

Fast Facts

BMW Group
University



Fast Facts 2013



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Due to low-profile tires, please note: Wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. Most models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

All vehicle specifications and features subject to change without notice.

Additional items such as BMW individual special paintwork are available on a limited basis via the Special Order process outlined in Product Knowledge On Demand (PKoD). Guidelines can be accessed via the menu bar under BMW Overview>Option Harmonization>Special Orders.

BMW for 2013:

Aiming even higher with a freshened 7 Series, 6 Series Gran Coupe, AWD 3 Series Sedans, new M5, M6, X1 – and a trio of ActiveHybrids.

Another year of slow economic recovery in America. Another year of a struggling European Union. And yet for BMW, 2012 has been another year of growth – worldwide and in the U.S.

Among the highlights:

- **BMW took the U.S. “luxury crown”** with its second straight year as leader of the Luxury Segment of U.S. motor-vehicle sales. With 281,460 vehicles in '12, BMW's U.S. sales were not only up 14% from the preceding year, but also a solid 7,376 vehicles ahead of our closest competitor.
- **Worldwide, the gains were strong too**, with the BMW brand up 11.8% to a total of 1,540,085 vehicles. Indeed, in December '12, BMW sales sprinted 13.8% as the new 3 Series hit its stride. Worldwide BMW Group automotive sales, including MINI and Rolls-Royce vehicles, were up 10.6% to 1,845,186.
- **A particularly American success** was the ongoing expansion of production at BMW's Spartanburg, South Carolina plant, where all X3, X5 and X6 Sports Activity Vehicles are produced for the world's markets: There, 301,519 vehicles were produced, a nearly 90% increase since the factory was expanded in 2010. This exemplary industrial enterprise (see page 11) has earned many awards, but perhaps the most surprising is its September '12 commendation by the National Association of Foreign Trade Zones as Exporter of the Year: it is now North America's leading vehicle exporter to non-NAFTA countries.

- **More modest**, but still solid, were sales of used BMW vehicles in the U.S.: 164,524 certified and non-certified pre-owned BMWs, up 2.1 percent over the 2011 total.

As has become BMW's customary launch strategy, model year 2013 began with April '12 production and proceeded through further Starts of Production through December '12:

April 2012

- 640i Gran Coupe
- X6
- X5 35i and 50i
- X3
- X5-X6 M

July 2012

- 7 Series
- BMW ALPINA B7
- All other 6 Series models
- 5 Series GT
- 5 Series Sedans
- 3 Series Sedans
- 3 Series Coupes and Convertibles
- 1 Series
- Z4
- M6 and M5
- M3
- X1

December 2012

- X5 35d

And now that we know when these wonderful vehicles began rolling off their respective assembly lines, let's look at the 2013 models themselves. For in-depth coverage of them, see **BMW features** and the individual **Series** sections.

7 Series. A thorough LCI freshening of BMW's flagship Sedan line brings an all-wheel-drive 740Li, new 6-cylinder engine

BMW for 2013:

How to use the Fast Facts Handbook

for 740i/Li, new V-8 for all 750i/Li models, a new ActiveHybrid, 8-speed transmissions for all, plus many other significant refinements and new features. For details on the very extensive updating of BMW's signature luxury-performance Sedans, see the 7 Series section, beginning on page 126.

ALPINA B7. Appearing for the first time in Fast Facts, the B7 comes in four models and incorporates wide-ranging evolution: a new 540-hp engine, 8-speed transmission, full array of EfficientDynamics refinements, and other new details paralleling those of the 2013 7 Series. The B7 section begins on page 190.

6 Series. 650i models get the same new V-8 as in the 750s, Enhanced Bluetooth brings stronger connectivity, and an Executive Package combines luxury and communication features in a new way. A graceful 4-door Gran Coupe joins the existing 2-door Coupe and Convertible models in 640i, 650i and 650i xDrive (AWD) models. All models now have the ECO PRO Driving Dynamics mode and automatic engine start/stop. The 6 Series section begins on page 218.

5 Series GT. Here, too, the new V-8 engine powers the "50i" models. ECO PRO and auto start/top also appear here as new energy-savers; so does electric power steering on 550i models. New options include Parking Assistant, Bang & Olufsen audio, Speed Limit Info and a new Rear Seat Entertainment system. The 5 Series GT section begins on page 274.

5 Series Sedans. New standard equipment includes split folding

rear seats (all except ActiveHybrid model), Enhanced Bluetooth (all), Xenon headlights for 528i models, and the popular BMW Universal Transceiver on 528i and 535i models. 535i and 550i models can now be ordered with the lavish BMW Individual Composition. The 5 Series Sedans section begins on page 316.

3 Series Sedans. Important new models: 328i and 335i xDrive, plus ActiveHybrid 3 with BMW's new Full Hybrid 2.0 powertrain. More standard equipment here too: Universal Transceiver, auto-dimming mirrors, power front seats and split folding rear seats now in all models. An M Sport Line brings the number of available Lines to four. The 3 Series Sedans section begins on page 374.

3 Series Coupes and Convertibles. These classically sporty BMWs continue their unique appeal with newly standard Bluetooth, a revised Premium Package and a new Premium Sound Package that pairs the Harman Kardon audio system and Satellite Radio. This section begins on page 432.

1 Series. Two new models for '13: 135is Coupe and Convertible. These feature a higher-output (320-hp) 6-cylinder engine, plus a special exhaust system, exclusive 18-in. wheels, an exclusive leather upholstery choice and a full range of M Sport Package features. The 128i Convertible gets standard 17-in. wheels, so that all models have at least 17s; Fine Line Anthracite wood interior trim is newly standard in 135i, optional in 128i models.

The 1 Series section begins on page 490.

Z4. Extensively expanded standard equipment includes Comfort Access, auto-dimming mirrors, power-folding exterior mirrors, Universal Transceiver, power lumbar and digital compass for all models; the 28i adds power front seats, automatic climate control and brushed-aluminum interior trim. The 35i gets 18-in. wheels, performance tires and sport seats; the 35is adds the premium audio system and BMW Assist. All of this while base prices are either reduced (28i) or held steady (35i, 35is). Read all about it, beginning on page 544.

M5 and M6. Returning after a 2-year hiatus, these three models (M5 Sedan, M6 Coupe and Convertible) enter an all-new 3rd generation. Not just new style here, but also abundant new technology, headlined by a 560-hp M TwinPower Turbo V-8 engine, 7-speed M Double-Clutch Transmission and the M Variable Differential Lock; MDrive now offers two driver-preferred dynamics settings. Option choices include Merino leather, BMW Individual esthetics and the spectacular Bang & Olufsen audio system. The M5-M6 section begins on page 594.

M3. The regular Coupe and Convertible models show minimal changes for MY13, but two limited-production special Coupes create new M3 exclusivity and excitement: the Lime Rock Park Edition, with 200 examples built during summer '12, and the Frozen Limited Edition with 150 units offered to U.S. customers in January '13. Details of these specials and the production M3 models begin on page 636.

X6. An LCI freshening features a revised front end with wider grilles, LED taillights, a new wheel design for the 50i model, and three new metallic exterior colors. New colors for the standard Nevada and optional Nappa leather freshen the interior; the formerly optional, now standard Storage Package enhances its practicality. Option packages are newly composed, named and priced: Most dramatic of these is a brand-new M Performance Package including upgraded engine power, 20-in. wheels and tires, and a wide range of esthetic details outside and in – all at a price below that of the former Sport Package. The X6 section begins on page 670.

X5. The X5 also gets an M Performance Package, conceived as a complement to the continuing M Sport Package. Here too, other packages are newly formulated and priced; notably, a Chrome Line exterior treatment is added to the 35i Premium model's Convenience Package and the 35d's Premium Package. The X5 section begins on page 710.

X3. Enormously successful since its new generation launched two years ago, the X3 joins other Series in adopting the N20 4-cylinder engine for its 28i model. As in the other vehicle lines, the new engine delivers nimble, responsive performance while boosting fuel economy significantly. Also new: the ECO PRO driving-dynamics mode and automatic engine start/stop, now saving fuel on both X3 models. Standard wheels on the 28i are upgraded from 17- to 18-in., all standard tires now performance

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all-seasons. The power tailgate is also newly standard. There's more, though: details on the '13 X3s begin on page 764.

X1. With this new line of three models, BMW takes its unique Sports Activity Vehicle concept to a new, more attainable entry price point. Made yet more attractive for price-conscious buyers by the rear-wheel-drive sDrive28i entry model, the X1 offers the same choice of engines (TwinPower Turbo, 2.0-liter 4-cylinder or 3.0-liter 6-cylinder) as the X3. The X1 is set to expand the circle of those who enjoy the extraordinary qualities and quality of BMW's family of all-road "X" vehicles. Learning about the X1 begins on page 802.

X5 M and X6 M. These models combine M-style performance attributes with the heft, all-road capability and commanding driving position of an SAV. Newly standard are blue-painted brake calipers and standard Multi-Contour front seats; attractive new options are Full LED headlights, a new color (Mugello Red) for the optional Full Merino leather, and the freedom to choose either of two wheel designs on both models. Additionally, the X6 M's hood is now of aluminum and has a prominent "power dome" to accent its powerful look. The M's section begins on page 844.

All Series. As every year, certain updates and enhancements appear in many BMW vehicles for '13. Standard equipment is increased in most models; Bluetooth connectivity and the iPod/USB Adapter are now standard in nearly all. M Sport Packages continue to proliferate; in two lines (X6 and X5), there's a new

M Performance Package that includes increased engine power. Parking Assistant expands to three more Series (7, B7, 5 GT), and LED headlights or Full LED Forward Lighting are available on more Series than before (now 7, B7, M6, X6, X5-X6 M). Other applications of LED technology also continue to multiply: foglights (7, B7, X5), Daytime Running Lamps (7, B7, M6, M5), headlights' luminous rings (7, B7) turn-signal flashers in exterior mirrors (7, B7, 3 Series Sedans), and taillights (most models).

The N20 TwinPower Turbo 4-cylinder engine, which lets its torque and fuel-efficient performance to 3 and 5 Series Sedans and Z4 in '12, now powers X3 and X1 models as well. A new, more powerful and fuel-efficient TwinPower Turbo V-8 engine (N63 TU) makes its debut in 750i/Li, 650i and 550i GT models while a similarly evolved M version (S63 TU) powers the new M5 and M6. And in a majority of MY13 models, the ECO PRO driving mode and automatic engine start/stop do their part to reduce fuel consumption, as do the wonderful 8-speed automatic transmission and electric power steering in a wider variety of models than before.

In the comfort-and-convenience area, soft-close doors are newly available in the 6 and 5 Series; Comfort Access keyless entry is now standard on the entire 7 Series and Z4 Series. On the 7 Series and 5 Series GT, Comfort Access adds the hands-free trunk opening that appeared first on the 3 Series Sedans in MY12. Automatic climate control is now standard in every BMW model.

The ActiveHybrid 3 is BMW's first hybrid model with split folding rear seats, and the masterful Bang & Olufsen audiophile sound system is newly available in 7 and 5 Series, ALPINA B7, M6 and M5. A new-generation Rear Seat Entertainment system with larger monitors is optional in 7, B7 and 5 Series models.

There's more yet, much more: See the **what's new** listings for each feature category in the **BMW features** section, as well as that in each Series or platform section.

BMW Fast Facts 2013 continues with the same popular format that BMW-center personnel and others have come to appreciate and use intensely, though with further evolution:

- Fast Facts covers more Series/platforms¹ than ever before. Last year's edition, the biggest until then, covered 14 Series or platforms and a total of 57 models. This edition covers 16 Series or platforms and 74 models – these totals including the BMW ALPINA B7's 4 models, which were included in the handbook for the first time.
- Fast Facts is again available in both online and printed form, the online version accessible through Product Knowledge on Demand. Thus you will be able to "carry it around with you" as a handbook; but you can also study it online and print out the sections you would like to have separately and/or give them to prospects. Finally, you can also use it on your iPad or other tablet/reader simply by e-mailing the complete FF13 PDF to its e-mail address and opening it there.

In addition to this overview of BMW for 2013, there are "up-front" sections covering:

- **BMW in America** – a brief summary of BMW's U.S. history and its current operations in the U.S.
- **BMW Manufacturing Co.** – tracing the history and evolution of BMW's U.S. manufacturing arm at another exciting point in time: its completion of another record-breaking year of production and the current expansion to add production of more models. This ultra-modern, prize-winning plant is now our primary Sports Activity center for the entire world and the leading exporter of motor vehicles from the U.S.
- **BMW, the award-winner** – winning awards is a frequent occurrence for BMW, both the vehicles and the company itself. This section cites awards that BMW earns year after year (*Car and Driver's* naming of the 3 Series to its annual 10Best honors for the 22nd straight year, for example) as well as those newly received. Its purpose is to convey the sense of how the world honors BMW's many accomplishments.
- **For more information** – listing a wide variety of websites to which you can refer for information about BMW the Company, awards, history and heritage, BMW Car Club, BMW's North American facilities, its philosophy and traditions, and a host of other aspects of BMW.

¹ – "Series" applies to the 7, 6, 5 GT, 3 and 1 Series, B7, Z4, M6, M5, M3, X6, X5, X3, X1 and X5-X6 M, even when there are more than one model, are described as "platforms."

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As always, **BMW features** covers attributes and features found in more than one Series or platform; this avoids repetition and thus helps keep Fast Facts as brief as possible – though once again BMW’s product line and array of features are so broad that “brief” now means a Fast Facts Handbook with almost 900 pages.

The **Series sections** concentrate on information particular to the individual Series or platforms.

Here **what’s new** is presented in bullet-point form for handy reference, and so is the listing of key features distinguishing the Series’ models from each other in **models & key features** that follows.

Then comes descriptive information on the Series as a whole in **Series key features**. Each Series section concludes with tables summarizing **standard & optional features** and **technical specifications** in great detail, more so than in the “key features” bullets. With each of these sections at your fingertips, you can usually answer any questions you or your customers might have about the details of any given model.

As always with Fast Facts, this latest edition has been designed and produced to put a wealth of information within easy reach: information on these 16 Series or platforms and on many other areas of the BMW presence. Here’s the entire handbook in outline form:

Background

- BMW for 2013
- BMW in America
- BMW Manufacturing Co., LLC
- BMW awards
- For more information

BMW features

- Features found in more than one BMW Series or platform

Product sections

- 7, B7, 6, 5 GT, 5 Sedans, 3 Sedans, 3 Coupes-Convertibles, 1 Series; Z4, M5 & M6, M3, X6, X5, X3, X1 and X5-X6 M in detail.

Customer benefits

- Warranty, Roadside Assistance & Included Maintenance, BMW vs. the competition
- BMW Assist

This handbook was produced by the **BMW Group University** with your specific professional needs in mind. We know from your comments how much you use Fast Facts, and always endeavor to make it as concise and easy to use as possible even as it grows larger every year. Each year we introduce changes that we hope will make it more so; in particular this year, the changes reflect an effort to accommodate four additional Series/platforms, to keep explanations and descriptions as brief as possible even though features become ever more technical; and to keep the entire book within a single printed volume despite the large number of pages.

If you have any suggestions as to how we might further improve Fast Facts, please let us know at:

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Thank you!
BMW of North America, LLC
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BMW in America

BMW of North America, LLC has been present in the United States since 1975. Rolls-Royce Motor Cars NA, LLC began distributing vehicles in 2003. The BMW Group in the United States has grown to include marketing, sales and financial-service organizations for the BMW brand, the MINI brand, and the Rolls-Royce brand of Motor Cars; Design-worksUSA, an industrial-design firm in California; a technology office in the Silicon Valley; and various other operations throughout the country.

BMW Manufacturing Co., LLC in South Carolina is part of BMW Group’s global manufacturing network and is the exclusive manufacturing plant for all X3 and X5 Sports Activity Vehicles and X6 Sports Activity Coupes worldwide. The BMW Group sales organization is represented in the U.S. through networks of 338 BMW passenger-car and Sports Activity Vehicle centers, 139 BMW motorcycle retailers, 115 MINI passenger-car dealers, and 34 Rolls-Royce Motor Car dealers. BMW of North America and BMW (US) Holding Corp., the BMW Group’s sales headquarters for North America, are both located in Woodcliff Lake, New Jersey.

BMW NA has a comprehensive system of support for BMW owners and centers in the U.S., covering activities as varied as specific engineering for American needs, tastes and regulations; Consumer Services; four Vehicle Processing Centers to provide all imported BMWs with a thorough Pre-Delivery Inspection; and BMW Ultimate Service™, a suite of services that includes the New Vehicle Limited Warranty, BMW Maintenance Program, Roadside Assistance and BMW Assist.

To help the BMW centers provide optimum service after the sale, BMW NA maintains seven regional Service Training Centers as well as six contracted service facilities, all staffed by full-time technical instructors. Service technicians who continue their training and improve their proficiency are certified by ACT, the BMW Association of Certified Technicians. BMW NA even offers training in body repairs to BMW quality standards with an 8-month program at the BMW Performance Center in South Carolina; at the Vehicle Processing Center in Oxnard, California; and at BMW facilities in Woodcliff Lake, New Jersey. Shorter courses in collision repair are also offered to employees of

BMW body shops at the California and New Jersey locations. To underpin all this service training, BMW has established eight fully equipped Service Technician Education Program (STEP) facilities in Arizona, California, Florida, Massachusetts, New Jersey, North Carolina and Ohio. These entities function as “graduate schools” of BMW technology for new and career-oriented center technicians, providing an outstanding growth opportunity. BMW STEP offers top graduates of NATEF (National Automotive Technician Foundation)-certified post-secondary schools and colleges 810 hours (27 weeks) of intensive classroom and lab instruction in BMW technology. In recent years, BMW has expanded its parts-distribution network in the eastern and central U.S. with two Regional Distribution Centers in Pennsylvania and Illinois. These centers store and distribute nearly 75,000 unique items, consisting of automotive and motorcycle parts as well as accessory and lifestyle items.

The other U.S. Distribution Centers are in Mississippi, Florida and two California regions.

For efficient access to parts, each U.S. BMW center’s computer system is linked to BMW NA national headquarters. In turn, BMW NA is linked by computer to the International Parts Distribution Center in Germany. BMW’s stock of parts, strategically located throughout the country at six Distribution Centers, covers the 3 million-plus BMWs now on American roads.

In case of a customer complaint, the BMW center will do its best to clarify any situation. If further assistance is needed, BMW Customer Relations Representatives can be reached by calling (800) 831-1117. This and many other services, such as BMW Roadside Assistance, BMW Assist, the BMW Maintenance Program, the 4-year/50,000-mile limited warranty and the 12-year corrosion warranty, are typical of the many efforts BMW NA makes to ensure that BMW ownership is a satisfying experience.

In 1992, BMW announced its intention to build a production plant in America. After exploring other possible U.S. locations, the company settled on an 1,150-acre site in Spartanburg County, South Carolina. By September 1994, BMW was building cars there: first 3 Series Sedans, then Z3 Roadsters.

Once Z3 production was launched, the Z3 became the primary product: built there and only there, and sold not just in the U.S. but in more than 120 countries around the world. In other words, this BMW factory became one of America’s few significant exporters of automobiles. This would become one of the plant’s many important values to BMW and to the U.S.; others include –

- being the only plant where certain models were built
- producing cars in different currencies to help balance international fluctuations
- building models closest to their most natural market
- producing in a place with a willing and able workforce, favorable geographic location and sustainable economics.

Establishing the U.S. production base was a momentous decision for BMW; it has turned out to be a good one – very good indeed, as the 21 years since the venture’s inception have shown. Through the end of 2012, BMW has cumulatively invested about \$6 billion in the facility and produced over 2 million vehicles. Along the way, in 1999 BMW’s first Sports Activity Vehicle, the X5, joined the Z3 at Spartanburg – like the Z3, it was a model for which North America would be the most important market.

Over 2008-9, another major expansion brought an additional investment of \$750 million to the U.S., adding 1.5 million square feet to the original 2.4-million-sq ft. assembly facility plus 300,000 sq ft. to the existing paint shop in preparation for the addition of X6 production. In all, through mid-2009, BMW’s investment had grown to nearly \$4.6 billion.

Yet another expansion, completed during 2010, again boosted annual production capacity in Spartanburg, and added some 500 jobs to bring the worker count near 6,000. This expansion added production of the new-generation X3, yet another BMW model whose main market is the U.S. but which also enjoys strong demand in many other markets; today the X3’s production volume accounts for a big net increase in Spartanburg output. Indeed, in its first year of production, X3 sales in the U.S. more than quadrupled; worldwide, they rose by 156% to reach a total of 117,944 vehicles. Over calendar 2012, X3 production rose again, to 150,143 units.

As this report is written, another major expansion – the fourth – is underway: between early 2012 and 2014, BMW is investing nearly \$900 million to produce the new X4, a Sports Activity Coupe that will relate to the X3 as X6 does to X5. This project brings the plant’s capacity to 350,000 units in the medium term; nearly 500 construction jobs have been added in the course of the buildout. When it is completed, BMW’s total investment in U.S. production will come to nearly \$5.8 billion.

Included are –

- a new 300,000-square-foot body shop
- a 170,000-sq ft. addition to the existing body shop
- a 650,000-sq ft. paint shop
- approximately 400,000 sq ft. of new logistics and warehouse space
- several on-site updates to existing facility.

The announcement of the present expansion was made at a ceremony to celebrate the 2-millionth vehicle produced at Spartanburg since 1994 – a Vermillion Red X3, which will remain on display to commemorate the milestone. In calendar '12, the plant produced a record 301,519 vehicles for sale, now to more than 130 markets around the world – an increase of 9% over 2011. This year, the plant is projected to maintain production at about this level and export approximately 70% of these vehicles to markets abroad. According to the U.S. Department of Commerce, BMW Manufacturing is the largest automotive exporter from the U.S.; indeed, BMW was recognized in September '12 by the National Association of Foreign Trade Zones (NAFTZ) as its Exporter of the Year.

Design of the expanded U.S. plant is similar to that of BMW's Leipzig, Germany factory, which is the newest addition to the BMW Global Production Network. A key feature of both Leipzig and Spartanburg is their "fingers," which reach out along the sides of the plant to enable direct deliveries to the precise point of use on the production line. A logistics warehouse has also been added to help ensure

leaner processes and quicker delivery routes for components and assemblies.

Likewise, the expanded paint shop shares new technologies with Leipzig, for example an innovative "RoDip" conveyor system that rotates the entire vehicle body 360° through each process tank for enhanced paint coverage, reduced water consumption and less waste. Other environmentally oriented features include the use of landfill gas to fuel efficient gas turbines that supply more than 37% of the plant's electric power; and a new concept for plant ventilation that cuts energy use for this purpose by about 30%.

Over the past six years, the plant's overall energy consumption has been cut by 48%; water consumption halved; CO₂ emissions by 44%; and waste by 65% per vehicle. For these efforts, BMW was recently recognized by the U.S. Environmental Protection Agency as an EPA Green Power Partner and one of the nation's top 20 on-site producers of green power.

A further energy savings is now being achieved by solar panels powering the 24,000-sq-ft. Zentrum museum that serves as the plant's heritage showcase and visitor center. The 400 solar modules, each capable of producing 240 watts of energy, fully power the Zentrum; concurrently, three electric-vehicle charging stations have been installed in the BMW Manufacturing plant.

As BMW's worldwide presence and activities continue to expand, this advanced vehicle manufacturing complex is expected to play an ever-larger role in BMW's international success.

BMW, the award-winner – again and again

BMW and its products are a phenomenon without parallel. The frequency and number of awards bestowed upon BMW are a significant indicator of how those "in the know" recognize the special position of BMW in the world of automobiles. Here is a mere sampling of the recognition BMW has received in recent times:

BMW the product

Each year the British magazine *Engine Technology International* names its International Engine of the Year (IEOTY) and other, categorized awards: 76 automotive journalists from 35 different countries formed the 2012 awards panel. In this 14th year of these awards in the beehive of innovation that is today's world of engine development, BMW engines garnered four of eight awards in the various size classes and was thus the most successful vehicle manufacturer of all. Three of BMW's winning engines are available in the U.S. market:

- **N20 TwinPower Turbo 4-cylinder engine** – newest BMW powerplant to win in these awards; powers 2013 BMW models as diverse as the 528i Sedan and Z4 28i. "Judges applauded the 2-liter's downsizing technologies, with François Rabe of South Africa saying, 'There is no doubt downsizing and adding turbo boost are the way of the future. BMW has done an exemplary job of pushing this technology to the mainstream.'"
- **N54 twin-turbo 6-cylinder engine** – best in 2.5- to 3.0-liter category. This is the high-performance, high-efficiency N54 unit that powers the 335is

and Z4 35i/is models: "BMW continues to dominate the 2.5-liter to 3-liter class, and this year it's the 3-liter bi-turbo 6-cylinder gasoline heart that takes the top spot, fighting off no fewer than three other turbocharged BMW engines... But in the end, it was the bi-turbo that impressed judges the most, as Gábor Szécsényi of Hungary explained: 'This engine uses every technical trick in the book to make sure that the end product is powerful, efficient and economical. This really is a work of engineering art.'"

- **S65 V-8 engine** – Best in 3.0- to 4.0-liter category. This is the 4.0-liter, 414-hp M3 engine that mesmerizes everyone lucky enough to drive it. "This engine isn't just a winner in this category, it can also compete with much larger engines," said Natan Tazelaar, a new IEOTY jury member from The Netherlands. 'Its extreme level of sportiness combined with usability and fuel efficiency is truly unique.'"

With its annual 10 Best Engines awards, *WardsAuto World*, a respected U.S. industry publication, also recognizes outstanding automotive powerplants. Though Ward's does not grant awards by class like ETI, it continues to rate BMW engines among its top 10 for 2013. This time, two BMW **TwinPower Turbo** engines repeated their 2012 victory: the N20 4-cylinder that powers 328i and 528i Sedans and the Z4, X3 and X1 28i models; and the N55 6-cylinder that now powers 740i/Li, 640i, 535i, 335i, 135i/is, and X3-X5-X6 35i models.

BMW, the award-winner – again and again

To win a place on Ward's 10 Best Engines list, an engine must score highly in measures of horsepower, torque, refinement, technical relevance, and comparative data. "BMW's all-new 4-cylinder proves once and for all that we have nothing to fear with the latest downsizing trend," wrote Ward's executive editor Tom Murphy. "We drove the 328i hard and still achieved close to 30 mpg...The N20 makes 120 hp per liter, delivers gratifying low-end torque, and is the type of engine many 2.0L turbos hope to be some day."

Added Drew Winter, editor-in-chief of *WardsAuto World*, added: "No one does inline 6-cylinder engines like BMW, and the turbocharged N55 is the perfect combination of intoxicating power and fuel-saving efficiency. The N55 sings like no other engine in the world."

Taking another perspective, *Edmunds.com*, a popular and credible auto website, recently named the Top 10 High-Tech Car Safety Technologies. All of these are either standard or optional on today's BMWs:

- Tire-pressure monitoring – standard on all models.
- Adaptive [Active] cruise control/collision warning – optional 7, B7, 6, 5, X6 and X5 (with Frontal Collision Warning System) and 3 Series Coupes and Convertibles.
- Blind-spot detection – optional 7, B7, 6 and 5 Series and 3 Series Sedans.
- Lane-departure warning/ wake-you-up safety – optional 7, B7, 6 and 5 Series, 3 Series Sedans, X6 and X5.
- Rollover prevention/mitigation – standard X6, X5 and X3.

- Occupant-sensitive/dual-stage airbags – standard all models.
- Emergency brake assist/collision mitigation – standard all models.
- Adaptive headlights and/or night-vision assist – Adaptive headlights optional or standard all models; Night Vision optional 7, B7, 6 and 5 Series.
- Rear-view camera – optional or standard 7, B7, 6 and 5 Series, 3 Series Sedans, X6, X5, X3 and X1. BMW also offers side-and top-view cameras.
- Emergency response – part of BMW Assist, standard or optional all models, including Enhanced Automatic Collision Notification.

And what about the cars themselves? Still winning –

- For the 22nd consecutive year, *Car and Driver's* annual 10Best Cars (January '13) included the 3 Series once more this year. Explains the authoritative American magazine its choice of the 3 Series Sedan: "With five equipment lines to choose from...the 3's appeal has expanded to reach a larger audience without breaking its grip on the sports-sedan segment. Many would-be challengers have benchmarked this winning formula, and some even match or beat it in one way or another, but they all fall short of the gestalt."
- *Automobile Magazine's* annual All-Stars, January '12, naming the 3 Series The Car Guy's Car: "How good is the 3 Series? If it had been eligible, it would have received serious consideration for Automobile of the Year even though the current E90-chassis edition is about to be replaced by

an all-new 3 Series Sedan. In fact, the current 3 Series was named AOY when it debuted in 2006, and it's been an All-Star ever since."

Yet BMW doesn't win awards just for its esthetic and performance attributes. **Award-winning safety** is also a recurring theme from time to time as BMW launches new vehicle Series. All-new in the last two years, 5 and 3 Series Sedans and X3 are no exception:

- In 2011, the Insurance Institute for Highway Safety (IIHS), a nationally recognized authority on automotive crash safety, declared the new 5 Series Sedan a Top Safety Pick on the basis of its performance in each of the IIHS's crash tests.
- Soon after the also all-new X3, also came out for '11, it too earned the Top Safety Pick rating. Among the IIHS' comments: regarding the side-impact test, "Measures taken from the dummy indicate a low risk of any significant injuries in a crash of this severity."
- In 2012, BMW achieved a third IIHS Top Safety Pick with the new 3 Series Sedans.

The Institute rates vehicles Good, Acceptable, Marginal or Poor in its high-speed Frontal Offset and Side Impact tests as well as evaluations of the vehicle's Rear Crash Protection/Head Restraints and Rollover Protection. To be named a Top Safety Pick, a vehicle must earn Good ratings in all four test categories. Additionally, winning vehicles must have electronic stability control, a standard BMW feature since 2000 known as Dynamic Stability Control.

BMW the company

Clearly, the cars and technologies are award-winners. But so is the company:

- **BMW EfficientDynamics** – recognized by the German newspaper *Bild am Sonntag* with the "Goldenes Lenkrad" (Golden Steering Wheel) award; with the Environmental Prize of Austria's ARBÖ, a national motor club; and the Green Award of Britain's *CAR* magazine, to name just a few of the trophies EfficientDynamics has won.
- **Best factory** – engine and powertrain production at BMW's Dingolfing factory won 2008's industrial competition, which acknowledges outstanding production management that gives companies a permanent competitive advantage. For the BMW customer, this translates into exceptional quality and value. Dingolfing is BMW's flagship plant; the 7, 6 and 5 Series are built there.
- **Best place to work** – every year the Trendence Institute surveys young professionals on what they expect of employers and where they would most like to work. In its latest study, released in September '12, BMW was ranked the most desirable employer in Germany, overtaking Google and becoming the first car-maker to earn this ranking. A related, more international ranking by the Universum market-research agency also named BMW as the world's most attractive automobile manufacturer to work for.
- **Most sustainable automobile company** – each year the SAM Group – a Swiss institute

BMW, the award-winner – again and again

that studies and advocates for sustainability – analyzes the economic, environmental and social performance of more than 2,000 stock-traded companies worldwide, and selects the best in each industry. On June 15, 2012, SAM published its annual evaluation and once again rated the BMW Group as the world's most sustainable manufacturer of automobiles and parts.

Another credible measure in this area is the Dow Jones Sustainability Index, which in '12 rated BMW 1st among the world's carmakers for the seventh consecutive year.

This is no happenstance. More than a decade ago, BMW Group's Board of Management declared sustainability a core strategic principle. Corporate sustainability is firmly entrenched throughout the entire value chain: from the development of fuel-saving and alternative vehicle concepts through clean production to green recycling practices. The BMW Group also accepts responsibility for its roughly 100,000 employees, and is involved in wide-ranging social projects outside of its plants.

- **World's best car manufacturer, period** – according to readers of *Frequent Business Traveler*, an online publication for affluent and frequent business travelers. The site's *Business Traveler GlobeRunner Awards* recognize the world's best travel-related companies; in July '12 they also named BMW the Best Car Manufacturer in the World: Editorial Director Jonathan Spira noted, "[The readers'] very selective

preferences and extensive patronage of hotels, airlines and everything travel-related make their votes particularly meaningful."

BMW quality

Strategic Vision, a prominent U.S. market-research consultancy, has more than 40 years of experience in understanding consumers' and constituents' decision-making processes for a variety of Fortune 100 clients, including most automotive manufacturers. Each year, Strategic Vision ranks motor vehicles with its Total Quality Index™, which measures how closely customers' experience of quality matches their expectations.

For 2012, this index ranked several BMW models best in their segments:

- **X6**, Luxury Utility segment, stood out for its image, thoughtfulness, workmanship and style.
- **Z4**, Premium Convertible segment, was praised for its technical innovations, durability and reliability.
- **1 Series Coupe**, Premium Coupe segment, was commended for its driving enjoyment and a well-rounded ownership experience.

BMW the brand

In the marketplace, too, BMW sets standards that go well beyond the excellence of its products.

For example, in Kelley Blue Book's 2011 Best Resale Value Awards, BMW was named Best Luxury Brand. "BMW cars and crossovers," noted the respected automotive authority, "appeal to used-car buyers for the same

reasons they appeal to new buyers: performance, style, luxury, a respected badge, or any combination thereof. Performance purists will talk of driving feel and the famed inline-six engines. Fans of BMW style will throw around terms such as angel-eye headlights, flame surfacing (maybe) and the Hofmeister kink. Luxury buyers might be inclined to call out the historically outstanding seats. And more than a few buyers we know aspired to drive a BMW simply because it's a BMW. Where it all comes together for excellent resale value is the fact that a used BMW is just as fun, fashionable, comfortable and prestigious as a new one."

BMW's wide-ranging leadership in resale/residual value

In addition, the BMW X5 and BMW X6 Sports Activity Vehicles each won places on Kelley's kbb.com 2011 list of Top 10 Models for Best Resale Value, and the X5 xDrive35d Advanced-Diesel was cited for Best Resale Value of a Hybrid / Alternative Energy Utility Vehicle. Not stopping there, BMW also won the 2011 Best Resale Value award in the Luxury Utility Vehicle category with the X5.

"At BMW, we believe our vehicles' strong resale value is a result not only of the innovation,

engineering and design esthetics built into each one of our cars, but also the quality of the BMW ownership experience in total," said Peter Miles, BMW of North America's Executive Vice President of Operations. "Consumers should take a good look at the projected resale value of a car when choosing their next new-vehicle purchase, and they would be wise to carefully consider the 2011 Best Resale Value Award-winning vehicles and brands on this year's list," said James Bell, executive market analyst for kbb.com. "Taking the time to research and choose vehicle makes, models and options wisely now can help new-car shoppers hold value down the road when they go to sell or trade-in the vehicle."

Kelley Blue Book's Best Resale Value Awards are based on projections from the *Kelley Blue Book® Official Residual Value Guide*, determined by an expert staff of automotive analysts.

These prestigious awards honor vehicles expected to maintain the greatest proportion of their original list price after five years of ownership.

One could go on and on, but we try to keep Fast Facts reasonably compact. For further awards and recognition of BMW's accomplishments from past years, see earlier editions of **Fast Facts**.

For more information

Sources for additional information about BMW: vehicles and other products, history and tradition, environmental standards and initiatives.

Want to learn more about BMW? About specific subjects? Find answers to your clients' questions? Authoritatively present information and sales points about the aspects of BMW that your customers want to know about?

There's a wealth of BMW information on the Internet. Here's a summary of sites and other sources that address specific subjects...but it's not necessarily all-inclusive. If you explore, you'll find more.

Subject	Refer reader to/path
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BMW Welt (BMW World, BMW's showplace & European-delivery center in Munich)	bmwusa.com Explore BMW European Delivery BMW Welt Overview download bmw.com BMW start page BMW Insights BMW Welt

BMW features

The following key features appear in more than one BMW Series:

General

What's new for 2013 or since last edition

- New Series: X1, most compact and attainable BMW Sports Activity to date
- M5 and M6 return, in new generation; were not present in 2012 line
- Extensive additional models in existing Series, especially xDrive models
- Two additional ActiveHybrid models: 7 and 3 Series new, 5 Series continues
- Gran Coupes added to 6 Series
- Expanded offering of Lines: now available in 3 Series Sedans, X1
- Reduced use of Priority 1 options in ordering system
- Elimination of many Sport Package offerings; expanded availability of M Sport Packages, M Performance Packages, Sport Activity Packages or Sport/M Sport Lines
- Continuing expansion of BMW Individual Composition offerings: new to 5 Series Sedans
- First appearance of BMW ALPINA B7 in **Fast Facts**: a special edition of 7 Series Sedans jointly created by BMW and Bavarian automobile specialist ALPINA

Exterior design & function

What's new for 2013 or since last edition

- Air curtains appear in front ends of more models; new to 7 Series
- Parking Assistant now offered on 7, 6 and 5 Series, 3 Series Sedans
- Expanded availability of LED headlights and Full LED Lighting

- Full LED Forward Lighting or LED headlights newly available on 7 Series, M6, X6, X5-X6 M
- Accent strips above headlights and luminous rings around headlights now in LED on more models
- LED front foglights appear on more Series: new to 7 Series, X5
- LED turn-signal flashers in exterior mirrors, new to 7 Series
- LED taillights appear on more models: now on 7, B7, 6, 5 GT and Sedans, 3, 1, Z4, M3-5-6, X6, X5 and X1 lines
- BMW Individual Xirallic paints newly available on 5 Series Sedans
- xDrive badge moved from front flanks to trunklid of Sedans, Coupes and Convertibles of 7, B7, 6, 5 and 3 Series

The BMW look

Every BMW is designed to communicate an identifiable, consistent "BMW look" – is there anyone who cares about cars who couldn't recognize a BMW? Each BMW is designed with restraint, good taste and an avoidance of fads or fashions that could outdate it quickly.

At the same time, a BMW's basic shape is largely determined by its engineering. For example, BMW's optimum (near-50/50) front-to-rear weight distribution dictates a distinctive look, with a long hood and the front wheels set well forward. In fact, this look is also closely related to BMW's tradition of rear-wheel drive as the basic layout for all models. (Compare, for instance, the short front overhang of BMWs vs. the long front overhang of front-wheel-drive or front-drive-based cars such as Audi, Acura TL and

TSX, and Lexus ES; and FWD-based SUVs like Lexus RX and Acura MDX.

Specific elements of the BMW look include:

- **Traditional "kidneys" grille**, consisting of dual grille openings with vertical slats. Over the years these have evolved from tall ovals into low, wide, flared shapes and now a forward-thrusting look on the latest models; yet the lineage to BMWs all the way back to the 1930s is as clear as ever.
- **BMW logo**, with blue-and-white color scheme (from the Bavarian flag) and rotating-propeller motif (from BMW's early history as a maker of aircraft engines).
- **Four headlights**. Became a BMW tradition in the Seventies. Today, the headlights are behind glass covers on all models and the way functions are apportioned between the two lamp pairs varies among Series and models, but the 4-light theme continues.
- **Luminous rings**. This distinctive BMW identity feature appeared first on the 5 Series in '01, and now appears on all models in combination with Xenon Adaptive headlights (standard or optional). The rings appear on all four lights on most models, and function as parking lights and daytime running lamps. As new models are introduced, the rings are increasingly LED-powered.
- **Large glass areas**, as a functional (for good outward vision) and design element¹.
- **"Reverse kink"** in the rear side-window shape of closed-body models and those with retractable hardtops. Also

known as the "Hofmeister Knick" for Wilhelm Hofmeister, BMW's head of design when it first appeared. Less pronounced on X5, X3 and X1 than usually the case on BMW automobiles.

- **A dynamic feeling** to the overall design that visually communicates BMW's dynamic performance.
- **Restrained use of trim**, always within bounds of good taste.
- **Timelessness**. Fads and fashions are avoided, so that a BMW looks good for many years to come. Indeed, if BMW has any connection to fads and fashions at all, it is that BMW sets trends, not follows them.

Integrated front spoiler (all models)

Reduces and helps manage the amount of air flowing underneath the car; hence reduces front-end lift at speed. BMW designs openings in the spoiler to direct air efficiently to the radiator, engine compartment, front brakes, transmission and along the underbody. Foglights (all except 135i/is, 335is Coupe, Z4 and M models) are integrated into the spoiler for clean appearance. Sportier models, various Packages and Lines, and center-installed kits include BMW aerodynamic treatments with deeper, more aggressive-looking front spoilers, usually with large air intakes.

1 – Softtop Convertible models necessarily depart from the tradition of large glass areas; these models (1 and 6 Series) also depart from the "reverse kink" theme, though the 3 Series/M3 hardtop Convertible and the Z4 do incorporate it.

BMW features

The following key features appear in more than one BMW Series:

Air curtains

(128i models, 7 Series)

These are openings at the outer edges of the front spoiler, usually in the form of vertical slots, that funnel air through the wheelwells to reduce turbulence and wind resistance.

Low aerodynamic drag

(all closed-body models)

Each BMW model is engineered for a low coefficient of aerodynamic drag (C_D), although softtop models aren't quite as "slick" as metal-topped vehicles. Air thus flows smoothly and efficiently over the body, so the engine has relatively little aerodynamic drag to overcome. Less turbulence in the airflow also means less wind noise heard inside the car.

Even BMW's open-bodied cars show excellent progress in aerodynamics: The 1 Series Convertibles, with their softtop, register a commendable C_D of 0.34. The 328i Convertible, with a retractable hardtop as smooth as a fixed top, achieves a remarkable 0.30. At 0.28-0.29, BMW's most aerodynamic models for '13 are the rear-wheel-drive 528i and 535i Sedans and the 328i Sedan.

Because of their greater height and relatively angular shapes, SUVs do not achieve C_D values in the 0.28-0.33 range of BMW automobile models, but the 0.34-0.38 values of current BMW Sports Activity models are excellent in the SUV context.

Marking a trend in recently introduced models is new, more extensive underbody fairing on 3 Series Sedans; mounted under the engine compartment, along the "tunnel" that accommodates the driveline and exhaust

system, and at the differential, this smoothes flow under the vehicle and thus helps improve fuel efficiency.

For model-by-model C_D ratings, see each line's Technical Specifications.

Low aerodynamic lift

(all models)

BMW devotes just as much attention to this less widely recognized aspect of aerodynamics. BMW bodies manage airflow to minimize its lifting effect on the body, so a BMW "hugs the road" at higher speeds for excellent stability. Ultra-high-performance models, such as M6, M5 and M3 and the various M Sport Package-equipped models, have additional features (such as a deeper front spoiler and rear diffuser) to reduce lift further.

Xenon Adaptive headlights with auto-leveling

(standard 7, 6 and 5 Series, B7, 3 Series Coupes & Convertibles, 335i & ActiveHybrid 3 Sedans, 135i/is, Z4, all M models, X6, X5, X3 35i, X1 35i)

Compared to halogen headlights, Xenons produce whiter, more daylight-like forward illumination. For its Xenon lights, BMW employs ellipsoid or "projector-type" lamps that are small in diameter; other BMW headlights are of the free-form type, with computer-generated reflector surfaces. Some manufacturers call Xenon headlights "high-intensity discharge" or HID.

Because of their more intense illumination, Xenon lamps need to be aimed correctly to minimize glare to oncoming motorists. Thus BMW includes auto-leveling of the headlights, in two forms:

- **1 Series – static auto-leveling.** After the engine is started and with the headlights on, the headlights are leveled every 25 seconds. Thus passengers, trunk loading and constantly changing fuel quantity are always compensated for in the headlight aiming.
- **All other models – dynamic auto-leveling.** Within milliseconds, the headlights are leveled in response to any change in vehicle attitude, whether static or dynamic; thus even transitory acceleration and braking are compensated for.

Adaptive Light Control, included with Xenon headlights, literally "aims" at making night driving safer. With the headlight switch in its Automatic position, when the vehicle is stationary or moving forward (the feature is inactive when the vehicle is backing up), the outboard lights steer with the front wheels, guided by an electronic control system and swiveled by small servo motors. The system responds not simplistically to the steering angle, but also to vehicle speed and the "yaw rate" at which the vehicle's direction is changing. The tangible customer benefit is enhanced night vision around corners and curves, and therefore greater driving safety. In contrast to cornering lights, next, Adaptive headlights operate at all vehicle speeds.

On the 5, 6 and 7 Series, Adaptive Light Control adds the capability to adapt to road contours (dips and bumps, for example) to reduce blinding of oncoming drivers and further enhance the BMW driver's forward view.

Cornering lights

(all models in combination with Xenon Adaptive headlights)

This feature, built into the foglights or inboard headlamps, provides an angled beam at each front corner to assist at low speed and large steering angles. Activated in left- or rightward direction by either a large steering angle or the turn signals; does not activate at speeds over 25 mph.

When the headlights are on and reverse gear is engaged, cornering lights are activated at both sides (U.S. models only). Cornering lights are standard or optional as listed on the previous page for Xenon headlights.

Automatic headlight control (standard all models)

When the headlight switch is in its "A" position, this function automatically switches on the headlights and all related lighting when ambient light drops below a certain level.

Halogen foglights

(standard except 335is Coupe, 135i/is models, Z4 & all M models)

Mounted close to the road, BMW foglights "reach under" fog to provide extra illumination. Foglights are omitted on 135i/is models and 335is Coupe to accommodate the deep M spoiler, on models equipped with the M Sport Package, and on all M models to allow large air intakes that supply their high-performance engine and other systems with necessary cooling air.

LED foglights

(7 & 6 Series)

All the advantages of LED lighting – brightness, whiteness, reduced power consumption –

BMW features

The following key features appear in more than one BMW Series:

apply to foglights as well as other types of automotive lighting.

Full LED Forward Lighting or LED headlights

(Full LED standard 760Li, optional other 7 Series & B7; optional 6 Series & M6; LED headlights optional X6)

With Full LED, all forward lighting functions, including low and high beams, cornering lights, Daytime Running Lamps, turn signals and foglights, are LED-powered. The LED headlights provide even whiter and more powerful forward illumination than Xenons.

Adaptive brakelights

(standard all models)

Additional lighting area and/or brighter illumination appears under heavy braking or anytime the ABS goes into action. This signals to following motorists that the BMW is braking hard, and can thus help avoid rear-end collisions.

Park Distance Control

(standard 7 & 6 Series, 5 Series GT, 550i Sedans, M6, M5, X6, all X5 except base 35i; optional 528i & 535i Sedans, 3 & 1 Series, Z4, M3, X3, X1)

PDC helps drivers avoid colliding with unseen obstructions. It comes in two forms:

- 1 Series, M3 – rear only
- all other models – front and rear.

PDC employs four ultrasonic sensors in the front (all except 1 Series and M3) and four in the rear bumper (all) to warn the driver when the vehicle is approaching objects or obstructions that may not be visible to the driver. All forward and the rear corner sensors trigger a warning beep at approximately

2 ft. distance to the object. The beeping becomes faster as the bumper approaches the object, turning into a constant tone when the distance closes to less than 1 ft.

The rear bumper's center sensors first trigger beeping at about 5 ft.; when the distance is less than 1 ft. the beep becomes a constant tone. The front sensors cause a higher-pitched tone; those at the rear trigger a lower-pitched tone. (The tones emanate from the appropriate end of the interior.)

PDC activates anytime the ignition is on and reverse gear is engaged, and automatically de-activates when the car is driven forward approximately 50 meters (164 ft.) or reaches about 18 mph. On vehicles with front and rear PDC, it can be activated or de-activated by pressing its console switch.

Parking Assistant

(7, 6 & 5 Series, 3 Series Sedan RWD² models)

This high-tech option assists in parallel parking. Via ultrasound sensors in the front side flashers, its system recognizes spaces of more than 20 ft. (about 4 ft. longer than the vehicle, depending upon Series), measures their width and length as the vehicle drives by at speeds less than 22 mph, and indicates their suitability in the iDrive display. This occurs whether or not the driver has activated the system.

Once the driver has pulled up next to the vehicle ahead of the space, Parking Assistant can be activated by –

- Pressing the console “P” button, then engaging reverse gear

- Engaging reverse gear, then pressing the Drive controller.

Then, all the driver has to do is operate the accelerator, apply the brakes and “supervise” the maneuver. Parking Assistant turns the electric power steering to back up precisely into the space, simultaneously monitoring and correcting the vehicle's trajectory as it goes. Even if the driver breaks off the maneuver, it can pick up and complete the maneuver once the driver resumes it. Throughout the process, Parking Assistant gives the driver appropriate audible instructions or indications.

Parking Assistant is offered only on rear-wheel-drive models equipped with electric power steering.

Rain-sensing windshield wipers

(standard all models)

A sensor mounted on the inside of the windshield measures the amount of rain impinging on the windshield. Pressing the “A” button puts the wipers in their rain-sensing mode. Sensitivity to moisture can be adjusted by turning the control on the stalk. In this mode, the wipers adjust their wiping action automatically according to the amount of rain the vehicle is encountering.

The user can leave the wiper control in its rain-sensing position most of the time. With the ignition switch in radio mode, the wipers can then be activated manually by turning the rotary control briefly, or by activating the wipers or windshield washer. Users should take care to ensure that the system is not activated when in an automatic car wash.

Other useful features of BMW windshield wipers and washers include:

- **Single-wipe** or “flick” operation, activated by pressing the wiper control stalk downward against spring pressure.
- **Automatic windshield washer**, activated by pulling the control stalk toward the steering wheel. Brief activation sprays washer fluid onto the windshield; holding the stalk longer activates the wipers for a few strokes.

The rain sensor serves other purposes as well, such as Dynamic Stability Control's Brake Drying function.

“Soft” windshield wipers (all models)

This wiper construction dispenses with the usual metal reinforcements in their blades. The wipers operate more quietly at high speeds, thanks in part to the fact that they need no “fin” on the wiper arm to hold them against the windshield. They can also be adjusted for optimum fit to the windshield contours, and replacement of worn blades is easier.

Automatic tilt-down of right exterior mirror

(all 7, 6 & 5 Series, B7, 3 Series Sedans, Z4, X6, X5 & X3; 328i Coupe, 1 Series, M3 & X1 with power seats)

When reverse gear is engaged, the right-side mirror tilts down for a view of the curb or other obstacles not normally visible to the driver. Placing the power-mirror selector switch in its right-mirror position de-activates this feature.

2 – Rear-wheel drive.

BMW features

The following key features appear in more than one BMW Series:

Power-folding exterior mirrors

(all 7, 6 & 5 Series, B7, 3 Series Sedans, Z4, X6 & X5 incl. M; 1 Series, M3, X3 & X1 with auto-dimming exterior mirrors) Via an additional button in the power-window switch panel, the mirrors fold inward or back to their normal position. Benefits include increased side clearance in tight parking spaces and reduced chance of damage, such as from car washes or vandalism.

Metallic, Frozen, Xirallic and other special BMW exterior paints

BMW's metallic paints are widely appreciated for their variety of color, quality of finish and customer protection under the BMW Limited Warranty; they are frequently updated or phased in and out as customer preferences evolve and new colors are developed. They are notable for such special attributes as the –

- Frozen Red, White or Blue on M3 Frozen Limited Edition
- Frozen ALPINA Blue available on B7
- Frozen Bronze available on 6 Series Gran Coupe
- Mineral White Metallic, more widely available for '13
- Atacama Yellow, an audacious non-metallic available on Z4s
- Exclusive, bold BMW M metallics named for famous race tracks³ the world over
- BMW Individual Xirallic paints such as Azurite, Citrin Black, Ruby Black, Moonstone and Tanzanite; see 7, B7 & 6 Series, 5 Series Sedans, M6, M5, M3 and X6 sections for examples of these colors' availability.

In particular, the Xirallics and the Frozen concept are exotic, elegant finishes. Xirallics are

applied in a 5-coat process, with fine pigments that delight the eye with great intensity and color-change effects as light conditions vary.

Frozen finish, now appearing as listed at left, is a matte finish with a rare metallic luster. To achieve this effect, a specially developed matte clearcoat is applied over the base (color) coats. These finishes are backed by the BMW Limited Warranty just like any BMW finish; special care guidelines are provided to customers and BMW centers to prevent the finish from becoming glossy.

Carbon-fiber exterior components

(M6 & M3 Coupes, 5 & 3 Series M Performance accessory products)

Both of these Coupes come standard with a carbon-fiber roof panel, which not only saves weight (at the vehicle's very top, lowering its center of gravity to the benefit of handling) but also presents a visually fascinating "grain."

Available carbon-fiber M Performance components, also showing the unique surface appearance, include trunklid spoilers and exterior-mirror caps; the limited-production M3 Lime Rock Park Edition includes a carbon-fiber trunklid spoiler and "chin splitters" in its outboard front air intakes.

Performance & efficiency

What's new for 2013 or since last edition

- ActiveHybrid 7 and 3 models added to 7 Series, 3 Series Sedans
- N20 TwinPower Turbo 4-cylinder engine in X3 28i and X1 28i

- N55 TwinPower Turbo 6-cylinder engine in 740i models and ActiveHybrid 7, ActiveHybrid 3, X1 35i
- N63 TU TwinPower Turbo V-8 engine in 750i/Li, 650i, 550i GT
- S63 TU TwinPower Turbo V-8 engine in M5 and M6
- M Performance Package offered on X6 and X5 35i/50i models
- Expansion of BMW Performance parts and kits for BMW-center installation: now 3 and 5 Series Sedans, 1 Series, X6
- Automatic engine start/stop in 740i/Li, 750i/Li, ALPINA B7, 650i, 5 Series GT, M6 and M5, X3, X1 28i
- ECO PRO mode added to Driving Dynamics Control of 740i/Li, 750i/Li, ALPINA B7, 650i, 5 Series GT, X3; also on X1 28i as separate feature (no Driving Dynamics Control)
- ECO PRO mode of 740i/Li and 750i/Li models adds Anticipation Assistant and coasting mode
- 8-speed automatic transmission in 740i/Li, 750i/Li, ALPINA B7
- 7-speed Double-Clutch Transmission in M5 and M6; new version with six shift modes
- xDrive models added to 740Li, 6 Series, 3 Series Sedans
- Self-leveling rear air suspension newly standard on 740i/Li and 740i/Li, thus now on all 7 Series models
- Electric power steering new to RWD² 740i/Li, 750i/Li, 550i GT
- Hydraulic power steering with increased efficiency in AWD⁴ 7 Series, 535i GT
- Fixed-caliper/multi-piston brakes newly on M5 and M6
- Automatic Hold function of

7 Series and 5 Series GT adds automatic drive-away release

- X3 28i standard wheels/tires upgraded from 17-in.: now 18-in. standard on both models

N52 3.0-liter DOHC 24-valve 6-cylinder engine (328i & 128i Coupes & Convertibles)

Most vehicle manufacturers of 6-cylinder engines have adopted the V-6 format, whose compactness is advantageous in small or midsize cars with front-wheel drive. By contrast, our customers (not to mention professional auto critics!) treasure BMW's inline 6-cylinder engines for their smoothness and sound. Thus BMW retains the inline format while constantly developing it toward reduced weight, more compact dimensions – and even more brilliant performance, smoothness and sound. The N52 is the classic "BMW six," a naturally aspirated⁵ or non-turbo unit.

Here are some of the ways in which the N52 achieves its outstanding spectrum of qualities; **Weight-efficient** – weighs 22 lb. less than a comparable aluminum unit.

Compact – Because there is just one external drive belt, overall engine length is relatively short. Reduced engine bulk can pay off in improved climate control and other amenities.

2 – Rear-wheel drive.

3 – See M3 section for names and countries of these racing venues.

4 – All-wheel drive.

5 – In a "naturally aspirated" engine, air is drawn into the engine by the pistons' downward, or "suction," stroke. By contrast, a supercharger or turbocharger compresses and supplies the engine's air in what is known as "forced induction."

BMW features

The following key features appear in more than one BMW Series:

Valvetronic variable valve lift.

An exclusive, patented innovation described elsewhere in this section.

Magnesium/aluminum composite construction. Exclusive to BMW, the unique engine block consists of three major castings:

- Bedplate (magnesium alloy⁶) as the lower portion of the block (crankcase); similar in concept to a construction element found in some racing engines as well as both turbo 6-cylinder engines and the M3's 414-hp V-8. Bedplate combines with upper crankcase to form the block's outer shell; the result is an ultra-rigid engine structure.
- Upper crankcase (magnesium alloy). Joining the bedplate at the level of the crankshaft (main) bearings, this too is a weight-saving casting. It is mounted onto the bedplate from above.
- Cylinder insert (silicon-impregnated aluminum alloy, or Alusil). In this sense, N52 construction resembles that of the twin-turbo V-8s of 7, 6 and 5 Series models, B7, X6 and X5, and X5-X6 M models plus the 760Li V-12, though their blocks are all-Alusil and thus require no cylinder inserts.

Other weight-saving materials.

Hollow camshafts save a remarkable 2.6 lb. each. Shaped in a hydroforming process; lighter than solid camshafts, they have less inertia and improve engine response.

Oil/coolant heat exchanger.

Another feature that speeds engine warmup; during this phase of operation, it transfers heat from the coolant to the oil circuit. Under conditions of high engine

power and oil temperatures, it performs the reverse, transferring heat from the oil circuit to the coolant, from which the engine cooling system then removes excess heat.

Power and torque: Producing 230 hp and 200 lb-ft. of torque, the N52 powers 328i and 128i Coupes and Convertibles. The 240-hp/260-lb-ft. version of the X3 28i through '12 is no longer offered.

N20 2.0-liter DOHC 16-valve TwinPower Turbo 4-cylinder engine with Valvetronic and direct fuel injection

(528i & 328i Sedans, Z4 28i, X3 28i & X1 28i)

Introduced in '12, this is the "entry" engine for these models. Its key features and attributes are:

- **4 cylinders** – applies BMW's latest engine technology to achieving a higher level of fuel efficiency while maintaining typical BMW performance
- **Valvetronic variable valve lift**, as now in five BMW engine families
- **Twin Scroll turbocharger**, providing a hearty performance boost in combination with Valvetronic
- **Direct fuel injection** contributing to both performance and efficiency
- **Twin balance shafts**, lending a 4-cylinder engine smoothness approaching that of more cylinders.

Valvetronic, Twin Scroll turbocharging and solenoid-operated direct fuel injection are all shared with the N55 6-cylinder engine that powers 35i and 40i models in the 7, 6, 5, 3 and 1 Series, X6, X5, X3 and X1 models and

described next. The N20 also shares the N55's cylinder spacing (distance between cylinder centers), bore, and valve diameters. Yet it is not merely a 4-cylinder reduction of the N55:

- **Block construction and cylinders.** Whereas the N55 has an aluminum block with cast-iron cylinders, the N20 adopts a different technology. Here too, the block is aluminum; but the cylinders are part of the block itself and electroplated with an ultra-thin steel coating. Called LDS for *Lichtbogen-drahtspritz-Verfahren*, this process (*Verfahren*) applies a steel coating via an electric arc (*Lichtbogen*) from an electrode; this arc impinges steel wires (*Draht*) and deposits the steel on the cylinder walls with a spray (*Spritz*). The resulting coating is a minuscule 0.3 mm (0.012 inch) thick, leaving extra space for coolant passages around the cylinders and presenting minimal friction to the pistons.
- **Balance shafts**, positioned at two levels near the front and driven by chain from the crankshaft, offset the 4-cylinder engine's inherent vibrations, making the N20 appropriately smooth for the refined BMWs it powers.
- **Centrifugally compensated flywheels**, adding pendulum elements to BMW's usual dual-mass flywheel for smoothness at low speeds.
- **Specific "split" of twin scrolls.** To optimize the flow of exhaust gases from the cylinders into the turbocharger's two scrolls, one scroll is fed by cylinders 1 and 4, the other by 2 and 3. The 6-cylinder engine's twin

scrolls are fed by cylinders 1-2-3 and 4-5-6.

Other salient engineering features, shared with both the N52 6-cylinder engine and the N55 turbo 6-cylinder that continues in most 35i models, include:

- **Electric coolant pump**, requiring less power, speeding engine warmup and making the engine more compact. Contributes to efficiency.
- **Variable-volume oil pump**, also requiring less power and enhancing lubrication; thus contributes to performance and fuel efficiency.

"Bottom lines" for the customer: torque, power, performance, fuel efficiency, weight.

The N20 more than matches the performance and fuel efficiency of the N52 6-cylinder engine it has replaced in 5 and 3 Series Sedans and X3 28i:

- **Power output** – 240 hp, vs. 230 for the 3 and 1 Series N52, 240 for the X3
- **Torque** – peaking at 240 lb-ft., vs. 200 for the 3 and 1 Series N52, 260 vs. 230 for the X3
- **Fuel efficiency** – the only directly comparable model is the X3 28i: for '13 it rates 24 mpg in the EPA combined mileage test, vs. 21 mpg in '12 (both with 8-speed automatic transmission).

And thanks to its TwinPower Turbo concept, the N20's power and torque peaks occur over a wider rpm range: for power, 5000-6000 rpm, vs. the previous 6600; for torque, 1250-4800 rpm vs. the previous 2600-3000.

6 – All magnesium castings in the block assembly are actually a magnesium-aluminum alloy, as pure magnesium would not have sufficient strength for these applications.

BMW features

The following key features appear in more than one BMW Series:

Such statistics translate into quicker 0-60-mph times with the new engine.

Exhaust note. BMW devoted special attention to the N20's exhaust sound, tailoring it to the character of the models it powers: Sedans, Sports Activity Vehicles and Z4. Given the velvety smoothness of the N52 predecessor engine, sound quality was naturally a high priority for the N20 engineering team. Specifically for the Sedan and SAV models, a discreet, refined sound quality was developed. In contrast, the N20's sound in the Z4 was composed to be expressly sporty.

However: the N52 6-cylinder engine does have its own advantages, primarily the silky smoothness and an inimitably beautiful sound. Those customers who appreciate such "engineering esthetics" may still savor the N52 in a number of '13 models (previous pages).

N55 3.0-liter DOHC 24-valve TwinPower Turbo 6-cylinder engine with Valvetronic and direct fuel injection

(all 740i, 640i, 535i, 335i and 135i/is models; X6, X5, X3 & X1 35i)

This spectacular performance engine shares its three principal engineering attributes with the N20:

- Twin Scroll turbocharger
- Valvetronic variable valve lift
- Direct fuel injection.

These are also points on which the N55 engine differs from the earlier-developed N54 (next). Here are some details on the N55's defining technologies.

Single Twin Scroll turbocharger. When this engine first appeared,

its single Twin Scroll turbo contrasted with the twin turbos of the already existing N54.

In contrast to the twin-turbo's dual 3-runner exhaust headers, the N55 has a single exhaust manifold, with 2 chambers of 3 cylinders each; it and the turbo-charger housing are welded into a single unit.

Altogether, these attributes enable the single Twin Scroll turbo to deliver almost the boost of the N54's two smaller turbos. Valvetronic (see next) and other refinements bring N55 performance fully up to the original N54 level, with increased fuel efficiency. Twin Scroll also allows the larger single turbo to respond quickly.

Valvetronic. The workings of this unique, patented BMW innovation are explained in detail on later pages of this section. Suffice it to say that it regulates airflow into the engine (and thus torque/power) by varying the intake valves' lift, rather than by opening or closing a throttle. Valvetronic, too, promotes quick accelerator response, improves efficiency and increases power.

High Precision direct fuel injection sprays fuel directly into the combustion chamber and thus enhances both performance and fuel efficiency. All BMW's turbo engines have this; the N55 (along with the N20 and, newly for '13, the N63 TU V-8 engine) departs from the earlier-designed engines' piezo-crystal-controlled injectors, having solenoid-controlled injectors. These have multiple, inward-directed openings and are positioned centrally in the combustion chamber close to the sparkplug.

DOUBLE VANOS variable valve timing. This familiar feature, varying the timing of the intake and exhaust valves for optimum torque, power and everyday driveability, appears in every contemporary BMW engine. For its N20 and N55 applications, it has been refined again.

Single catalytic converter. Another complexity-reducing feature. Exhaust passes through the turbo's twin scrolls, thence to the converter. Aft of this, some models with this engine have dual exhaust (thus partial dual); some have a single exhaust system. See the individual Series' **standard & optional features summaries** for information on this detail.

Serpentine belt for driving ancillaries, as on the N52 TU engine; reduces engine length. The need for 2-sided belts and a special air-conditioning compressor is eliminated. Other elements of the layout of the engine and its ancillaries have also been simplified.

Reduced weight thanks to the single turbocharger, advanced lightweight cast crankshaft, and other engineering details.

Shared features, N54 and N55. Both engines share the same basic block concept – aluminum with cast-in iron cylinder liners, bedplate construction for extremely high strength – and their bore and stroke dimensions. Both employ BMW efficiency enhancements such as the electronically volume-controlled oil pump and electric coolant pump.

N54 3.0-liter DOHC 24-valve twin-turbo 6-cylinder engine with direct fuel injection

(335is models, Z4 35i & 35is) Alongside development of the N55, the twin-turbo N54 was further refined and its power + torque output increased. Thus the N54 assumed a new role: Higher-performing and sportier in their details, equipment and esthetics, these models offer a step up from their 35i stablemates. In addition to increased "regular" power and torque – 320 hp/332 lb-ft. for the two 335is models, 335 hp for the Z4 35is – all include an Overboost function that lifts torque to 370 lb-ft. for brief bursts of performance.

The 300-hp N54 (original version) continues in the Z4 35i; it is familiar and needs no introduction.

Whatever the version, the N54 differs from the N55 via:

- **Twin turbocharging** via two single-scroll turbos vs. the N55's single twin-scroll turbo.
- **Overboost function**, allowing higher turbo boost for brief periods (up to 7 sec.) to achieve dramatic midrange acceleration. One could think of this as a sort of "passing gear." 335is and Z4 35is versions.
- **Special exhaust system** to match the engine's more aggressive turbocharging system. In the 335is and Z4 35is, this is tuned for an ultra-sporty sound.
- **Conventional valvegear** (thus fixed valve lift) vs. the N55's Valvetronic
- **Piezo injectors** for the direct fuel injection, providing an extra measure of precision for this higher-performance engine.

BMW features

The following key features appear in more than one BMW Series:

In summary, while the N55 matches the original N54 (debut in '07) with regard to performance, makes notable progress in fuel efficiency – and does it all with less complex engineering – the enhanced N54 advances performance another level. Here are some impressions of how this all works out:

335is – a choice of 6-speed manual or 7-speed DCT is offered. With the latter, *Car and Driver* (September '10) found that "At the track, the 335is backs up its power claims, proving to be the quickest 335 ever." *AutoWeek* (February 8, '10) added that "the wail of the engine is a continuous treat."
Z4 35is – In this model, the higher-output N54 is combined exclusively with the 7-speed DCT. The BMW Car Club magazine *Roundel*, in its February '10 issue, reported that "The reworked engine is super-responsive...it also produces a wonderful soundtrack – a throaty combination of induction and exhaust blare that takes on a delicious hard-edged growl as you approach the 6500-rpm cutout."

N63 4.4-liter DOHC (4-cam) 32-valve TwinPower Turbo (twin-turbo) V-8 engine with direct fuel injection (550i, X6 & X5 50i)

This muscular engine represents BMW's contemporary approach to achieving high performance with reasonable fuel efficiency via turbocharged engines.

In quantitative terms, the N63 engine delivers 400 hp @ 5500 rpm and 450 lb-ft. of torque, the latter available from a very low 1750 rpm. Abundant power and

torque, yes; but more importantly, delivered over a very wide range of operating conditions.

The point of this approach is high performance for BMW's larger and heavier models without correspondingly high fuel consumption. In technical terms, the approach involves some fascinating design details. This engine pioneered a new layout, in which twin turbochargers and the exhaust-cleansing catalytic converters are placed between the V-8's two cylinder banks. Opposite to the conventional layout, this puts the exhaust camshafts and valves inboard so that the path from cylinders to turbochargers (which are driven by exhaust gas) is efficiently short. The intake camshafts and valves are positioned outboard.

Aside from the dramatic thrust drivers will notice subjectively, the objective data are dramatic: 0-60-mph times ranging from 4.7 sec. for the 550i xDrive Sedan to 5.3 for the X5 50i. The N63 engine's salient engineering features are widely shared with the N54 twin-turbo 6-cylinder unit, and to a lesser extent with the N55 single-turbo 6-cylinder.

N63 TU 4.4-liter DOHC (4-cam) 32-valve TwinPower Turbo (twin-turbo) V-8 engine with direct fuel injection (750i/Li, 650i & 550i GT models)

Although the TwinPower Turbo designation appears on its hand-some engine cover, the Twin Turbo designation is equally correct and usefully clarifies its technology.

For 2013, N63 technology takes a significant step forward with the new TU (Technically

Updated) version of this strong, refined V-8 engine. Its highlights:

- **Valvetronic variable intake-valve lift**, a primary distinction from the N63's fixed valve lift.
- **Direct fuel injection**. This replaces the N63's piezo-crystal-controlled direct system and brings the N63 into line with the N55 6-cylinder; it utilizes multiple, inward-directed openings, positioned centrally in the combustion chambers.
- **Two single-scroll turbochargers** as before; but not single twin-scroll type of N55.

Other changes, mainly directed toward reduced fuel consumption, include:

- 3-pump cooling system with switchable mechanical main pump; 50-watt electric pump for intercooler and engine controls; 20-watt electric pump that continues running to cool turbocharger bearings after engine shutoff.
- Volume-controlled oil pump
- Automatic engine start/stop.

The N63 TU continues with its ultra-robust aluminum block and silicon-impregnated, soft-honed cylinder surfaces; like all other current BMW engines it also retains Double VANOS variable intake- and exhaust-valve timing. This wide-ranging upgrade also benefits performance:

- **Power output** rises from 400 to 445 hp.
- **Torque output** rises from 450 to 480 lb-ft.
- **Vehicle performance** naturally reflects these increased outputs. Comparing parallel models, 0-60 times improve from 4.9 to 4.5 sec. for the 650i Coupe, and from 4.7 to 4.3 sec. for the 650i xDrive Coupe.

Thus: Once again, BMW achieves higher performance in combination with higher fuel efficiency. A great engine becomes even greater!

S63 & S63 TU BMW M 4.4-liter DOHC (4-cam) 32-valve TwinPower Turbo (twin-turbo) V-8 engine with direct fuel injection (M6, M5, X6 M & X5 M)

For 2013, there are two BMW M TwinPower Turbo engines, both featuring dual Twin Scroll turbochargers and extensive M features and modifications. One, the S63, powers X6 and X5 M models and is related to the N63 unit that continues for '13 in 550i Sedans. The other, S63 TU, is related to the new N63 TU that powers 7, 6 and 5 Series GT 50i models and is described just above. As these two engines are exclusive to the two model sets, they are described in detail in the M5 & M6 and X5 M & X6 M sections.

ALPINA 4.4-liter Bi-Turbo V-8 engine (BMW ALPINA B7)

A further development of the new N63 TU engine, retaining twin single-scroll turbochargers. It is described in the BMW ALPINA B7 section.

Turbocharging, direct fuel injection and other power-enhancing technologies (all except 128i models & 328i Coupes-Convertibles)

Several outstanding technologies and features underlie the dramatic power and – especially – torque that characterize the majority of today's BMW engines.

BMW features

The following key features appear in more than one BMW Series:

Turbocharging increases the performance of combustion engines, and has been around in various forms for 100 years. At various times, BMW has set milestones in the development of turbocharging: In 1973, the 2002 Turbo offered 170 hp, vs. 130 for its non-turbo stablemate the 2002 ti. In 1983, a BMW-powered Brabham racecar was the first turbocharged vehicle to win a Formula 1 championship.

Yet over its history, turbocharging often had bothersome “turbo lag” – the lag after the driver pressed the accelerator pedal before the turbo(s) responded. Another was relatively high fuel consumption. Available materials didn’t always fare well under the operating conditions of a turbocharger, which gets its energy from hot, flowing exhaust gases and typically spins up to 5-figure rpm’s. After the 2002 Turbo, BMW set turbocharging aside. (Except for diesel engines, where turbocharging is an almost indispensable power enhancer.)

BMW’s turbocharging concepts address both turbo lag and durability concerns:

Twin-turbo. Two small turbos – each serving half the engine’s cylinders – reduce the inertia that creates turbo lag. In its July 31, ’06 issue, *AutoWeek* noted of the then-new N54 engine that “Turbo lag is not an issue, the motor pulls cleanly with as little as 1200 rpm showing, and throttle response feels instantaneous throughout the rev range.” BMW engines with twin single-scroll turbos are the N54 6-cylinder of 335is and Z4 35i/is models; and the N63 V-8s of 7, 6 & 5 Series, B7, X6 and X5 models.

Twin Scroll turbo. Intensive evolution has brought turbocharging into today’s mainstream powertrain spectrum; Twin Scroll represents another refinement. Instead of half the cylinders feeding their exhaust into each of two small turbos, each half feeds its exhaust gas into a single (larger) turbo’s twin spiral ducts or scrolls. Apportioning the two cylinder sets’ exhaust between the two paths –

- results in a smooth, nearly continuous flow of the gases to the single turbine
- reduces interference between cylinders’ exhaust pulses
- and thus limits any undesirable “feedback” of exhaust gas into a cylinder that’s inducting fresh air for combustion.

Dual Twin Scroll turbos. BMW M’s TwinPower Turbo V-8s combine the two above concepts by employing two Twin Scroll turbos – an ultimate solution for the ultimate performance of these engines.

Materials innovations. BMW has drawn upon innovative and heat-resistant materials from space technology to facilitate the twin turbos’ dramatic contribution to performance. Each turbo’s turbine – the rotating component that gets its spin from the exhaust stream, drives the compressor, and is subject to the most extreme heat – is made of advanced steel that can withstand up to 1050°C, or 1920°F.

Direct fuel injection. Fuel injection, as (mostly) known over the decades, has been of the port type: fuel is injected into the engine’s intake ports, where air passes through on its way to the cylinders. Direct fuel

injection sprays fuel directly into the cylinders, or more precisely the combustion chambers.

If this were as simple as it sounds, direct injection would be commonplace. But the cylinder is a much hotter, higher-pressure place than the intake port and poses challenges for the fuel injectors and for optimizing how, when and how much fuel is injected.

Direct injection is a key factor in achieving BMW’s goals for these engines. It gives the engineers greater freedom in the calibration of fuel quantity and timing and the distribution of the fuel-air mixture in the combustion chamber. With this concept, it’s possible to utilize a “leaner” mixture – thus less fuel. The advantages in fuel efficiency, power, torque and emission control are more significant.

A further advantage to torque and fuel consumption is the cooling effect of fuel being injected into the hot combustion chambers. In the past, to avoid overheating, turbo engines required a much lower compression ratio. As a higher compression ratio benefits both fuel efficiency and (especially low-speed) torque, today’s BMW turbo engines benefit mightily, with compression ratios only slightly lower than for their non-turbo counterparts: N20 10.3:1, N54/55 10.2:1 vs. N52’s 10.7:1, N63 variants 10.0:1 vs. their non-turbo predecessor’s 10.5:1.

Intercooling. Turbocharging typically includes intercooling of the engine’s induction air, that is, cooling the compressed air that emerges, heated by the compression process, from the

turbocharger(s). It can be done with coolant or air; here it’s done indirectly by outside air. Intercooling helps preclude detonation or “knocking” that can reduce power or, in the extreme, damage the engine. Of course all current BMW engines have knock control.

Special exhaust system. The dual (or partial dual) exhaust system runs at both sides of the vehicle. At low loads, a flap channels most gas through one side to reduce low-frequency exhaust “rumble.”

Oil cooler(s). In addition to the standard coolant-to-oil cooler, current N54-powered models (thus with Sport or M Sport Package) have an air-to-oil cooler.

BMW Full Hybrid 2.0 power system

(ActiveHybrid 7, 5 & 3)
“Full Hybrid 2.0” signifies the 2nd generation of BMW’s full-hybrid concept.

In hybrid power systems, a primary distinction is between “mild” and “full.” Both employ a combustion engine and electric motor(s), the latter providing a portion of the vehicle’s motive power and operating as generator(s) to charge a high-voltage battery pack.

“Mild” denotes employing an electric motor to augment the combustion engine’s power and charge the HV batteries; mild hybrids cannot be driven on electric power alone.

A “full” hybrid, by contrast, can be driven under certain conditions on electric power alone. BMW’s first hybrid models were

BMW features

The following key features appear in more than one BMW Series:

the 2010-11 ActiveHybrid X6, with a highly complex full-hybrid system; and the V-8 ActiveHybrid 7, with a less complex mild-hybrid system. Both these hybrids are now out of production; BMW now offers three models, all powered by the advanced Full Hybrid 2.0 system with some Series-specific variations.

Full Hybrid 2.0 is the system powering all three ActiveHybrids, which for brevity will be referred to as "AH". This full-hybrid system can operate under some conditions on pure electric power. As such, it is an important step forward; and it incorporates innovations that go well beyond the power system itself – innovations that help the driver obtain the most fuel-saving benefit from hybrid power.

Basic elements of the power system. Hybrid power systems take a variety of forms – Toyota's full, Honda's mild, Chevrolet Volt's plug-in full hybrid with its stronger accent on electric power, etc. AH5 introduces BMW's latest, most highly developed concept.

The basic elements are:

- **N55 6-cylinder TwinPower Turbo engine** – essentially as in other BMW models, but with hybrid-specific modifications. Among these:
- **Cooling for electric motor/generator** connected to that of combustion engine
- **Specific electronic engine management**
- **Different positioning of engine mounts**, plus switchable hydraulic engine mount
- **Modified dual exhaust system**
- **Electric motor/generator**,

integrated into automatic transmission. Powers the vehicle in electric-only driving, boosts the engine for acceleration, charges the high-voltage battery pack via a bidirectional inverter, and supplies the low-voltage vehicle electrical system via a DC/DC converter. It also applies torque to transmission gearsets for smooth shifting. Delivers 39 kW/53 hp, weighs 46 lb.

- **Belt-driven starter/alternator**, charging a dedicated 12-volt battery and bringing the engine into action ultra-quickly and virtually imperceptibly, whether at vehicle standstill or underway. Can also provide voltage for vehicle electrical system if necessary. A conventional starter, powered by the low-voltage electrical system and driving the flywheel via gears, provides initial engine starts. This is the engine's only belt-driven ancillary.
- **Electric vacuum pump, oil pump, air-conditioning compressor.** In purely combustion-engine vehicles these are usually engine-driven.
- **Special 8-speed automatic transmission** with no torque converter; adds internal clutch for decoupling engine during all-electric driving, utilizes existing elements for creep and vehicle startup from rest (this is also a clutch function).
- **High-voltage battery pack** – 120 volts via 26 lithium-ion cells; carried in a reinforced steel housing at the front of (or under) the trunk compartment. Powers the electric motor/generator via a bidirectional inverter; is charged by the electric motor/generator, also

via inverter. Cooled via a/c refrigerant.

- **Low-voltage power supply** – from the high-voltage battery pack via DC/DC converter
- **Advanced Electrical Power Management** – managing the low-voltage circuit
- **High-voltage power management** – managing the high-voltage system as well as the DC/DC converter that powers the low-voltage circuit
- **Starting battery** – carried in the trunk, this 12-volt/50-amp-hr. battery powers the belt-driven starter/generator described above.
- **Hybrid-specific Brake Energy Regeneration.** Via the electric motor/generator in the automatic transmission, charging of the high-voltage battery pack occurs during deceleration or braking.

In combustion-powered vehicles, when the driver lets off the accelerator, the engine produces "engine braking" that helps slow the vehicle (deceleration). In hybrid vehicles this effect comes primarily from the electric motor/generator, operating as a generator to charge the high-voltage battery pack. The effect varies according to the Driving Dynamics Control setting: maximum in Sport mode, less in Comfort, still less in ECO PRO.

Actual braking in combustion-powered vehicles is done by hydraulic-mechanical brakes at the wheels – 4-wheel ventilated disc brakes on all U.S. BMW models. In hybrid vehicles, the electric motor/generator provides braking force and charges the battery pack.

Depending on vehicle speed, the motor can charge at about 10 times as much as the regeneration that's standard in most of our combustion-engine models. This Brake Energy Regeneration contributes much of the system's savings in fuel consumption. (EPA combined mileage ratings show +7.6% for AH3, +13.0% for AH5 and 13.6% for AH7 compared to their combustion-engine counterparts.)

In its generator mode, the electric motor can produce up to 0.3g of deceleration, significantly reducing the job of the wheel brakes. Above this level of deceleration, the system apportions electric and hydraulic braking. The driver's pedal application is read by sensors and split according to driving conditions.

Driving BMW Full Hybrid 2.0

Starting. Whether standard-equipped or with Comfort Access, the hybrid power system is started with the Start-Stop button. If the system is cold, the combustion engine will start via the conventional starter. Once the system is warmed up, a "silent start" occurs, without the engine running. In the latter case, a "Ready" indication in the tachometer (standard) and digital display (vehicles with optional Head-up Display) are evidence that the vehicle is ready to drive.

Driving away. If the system is cold, this will be with engine running and will feel conventional. Once the system is warm, under gentle acceleration the vehicle moves off under electric power; if brisk, the engine almost imperceptibly joins in.

BMW features

The following key features appear in more than one BMW Series:

Accelerating. Under hard or maximum acceleration, the electric motor acts as a booster, a sort of “supercharger.” In this transitional mode, the boost comes from the battery pack, which is then recharged during deceleration or braking. Total system power is:

- AH7 – 350 hp, total torque 367 lb.-ft., vs. 315/330 for engine alone
- AH5, AH3 – 335 hp, total torque 330 lb.-ft., vs. 300/300 for engine alone

Thus the AH7 can accelerate from rest to 60 mph in 5.4 sec. vs. 5.6 for the combustion-engine 740Li; AH5 in the same 5.7 sec. as the 535i; AH3 5.2 sec. vs. 5.1 – all despite their greater weight. The engine’s transitional response is also enhanced by the quick-acting motor (“tip-in” of the accelerator).

Coasting mode. In one of the 2.0 innovations, a coasting function switches off the engine when the driver lifts off the accelerator or applies the brakes at speeds up to 50 mph. In the Driving Dynamics Control’s ECO PRO mode, this function occurs at up to 100 mph.

Electric-only driving at lower speeds. For zero local emissions, the AH7 and AH5 can operate all-electrically up to 37 mph; in ECO PRO mode, the AH3 increases this to 47 mph. The battery pack can store energy sufficient for an all-electric driving range of about 2.5 miles at an average speed of 22 mph. Generally, the engine is switched off when vehicle speed drops below 35 mph and no strong acceleration is needed. Most frequent electric-only operation occurs in the ECO PRO

mode, less in Comfort mode, and minimal in Sport mode.

Stopping in traffic. In a further development of the Auto Start-Stop function now appearing in many BMW combustion-engine models, with the system warmed up the driver can expect the engine to stop (after a brief delay) when the vehicle stops. All other electrical systems, including climate control, continue to operate. When the driver releases the brake pedal, the vehicle will move off on the electric motor alone or with electric and combustion power, depending upon the battery pack’s current charge level and how much power the driver wants.

Use of electromechanical parking brake and Automatic Hold. In contrast to the non-hybrid version, the parking brake in the AH5 does not depend on whether or not the engine is running. Automatic Hold (AH7 and AH5 only) has the same function as in other models, holding the vehicle stationary until the driver steps on the accelerator.

“Looking ahead” – a revolutionary capability. At any given time, the hybrid system’s Intelligent Energy Management works to maximize the ActiveHybrid’s fuel efficiency. Yet this is merely the “here and now.” BMW’s acclaimed GPS Navigation system, standard in AH7 and AH5 and optional in AH3, appears here in a special version with the ability to “look ahead” and further optimize the hybrid system’s operation on the basis of conditions about to be encountered en route to a navigation destination. Presently, this capability is available only under low-speed

urban conditions and is called City Driving Management; further capabilities will be added later.

Remote climate control – a useful amenity: climate control can be activated at about 100 ft. from the vehicle, for instance to cool down the interior ahead of getting into it.

Instrument displays. Five operational situations are indicated as follows:

- **Readiness.** Engine not running, tachometer shows zero. READY appears at the tachometer’s lower left, above the blue energy-balance band.
- **Electric-only driving.** Arrows at the left end of the blue band point clockwise.
- **Regeneration.** Blue band extends counterclockwise into “plus” range.
- **Engine running.** Tachometer needle active, blue band indicates state of battery-pack charge.
- **Boost.** Tachometer needle active, arrows as in electric-only driving.

Displays in iDrive. In VEHICLE INFO, select HYBRID; this replaces non-hybrid models’ EfficientDynamics menu and offers these displays:

- **Fuel consumption/hybrid utilization.** Via juxtaposed bar graphs, the display contrasts fossil-fuel consumption and hybrid utilization.
- **Energy flow.** A dramatic diagram depicts the system as arranged in the vehicle. Momentary combustion power is shown in red, electric power in blue; boost, regeneration and drawdown of batteries are illustrated by arrows.

Weight-saving cylinder block and head(s)

(Aluminum head/heads all models; aluminum block all models except N52 engines’ magnesium/aluminum construction, 328i & 128i Coupes & Convertibles)

All BMW engines except the N52 have an aluminum cylinder block and cylinder head or heads. (4- and 6-cylinder engines have one cylinder head, V-type engines two.)

Compared to cast iron, aluminum saves weight, enhancing vehicle performance and handling. Block construction is as follows:

- **4-cylinder TwinPower (single twin-scroll turbo) engine** of 528i and 328i Sedans, Z4, X3 and X1 28i – aluminum block with arc-electroplated steel cylinder surfaces.
- **6-cylinder engine** of 128i and 328i Coupes and Convertibles – magnesium/aluminum composite block construction, integral silicon-impregnated aluminum cylinders (not liners). A “soft honing” machine removes enough aluminum from cylinders to leave hard silicon crystals as their working surfaces.
- **6-cylinder TwinPower (single twin-scroll turbo) engine** of 740i/Li, 640i, 535i, 335i, 135i/s, X6 and X5 35i – aluminum block with iron cylinder liners cast into block.
- **6-cylinder twin-turbo engine** of 335is and Z4 35i/s models – aluminum block with iron cylinder liners cast into block.
- **V-8 and V-12 twin-turbo engines** (760Li, 750i/Li, 650i, 550i, M6, M5, X6 and X5 50i,

BMW features

The following key features appear in more than one BMW Series:

X6 and X5 M – aluminum block with integral silicon-impregnated, soft-honed aluminum cylinders.

- **V-8 engine** of M3 (M engine, non-turbo) – aluminum block with integral silicon-impregnated, soft-honed aluminum cylinders.

In particular, the magnesium/aluminum construction of 328i Coupe-Convertible and 128i models' N52 6-cylinder engines saves weight. The N20 4-cylinder engine, which replaced the N52 in several 28i models for '12 and '13, achieves a further weight savings of some 20 lb. by virtue of its smaller size.

Dual overhead camshafts (DOHC) and four valves per cylinder (all models)

All current BMW engines have DOHC and four valves per cylinder, one of the most efficient valve mechanisms in use today. This means two camshafts in the 4- and 6-cylinder engines, and four in the V-8s and V-12.

Chain camshaft drive (all models)

The camshafts of some competitors' engines (notably some Acura, Audi, Honda, Lexus and Volvo models) are driven by a toothed belt, which requires periodic replacement. All current BMW engines have chain drive, automatically maintained at the correct tension and engineered to last the life of the car. This is a good point to make, especially for customers (such as for the 1 Series) who might have owned vehicles with timing belts in the past. Notably, the "corporate" 2.0-liter 4-cylinder turbo engine

that powers many Audi and VW models has belt-driven camshafts.

Double VANOS variable valve timing (all models)

VANOS derives from VARIable NOckenwellen Steuerung, German for "variable camshaft control" or variable valve timing, achieved by rotating each camshaft relative to its drive sprocket. This has the effect of varying the points in the combustion cycle at which the valves open and close. Because it operates on the intake and exhaust camshafts, it is called Double VANOS.

VANOS enhances low- to medium-speed torque and emission control, and may positively affect fuel economy. Valve timing is varied steplessly between the system's "earliest" and "latest" settings (i.e., no simple change-over from low- to high-speed). Electronically controlled and hydraulically actuated, VANOS varies valve timing according to engine speed, load and temperature.

Valvetronic variable intake-valve lift (750i/Li, 740i/Li, 650i, 640i, 550i GT, 535i, 335i, 135i/is, 328i Sedans, all 28i models, all 35i models except Z4)

Valvetronic is BMW's advanced engine "breathing" concept. In addition to today's almost universal variable valve timing, a few manufacturers (notably Honda, Toyota and more recently Audi) employ a mechanism to change valve lift – the distance the valve is opened to admit air and fuel into the combustion chamber – on some of their engines.

Valvetronic varies intake-valve lift – but to a far greater, and more fundamental, degree than any other system – indeed, so extensively that it replaces the traditional engine throttle. Engine breathing is controlled by the intake valves. This is in contrast to Audi's Valvelift system, which provides just two settings for valve lift and does not replace the throttle. (This system now appears in the A4, A5, A6, A7, Q3, Q5 and Q7 V-6 engines).

BMW has now combined Valvetronic with turbocharging in five engine families:

- N20 4-cylinder – powering 5 and 3 Series, Z4, X3, X1 models
- N55 6-cylinder – 7, 6, 5, 3, 1 Series; X6, X5, X3, X1
- N63 TU V-8 – 7 and 6 Series, 550i GT
- ALPINA Bi-Turbo V-8 – BMW ALPINA B7
- S63 TU V-8 – M6, M5.

The BMW-patented Valvetronic mechanism sits atop the intake valves. Each of the engine's valves (4 valves per cylinder) is actuated as the camshaft lobe deflects a finger-type rocker arm. On the intake side, there is an additional element between the cam lobe and rocker arm, an intermediate follower.

Upon contact by the camshaft lobe, this follower actuates the rocker arm and, in turn, the valve. The follower is positioned by an eccentric shaft which, rotated by a small servo motor in response to the driver's accelerator-pedal motions, varies the follower's pivot point and thus the valve lift. The system's highlights:

- **Intake valves assume function of throttle.** Engine breathing (air intake) is controlled by varying their lift. The driver's foot gives the commands; valve lift varies accordingly. At minimum lift, the engine is idling or decelerating; at maximum lift, it produces full power.
- **Enhanced efficiency.** A throttle imposes a restriction that incoming air must snake around. This causes so-called "pumping losses," which take an increasing portion of engine power in lower-speed driving. By eliminating the throttle, Valvetronic essentially does away with pumping losses. This is reflected in excellent EPA mileage ratings relative to engine performance, and in more spontaneous engine response to the accelerator.
- **More power.** High valve lift contributes to high power output; yet with fixed lift, one cannot simply increase it, as too-high lift can degrade operation at low speeds and loads. Valvetronic adjusts valve lift precisely to operating conditions – and is extra-high at the top end. This helps Valvetronic engines achieve their remarkable power. In the newest Valvetronic engines (N20, N55, N63 TU), maximum lift is 9.7 or 9.9 mm.
- **Refined engine operation.** In light-load driving, operation is extra-smooth because of relatively small valve lift of 0.5 to 2 millimeters. Many customers may notice the ultra-smooth idling and low-speed operation.

BMW features

The following key features appear in more than one BMW Series:

- **Excellent cold starting.** The small valve opening promotes highly effective vaporization of fuel, even when the engine is being started from cold.
- **“Drive by wire”** in a different form. Non-Valvetronic BMW engines have electronically controlled throttles, so-called “drive-by-wire.” With Valvetronic, this feature is even more natural: via the pedal, the driver’s call for power translates into greater valve lift.
- **Lightning-fast response.** The system can vary lift all the way from minimum to maximum in just 300 milliseconds, or 0.3 sec. To achieve this, BMW developed a dedicated Valvetronic microprocessor, which networks with the powerful primary engine computer. In the newest Valvetronic engines, this response is even faster.
- **Low friction, precision components.** Low-friction rollers transmit the Valvetronic system’s motion. The follower is a precision casting, machined to a tolerance of 8/1000ths of a millimeter. For quietness, zero valve clearance is maintained by a hydraulically adjusted pedestal on which the rocker arm pivots.

Valvetronic is an important engineering and technological advance by BMW. Presently it appears in all BMW engines except the V-8s of 550i Sedan, M3 and X5-X6 M models.

Accelerator pedal pivoted at floor

(all models)

The accelerator pedal of all BMW models is pivoted at the floor, which helps preclude its

catching on a floor mat. Pedals suspended from above and not attached to the floor, as in some of BMW’s competitors, may be susceptible to getting caught on all-season floor mats, which are often heavy and relatively rigid.

Hydraulic valve adjustment

(all models)

This maintains zero clearance between the valves and their actuating mechanism, virtually eliminating valve noise and making periodic adjustment unnecessary.

Two systems of hydraulic valve adjustment are used in current BMW engines. The M3 engine has bucket-type hydraulic valve lifters between the camshaft lobes and valves, with no rocker arms.

In all other models, there are rocker arms; the hydraulic elements are not “lifters,” but rather stationary adjusters that position the rocker arms’ pivots to maintain zero valve clearance.

Direct ignition system

(all models)

Instead of a single coil, each cylinder has its own ignition coil. This reduces the number of moving parts, and allows more precise control of ignition timing for the individual cylinders. To accommodate its very high rpm capability, the current M3 engine employs advanced ionic-current ignition technology for knock control. (See also **knock control**, nearby, and 4.0-liter DOHC (4-cam) 32-valve V-8 engine in the M3 section.

DME engine management

(Digital Motor Electronics)

(all models)

This microprocessor system continuously monitors a wide variety of operational data, calculates the ideal fuel metering and ignition timing, and adjusts them several hundred times per second. Signals from Lambda oxygen sensors (in the exhaust system) are processed by the DME computer with adaptive logic. The engine’s idle speed is also controlled adaptively to compensate for engine break-in and wear. You could call this an ability to “learn.”

Electronically controlled engine cooling

(all except M3)

Also referred to as “map cooling.” Controls the engine thermostat in response to a complex matrix of operating data – coolant and outside temperature, engine load and driving speed – rather than just coolant temperature. This allows operating the engine at higher temperatures under light-load conditions, which can increase fuel economy and benefit heater effectiveness.

Knock control

(all models)

In all current BMW engines except that of the M3, knock sensors in the engine block detect any incipient knocking in the cylinders, then signal the DME to retard ignition timing at the affected cylinder(s) only until the knocking ceases. Thus timing can always be optimum unless knocking actually begins to occur. Knock control allows a high compression ratio to be used (all current BMW engines

have a ratio of 10.0:1 or higher), benefiting performance and efficiency.

The M3 engine has even more advanced technology for knock control; see 4.0-liter DOHC (4-cam) 32-valve V-8 engine in the M3 section.

Hydraulic engine mounts

(all models)

These employ oil as well as rubber to reduce engine vibration felt inside the car – an especially important point in highly refined BMWs.

Low-restriction exhaust system

(all models)

All BMW exhaust systems are designed for relatively free, efficient flow of exhaust gases to enhance performance. All current engines have a partial or full dual system. To facilitate their engines’ very high power outputs, M models’ exhaust systems are especially elaborate, voluminous and free-flowing. Some models, notably the X5 M and X6 M, include electronically controlled flaps in their exhaust systems to achieve especially sporty sound.

Underhood beauty

(all models)

All BMW engines and engine compartments are designed to be not only logical and straightforward to service, but to look attractive when the hood is opened. Be sure to show every prospect BMW’s distinctive engine and engine-compartment design – especially that of the M models, whose customers usually have heightened interest in this aspect.

BMW features

The following key features appear in more than one BMW Series:

Automatic start/stop function (750i/Li, 740i/Li, B7, 6 Series, 5 Series GT, 535i & 528i Sedans, 3 Series Sedans, Z4 28i w/ manual transmission, M6, M5, M3, all X3, X1 28i models)

This important advance will boost fuel economy on more models as time goes on. Under certain defined conditions, the engine shuts off when the vehicle comes to a stop, and re-starts in a fraction of a second for drive-off.

- **With manual transmission**, after the driver shifts into neutral and releases the clutch pedal. To re-start the engine, the driver again depresses the clutch pedal.
- **With automatic or Double-Clutch transmission**, after the vehicle comes to a stop, the driver continues to apply the brakes. After 1 second the engine shuts off. To drive off, the driver need only release the brake pedal and the engine re-starts.
- An **“A START STOP”** icon appears in the central information display when the function is active.
- **Auto start/stop does not function** if the –
 - engine has not reached normal operating temperature
 - interior climate has not attained the selected settings
 - ambient temperature is less than 37°F
 - battery is not sufficiently charged
 - driver moves the steering wheel
 - vehicle begins to roll, as for example on a slope.

Further, even after a shutdown, the system’s electronic control

unit will re-start the engine anytime comfort or safety considerations dictate, such as windshield fogging or insufficient battery charge. And it will not re-start the engine if a safety belt has been unfastened or the hood opened.

Finally, the driver may de-activate the function by pressing the A START STOP button.

BMW manual transmissions (26 of 74 models⁷)

Of 74 models currently offered by BMW in the U.S. (up from 63 in ‘12), 24 are available with a manual transmission, all 6-speeds; this fact documents BMW’s unique position among luxury vehicles of offering an extensive array of models with a manual transmission.

Each is engineered to provide what buyers want when they choose a manual transmission: precise control and a high level of driving pleasure. Five types of 6-speed now appear in various models, in ascending order of their torque capacity:

- Type I in 128i, RWD 328i Coupe, 328i Convertible
- Type I-350-Turbo in RWD 328i Sedan, Z4 28i
- Type H in 328i xDrive Coupe
- Type K in 135i/is, all 335i, RWD 535i Sedan
- Type G in 335is, RWD 550i Sedan, Z4 35i, M5, M3

Introduced in ‘12, Type I-350-Turbo currently teams only with the N20 4-cylinder engine. Type K was new in ‘11 and pairs only with the N55 6-cylinder engine. Both of these relatively new transmission designs are described in the **3 Series Sedans** section.

BMW automatic transmissions (64 of 74 models⁷)

All current BMW automatic transmissions include at least the following features:

- At least 6 forward speeds, 8 speeds becoming the norm
- Full electronic control
- Adaptive Transmission Control, which automatically selects shift modes according to driving style and operating conditions (during normal automatic operation only)
- Selectable Sport and Manual shift modes.

Two types of shift or selector lever appear in the different Series: **Mechanical shift lever** (3 Series Coupes and Convertibles, 1 Series, X1 35i). The primary shift quadrant or “gate” offers Park, Reverse, Neutral and Drive positions. A second gate, to the left, is labeled M/S for Manual/Sport and interfaces with the primary gate at the Drive position. Moving the lever into this gate activates the Sport mode, in which shifts occur at higher speeds for a livelier performance feel and 6th gear is not engaged. From this position, the driver can make upshifts and downshifts at will by “flicking” the lever forward for downshifts, rearward for upshifts.

E-shift on console (7, 6 and 5 Series, B7, 3 Series Sedans, X6, X5, X3, X1 28i) A shorter lever incorporates movements analogous to those of the mechanical lever. The shift pattern appears on the lever itself, rather than on the console. When the engine is started, the transmission is always in neutral (N). Reverse is selected by tipping the lever forward, Drive rearward. From operation in Drive,

the Sport mode is engaged by moving the lever to the left; to return to Drive the driver moves the lever rightward. All these movements are analogous to those of the mechanical lever, except that the lever itself returns to its constant position after it is tipped or toggled (except when it is moved laterally into or out of M/S). Requiring less physical space, E-shift leaves more room for other amenities.

Instead of moving the lever all the way forward to engage Park, the driver instead presses a P button atop the lever; in the lever’s shift pattern, P then illuminates. It is also necessary to press the Unlock button on the side of the lever to move it from Park to Reverse or Drive.

Other Series or model-specific transmission features

- **Steering-wheel shift paddles** appear in all 3 and 1 Series models with automatic transmission and M Sport Package, Z4 28i, all X6 and X5-X6 M models, X5 35i Sport Activity and 50i, X3 35i with M Sport Package, and X1 optionally. Models with shift paddles also include Direct Selection of Manual mode: If, while driving in D, the driver manually downshifts via paddle, the Manual mode engages. But if the driver makes no further manual shifts within 15 seconds, the transmission returns to automatic operation.
- **Driving Dynamics Control**. On most current models, the transmission’s Sport mode is selected by a console-mounted Driving Dynamics

7 – The three versions of X5 35i are counted as three models.

BMW features

The following key features appear in more than one BMW Series:

Control that also affects engine response and (if present) electronically controlled suspension. For details on this, see **Driving Dynamics Control**.

Sport automatic transmission (standard 6 Series, RWD 5 Series Sedans, 3 Series Sedans with Sport or M Sport Line, Z4 28i, X6, X5-X6 M; X3 35i)

This version includes shift paddles plus a wide range of attributes making it ideal for sports-minded drivers who prefer an automatic transmission:

- Sport button on console (X6 35i & 50i, X5-X6 M) for two Sport modes:
- Standard Sport mode, selected as described earlier for the E-shift. Only the transmission functions are altered: Shifts occur at higher vehicle speeds, shifts themselves are quicker once initiated.
- Via Sport button. In addition, engine response to the accelerator pedal is quickened; steering's power assist is reduced; tachometer is calibrated for quicker response to this mode's even quicker engine-speed changes. A Sport mode for the vehicle, not just the transmission.
- Modified Direct Selection. If transmission is in Drive, Direct Selection is as described earlier under **steering-wheel shift paddles**. If Sport mode has been selected via Sport button, a paddle shift engages the Manual mode and it remains engaged.
- Driving Dynamics Control (7, 6 and 5 Series, 3 Series Sedans, Z4, X3). Provides various settings according to Series.

The X5-X6 M models' 6-speed automatic has further special features; see their section for details. 135i/is models with shift paddles have a simplified Sport automatic, with the quick shifting and fast-reacting tachometer but without the Sport button or Driving Dynamics Control.

For further Series-specific information on each automatic transmission, see the **performance & efficiency** section for each Series.

Another ultimate powertrain achievement: 8-speed automatic transmission (7, 6 & 5 Series, B7, 3 Series Sedans, Z4 28i, X6, X5 35i & 50i, X3, X1 28i)

Now found in these models and will appear in more models to come; brings smooth shifting, sportiness and efficiency to a new level of perfection. Compared to the excellent 6-speed automatic it is replacing as new models or generations are introduced, the 8-speed brings significant advantages:

Two additional gears mean quicker shifts, greater smoothness, enhanced efficiency. The wider spread of ratios allows the engine to run at lower speeds, mainly in the "tallest" gear, 8th. Yet even with this wider spread, the steps between adjacent gears are reduced; in turn this means a stronger, yet smoother flow of power during acceleration.

For the same reason, smoother, quicker shifts are a further benefit, as is the fact that in up- or downshifting by one or two gears, only one clutch has to be disengaged. If the driver's acceleration demands call for downshifting more than two gears, this

occurs lightning-fast. In fact, a downshift from 8th to 2nd gear is accomplished with only one clutch disengagement, and thus occurs as a direct shift. Thus at one instant the driver can be enjoying the quiet, fuel-efficient low rpm of 8th gear, in the next instant getting the thrilling acceleration of which these high-performing BMWs are capable. Further, the modest increase in the number of mechanical elements allows the new unit to achieve unusually high efficiency: the so-called "gearing efficiency" is higher than 98% in all eight gears. In 6th gear, it's highest of all because that is direct drive, with no gearing in play. Combine this with reduced friction and the ability to keep the torque converter "locked up" more of the total driving time, and you have a transmission that is very much part of BMW's evolving Efficient-Dynamics concept.

7-speed M Double-Clutch Transmission with Drivelogic (M DCT Drivelogic)

(standard M6 & M5, optional M3) **7-speed Double-Clutch Transmission (DCT)** (optional 335is, 135i/is & Z4 35i; standard Z4 35is)

DCT's BMW debut in the M3 marked an important migration of this concept into sports automobiles of the highest performance levels; also a pioneering application of the principle to such a high-revving engine. In the meantime, Porsche and other marques are adopting it too, with various market names.

For the new-generation M6 and M5, BMW M's engineers deemed that with the wider

torque band of their new M Twin-Power Turbo engine, fewer shift modes are necessary to achieve similar performance results. Thus M DCT Drivelogic evolves, with 6 modes vs. M3's 11.

The DCT offered in the non-M models listed at left operates on the same principle as that in the M models, but with a further simplified selection of modes. This text describes the shared operating principles of all versions and their different systems of shift modes.

Double-clutch signifies two clutches, each of which transmits engine torque to its own gears. One clutch serves to –

- Disengage the engine from the drivetrain so that it can idle while the vehicle is stopped.
- Engage the drivetrain and thus move the vehicle off from rest ("start-up").
- Engage 1st, 3rd, 5th, 7th and Reverse gears.

The other clutch engages 2nd, 4th and 6th gears. This concept is not to be confused with the single twin-disc clutch of the M3's manual transmission, which is there to meet the strength requirements imposed by those models' extremely high power and torque flows. (See the M3 section for details on this.)

How it shifts. DCT shifts sequentially, that is, from one gear to the next – though the driver can "jump" more than one gear at a time by activating the shift lever (or steering-wheel paddles) in rapid succession.

Each shift occurs via the simultaneous release of one clutch and engagement of the other. For example, in moving off from rest, clutch 1 conveys engine

BMW features

The following key features appear in more than one BMW Series:

torque to gearset 1, which is in 1st gear and transmits torque on to the driveshaft, differential and rear wheels.

For the upshift to 2nd gear, clutch 1 disengages and clutch 2 engages. Via the gearbox's electronic/hydraulic controls, 2nd gear is already engaged on gearset 2 and torque now flows through gearset 2.

For the upshift to 3rd gear, clutch 2 disengages and clutch 1 again engages. Torque now flows through gearset 1 again, but that gearset is now in 3rd gear. And so on, all the way to 7th gear. For downshifts, this process occurs oppositely.

Manual or automatic shifts. At all times the driver has the choice of shifting manually or letting DCT do the shifting.

Clutches, not a torque converter. Conventional automatic transmissions employ a device called a torque converter: A fluid coupling that allows the engine to idle with the vehicle stationary; cushions start-up; multiplies engine torque; and helps smooth shifts. These functions (except torque multiplication) are handled by DCT's two clutches, which are mechanical in nature rather than a fluid coupling.

M DCT Drivelogic control system (M3). The E-shift lever provides S (Sport, or manual) and D (Drive, or automated) operation, selected by toggling the lever to the right. The lever is the E-shift type, which the driver "tips" in the desired direction rather than moving from one position to another.

The driver can execute shifts in two ways: by tipping the lever

forward for downshifts (-), rearward for upshifts (+); or by pulling the steering-wheel paddles, the left one for downshifts, the right one for upshifts. If, while operating in D, the driver initiates a shift via lever or paddle, the transmission switches to its S mode.

There are five shift programs in D (D1-D5) and six in S (S1-S6). With each movement up the Automated mode scale (D1 to D2, etc.), shifts become snappier and the vehicle speeds at which they occur moves upward; with each movement up the Manual scale (S1 to S2, etc.), shifts become snappier and rpm matching becomes more aggressive.

M DCT Drivelogic control system (M6, M5). Compared to the M3's ultra-high-revving, naturally aspirated V-8, the M6-M5's "merely" high-revving, higher-torque TwinPower Turbo V-8 spreads its torque over a wider range of engine speeds, holding its peak all the way from 1500 to 5750 rpm vs. the M3's "peakier" 3900 rpm. The turbo engine's peak power holds from 5750 to 7000 rpm, vs. 8300 for the M3.

Thus M's engineers provided "only" six programs, with three in the Automated (D) mode, three in the Sequential (S) mode. The logic, however, is the same: with each movement up the mode scale, shifts become snappier and (in D) occur at higher vehicle speeds. Likewise, in S the rpm matching becomes more aggressive.

DCT control system (335is, 135i/is, Z4 35i & 35is). As with M DCT, Reverse, Neutral and Drive are indicated on the E-shift graphic as a straight line; the leftward "gate" is labeled

M/S (Manual/Sport) in the same manner as with BMW automatic transmissions. Lever and paddle motions for manual shifting (-/+) are as for the M DCT and automatic transmissions.

The main difference between DCT and M DCT is the number and variety of shift programs. Whereas the M DCT provides those 11 or 6 programs via its console-mounted program selector, DCT offers these choices:

- D (automatic) with shifting appropriate to "normal," everyday driving
- S (also automatic) with quicker shifting occurring at higher vehicle speeds
- M (manual) with driver-controlled shifting.

Selecting the Sport or Sport+ modes of Driving Dynamics Control (where present) superimposes a further increment of sportiness over the above modes. Sport+ does not affect transmission operation; instead, it switches the DSC to Dynamic Traction Control but retains the Sport shift modes.

Special functions and safeguards. M DCT incorporates – **Launch Control** for maximum acceleration from rest. DSC must be de-activated and the S6 shift program selected. Then the driver holds the shift lever forward (as if for a downshift) and presses the accelerator pedal fully down. This raises the engine to 1600 rpm. Ready to go, the driver simply releases the shift lever; the engine revs to 8000 rpm and the car launches with precisely balanced clutch slip and wheelspin.

Thus Launch Control gives essentially the same standing-start

acceleration results as would an expert driver. To preclude overheating the clutch, the control system requires an interval of several minutes between Launch Control starts; and if the monitoring does ever detect clutch overheating, the clutch engages fully rather than slipping. Use of Launch Control on public roads and highways is not recommended.

Automatic downshift to 1st gear for starting off from rest. Whether in D or S, DCT engages 1st gear as the vehicle comes to a stop. If the mode selector is in D, upshifts will then occur automatically; or the driver can initiate the upshifts.

Overspeed protection. If the driver calls for a downshift (S mode) that would overspeed the engine, the downshift command is ignored.

Start-off Assistant, active in both S and D modes. When stopped facing uphill, the driver simply holds the brake pedal until ready to start off. Upon release of the brakes, the vehicle is ready (for 1 sec.) to start off without rolling back. This function is achieved via the brakes rather than by slipping the clutch, and is now found on most other BMW models as well.

Hill Detection. Depending on road gradient, the D shift points are modified to ensure optimum gear selection. In S mode, shift times are shortened so that the engine is always "on point" for best acceleration uphill, or engine braking downhill..

2nd-gear start in D1 program rather than 1st gear; the clutch engages delicately. Although the traction-control function is also

BMW features

The following key features appear in more than one BMW Series:

there to prevent it, this reduces even transitory wheelspin.

Driving with M DCT (M3)

For the enthusiastic and technically interested – descriptions that apply to many if not most M Car owners – M DCT Drivelog offers technical fascination, maximum performance, and automatic driving for those times (as when in heavy commuter traffic) when one wants more relaxed motoring. Some might even say that DCT is all transmissions wrapped into one, missing only one thing some enthusiasts want: a clutch pedal.

A remarkable aspect is how well it works in the automatic mode if and when the driver so desires; in the “lower” or less sporty ranges like D1–D3, its shifting is butter-smooth. Taken to its other extreme, say S5 or S6, shifts are snappier and even more perceptible. Here are some notes on driving with M DCT:

1. Even in S, it shifts down automatically when you’re approaching a stop. But after starting up again, it won’t upshift unless the driver chooses – or selects D.
2. When the engine is switched off, Park engages automatically. Park cannot be engaged with the engine running.
3. For maneuvering in tight places, such as parallel-parking, the driver taps the accelerator lightly. Engine speed increases slightly, and the driver then controls vehicle speed with the brake pedal.
4. If you’re at a stop, such as a traffic light, on level ground you don’t need to hold the brakes as you would with an automatic transmission.

5. Rpm matching – synchronizing engine speed with the gear you’re downshifting into – is noticeable mainly at higher speeds, or when downshifting more than one gear at a time (done by multiple actuations of the lever or paddles). It’s accompanied by thrilling sound effects.
6. Upshift lights at the top of the tachometer illuminate sequentially to alert the driver to shift right at the redline. But this happens so fast, you’ll have to be quick!

Driving with DCT (335is, 135i/is, Z4 35i and 35is)

Essentially the same, but with fewer mode variables. Points 1, 2 and 5 apply equally to these models’ DCT and the following points differ:

3. For maneuvering in tight places, such as parallel-parking, the driver need not tap the accelerator. When the driver releases the brake pedal, the vehicle “creeps” in the same manner as with a torque-converter automatic.
4. For this reason, the driver does need to hold the brakes when at a stop.
6. Upshift lights are not provided.

Launch Control is present; the procedure for using it is described step-by-step in the Owner’s Manual.

Driving Dynamics Control (7, 6 & 5 Series, B7, 3 Series Sedans, Z4, X3)

This system provides the driver multiple choices of vehicle dynamics. Over model years ‘12 and ‘13, the settings have been newly named and an ECO PRO

setting added. The settings and their effects are:

Comfort settings for engine response, suspension and Dynamic Stability Control (DSC). Comfort replaces Normal as the normal or default setting in all the models listed above.

Comfort + – normal engine and DSC, comfortable suspension setting⁸. This mode not provided on Z4 and X3.

Sport – On vehicles with iDrive there are three “sub-choices” for this mode, programmable within iDrive on a menu that pops up when the driver selects Sport with the console control:

- **Sporty driving with optimized suspension** – sporty engine and suspension, DSC normal
- **Optimized suspension** – sporty suspension⁸, normal engine and DSC
- **Sporty driving** – sporty engine, normal suspension⁸ and DSC. (Once this choice is made, it is the one activated when Sport is selected with the DDC.)

Sport + – engine and suspension settings as in Sport, plus DSC with reduced intervention (Dynamic Traction Control setting)

ECO PRO mode (7, 6 & 5 Series, B7, 3 Series Sedans, X3, X1 28i)

In all these models except X1 28i, the ECO PRO mode is one of the settings on the console-mounted Driving Dynamics Control; in the X1 28i it is selected by a switch in the center stack. ECO PRO modifies vehicle behavior in energy-specific ways and encourages energy-conscious driver behavior as well.

Climate control. Optimizes system operation for energy

conservation, at some sacrifice in comfort –

- In cooling, less dehumidification of interior air; a/c compressor runs less
- In heating, reduced operation of engine in modes that give off a lot of heat; heating of exterior mirrors and front seats reduced
- In cooling or heating, periods of stopped engine are maximized.

The user can manually revert the climate system to Comfort mode while leaving the other factors in ECO PRO mode; and capture this “mixed mode” operation for subsequent ECO PRO operation if the user desires.

Powertrain. Pressing down on the accelerator, the driver encounters a “plateau” of resistance at the end of the high-efficiency range. (However, flooring the pedal does produce maximum acceleration.) Transmission upshifts and downshifts occur at lower speeds.

Rewards and encouragement.

Rewards: In the instrument cluster’s digital display, the increase in tank range (miles to fillup) due to ECO PRO operation is shown. **Encouragement:** In the iDrive display, the driver is shown ECO PRO Tips on how to improve driving style with an eye to efficiency, such as “accelerate moderately.” These are based on the driver’s actual driving style as measured by the system.

8 – Variable suspension settings are available only on vehicles equipped with electronically controlled suspension (Dynamic Damping Control, Electronic Damping Control, Adaptive M Suspension).

BMW features

The following key features appear in more than one BMW Series:

Brake Energy Regeneration (7, 6 & 5 Series, B7, 3 Series Sedans, Z4, X6, X5, X3, X1 & X5-X6 M)

Conventionally, a car's alternator runs continuously and thus charging is always available to the battery. With BER, it charges only when the vehicle is decelerating or braking; otherwise, the alternator freewheels, drawing virtually no power from the engine. An electronically controlled clutch, similar to that used with the air-conditioning compressor, engages and disengages the alternator.

Accommodating the less frequent charging is a special, more powerful battery that can satisfy a contemporary vehicle's high electrical demands without access to continuous charging. The battery uses a technology called "absorbent glass mat," in which its internal plates are separated with saturated absorbent glass-boron silicate rather than the usual liquid electrolyte. This construction reduces the battery's conversion of charging energy to heat, and can provide the necessary electrical power for longer periods between charges.

In the test cycle used for measuring fuel economy in Europe, Brake Energy Regeneration typically improves mileage by about 3%. ActiveHybrid models have a different form of Brake Energy Regeneration; see **BMW Full Hybrid 2.0 power system** for details.

Ultra-rigid chassis-body structure (all models)

Solidity and minimum squeaks and rattles are obvious benefits; this also provides a "stable platform" for the suspension and brake systems, from which they work precisely as they were designed to do.

Dynamic rigidity. To achieve excellent structural dynamics – a critical factor for riding comfort – BMW body engineers carefully tune the structure's natural frequencies⁹ to be different in torsion and bending, and to be relatively high. These high frequencies are an important factor in achieving BMW bodies' typically great resistance to vibration; the different frequencies for torsion and bending help ensure that the structure never takes on "a life of its own" when subjected to vibration influences, such as sharp bumps or "washboard" road surfaces.

Static rigidity, critical to a feeling of solidity and precise operation of the suspension system, is also high in a BMW. Taken together, dynamic and static rigidity plus the difference in torsion and bending frequencies are essential elements of the truly remarkable level of riding comfort and handling precision every BMW offers. In a First Drive report on the new 3 Series Sedan in its February '12 issue, *Car and Driver* testified to this very principle: "According to 3 Series project leader Dr. Udo Haenle, the new unibody is one-third stiffer in torsion and 8% stiffer in bending. This stouter foundation improves both crashworthiness and the ability of the...suspension

systems to harmonize wheel and body motion without injuring ride quality."

Similar compliments are often paid to the other BMW Series as well. The body structure also enhances passive safety; for information on its safety benefits, see **safety & security**, elsewhere in this section.

Rear-wheel drive (all except all-wheel-drive models)

Front-wheel drive can yield more space for passengers and luggage; in the future it may be employed to make smaller BMW models roomier. For the character of today's BMWs, we believe our customers savor the handling benefits of rear-wheel drive.

Among upscale automobiles, a rear-wheel-drive revival has set in. Cadillac, whose automobiles all had front-wheel drive for a long time, is now focused on RWD models like the CTS and the new, more compact ATS series with RWD for '13. A large series with RWD is expected later. Infiniti's G, M and FX series (soon to be renamed) and Lexus' LS, GS and IS series all offer RWD as these makes try harder to compete with BMW. Indeed, Switzerland's authoritative *Automobile Revue* previewed the upcoming new-generation IS series with the headline "A Japanese car learns Bavarian." But after test-driving a prototype, *AR* declared "It doesn't get near the 3 Series."

Now what was that old saying? Oh yes: "Imitation is the sincerest form of flattery."

xDrive: BMW's "intelligent" all-wheel drive system

(7, 6, 5, 3, B7 & X1 xDrive models; all X6, X5 & X3)

Increasingly, customers – particularly those who drive in snowy winter conditions – are attracted to all-wheel drive. The listed models incorporate BMW's advanced xDrive AWD and traction system. xDrive operates as follows:

- Driving torque is always transmitted to the rear wheels, most of the time to all four wheels.
- The portion of torque transmitted to the front wheels is controlled by a multi-disc clutch that can be fully open, fully engaged or at any level of partial engagement in between. The torque split between rear and front wheels is thus steplessly variable.
- Engagement pressure on the multi-disc clutch is directed by an electronic control system in response to actual road and driving conditions.

xDrive doesn't just optimize traction; it can also enhance both agility and stability on grippy as well as slippery road surfaces. Via the same type of logic that DSC employs to recognize and correct for excessive over- or understeer, xDrive adjusts front/rear torque split to help avoid these tendencies. If undesirable oversteer is sensed, the multi-disc clutch is completely closed, sending the maximum possible torque to the front wheels. If excess understeer is detected, xDrive opens the clutch completely, sending no driving torque

9 – A natural frequency is that frequency at which any object tends to vibrate of its own accord once set into motion by some disturbance or input.

BMW features

The following key features appear in more than one BMW Series:

to the front wheels. In the BMW tradition, the driver enjoys optimum vehicle dynamics under a wide range of driving and road conditions.

Motor Trend confirmed this in its December '11 drive of the X3 35i: "Of course, in true AWD style, every bit of power is applied to Planet Earth extraordinarily well. Its athleticism proved formidable during our figure-eight sessions and real-world canyon runs. "Best driving crossover ever?" asked associate road-test editor Carlos Lago. "Germany's *auto motor und sport* concurred in its October 31, '10 issue: "The X3 is almost shockingly agile. Winding along the gentle hills of the U.S. state of Georgia, if anything it feels unchallenged. Rather, the precise, exact steering feedback seems to be craving some more demanding Alpine passes."

The latest models with xDrive – 7, 6 and 5 Series, B7, 3 Series Sedans, X6, X5, X3 and X1 – incorporate a significant evolution. xDrive's functioning always relied on a networking of Dynamic Stability Control and the xDrive system. Within the overall Integrated Chassis Management system, the engine, brake and front-to-rear xDrive interventions all work in parallel; thus while the xDrive controls the front/rear torque split, brake and engine intervention can simultaneously network to optimize traction and handling dynamics. This refined interaction achieves lightning-quick reactions to changing driving conditions, and enhances xDrive's handling dynamics.

Dynamic Performance Control (DPC)

(standard X6, X5-X6 M)

This amazing system gives these relatively large all-wheel-drive vehicles the agility of a BMW rear-wheel-drive vehicle without losing any of the traction advantages of AWD.

DPC consists of two multi-disc clutches and two planetary gearsets, one on each side of the rear differential. Each clutch is actuated mechanically by an electric servo motor, which acts on the basis of inputs from several sensors – the same sensors that feed their information into the Dynamic Stability Control system: vehicle speed, accelerator position, wheel rotational speed, steering angle and yaw rate.

Each clutch can be partially or fully engaged as dictated by these inputs and the DSC control unit's complex algorithms, whereby the planetary gearbox increases the wheel speed on its side by up to 10%. In turn, this acceleration of wheel speed achieves the desired influence on handling. A full transfer to the one or other wheel can occur in as little as 100 milliseconds; at a maximum, there can be up to a 1328-lb-ft. torque difference between the two rear wheels.

This effect – called "torque vectoring" – is also achieved by Honda/Acura with the MDX and RL models' Super Handling AWD, but the BMW system goes a step further than Honda's: it works either under power (that is, with driver pressing accelerator pedal) or in deceleration or downhill driving. It's a highly technical concept, but the

benefits are clear to the driver:

- **Greater agility** in cornering or maneuvering situations where the vehicle would tend toward undesirable understeer. In this case, the outside wheel is accelerated, reducing the understeer and "neutralizing" the handling.
- **Greater stability** in situations where the vehicle would tend toward undesirable oversteer. In this case, the inside wheel is accelerated, acting against the oversteer to stabilize the vehicle.
- **Improved traction** even in straight-ahead driving. The wheel with better traction gets the extra "push" from its clutch and gearset.

DPC's benefits aren't limited to wintry conditions. Referring to dry-road handling, Germany's *auto motor und sport* magazine noted in its November 21, '07 issue that "This apportioning of torque to the two rear wheels, which can be observed in an instrument-panel display, helps nip incipient understeer in the bud – better than DSC by itself. DSC interventions are thus less frequent; the result is basically neutral handling even at the vehicle's quite high cornering limits."

Performance Control, now offered as part of the X3's Dynamic Handling Package. As a less complex variant of DPC, this function boosts xDrive agility by electronically varying torque distribution between the inner and outer rear wheels.

Intelligent driving dynamics: Integrated Chassis

Management and FlexRay (7, 6 & 5 Series, B7, 3 Series Sedans; X6, X5 & X3)

All such driving-dynamics functions are coordinated and overseen by BMW's Integrated Chassis Management. Via sensing and analysis of a multitude of inputs, this powerful electronic control scheme applies and governs the interaction of these functions to ensure maximum stability. Under rapidly changing conditions, such as varying road surface, spontaneous steering input, abrupt acceleration or sudden braking, ICM reacts with ultra-quick and ultra-precise interventions via the DSC actuators and – where present – Electronic Damping Control, Active Roll Stabilization and Integral Active Steering.

For this sensitive and powerful networking of functions, the listed models employ ultra-fast FlexRay data-transmission technology.

Optimum weight distribution (all models)

All current BMW models have their front wheels relatively far forward and their engine as far rearward as practical. BMW even positions the battery – a heavy component – at the rear of the vehicle (and low, to help keep the center of gravity low). This gives excellent weight distribution – closer to the ideal 50% front/50% rear than most competitive vehicles. In fact, on no current BMW model does the weight bias at one end of the car depart more than 3.7% from this ideal. The greatest departure from 50/50 occurs with the front

BMW features

The following key features appear in more than one BMW Series:

weight bias of AWD models, and the rearward bias of the 3 Series Convertible models.

For actual weight distribution of each model, see the Technical Specifications for the various Series.

Subframe construction (all models)

All current BMW front and rear suspension systems are carried primarily on subframes, which help isolate vibration and road noise from the body structure by virtue of precisely tuned rubber mounts or bushings. See also acoustic decoupling, below.

Thrust plates

(3 Series & X1 xDrive models, Z4, M3)

Thrust plates provide targeted reinforcement of the underbody in the areas where suspension attaches to it. Generally of relatively thick aluminum for high strength with moderate weight, they are found in the various models as follows:

- 328i/335i xDrive models – front
- 5 Series GT, all models – front
- Z4 – rear
- M3 – front.

Acoustic decoupling (all models)

Reduces unwanted vibration and noise. In the multi-link rear suspension systems of all models, the suspension subframe is mounted to the main structure with rubber mounts; the differential is then mounted to this subframe with further rubber mounts. By thus acoustically decoupling the differential from the main structure, transfer of gear noise from the differential into the car's structure (and hence its interior) is effectively minimized.

Unique 4-wheel independent suspension system (all models)

Every BMW model has fully independent suspension at all four wheels. Each wheel reacts independently to bumps; if the left rear wheel hits a bump or hole while cornering, the right one stays in contact with the road and stability is retained. With a "live" or "beam" rear axle – an old-fashioned feature still found in a few vehicles, including some SUVs and pickups, the VW Jetta base model and the Ford Mustang – when one side hits a bump, the other side is directly affected. Strong acceleration or choppy road surfaces can set a live axle into an unpleasant motion called "tramping."

To reduce unsprung weight and therefore enhance the suspension's ability to deal effectively with rough road surfaces, most BMW suspension systems employ aluminum components. The extent of aluminum varies from Series to Series, with 7, 6 and 5 Series rear-wheel-drive models presently using the highest proportions. See **performance & efficiency and technical data** sections of various Series for specific information on how they apply this important aspect of BMW suspension engineering.

Each BMW suspension system is unique, tailored specifically to the model in which it's installed. See the Series sections for descriptions of these systems.

Double-pivot strut-type front suspension

(3 & 1 Series, Z4, M3, X3, X1)

This classic BMW front suspension features two lower arms working in combination with a spring/shock-absorber strut. The two lower arms are the reason for its name "double-pivot."

By employing two lower arms, this system provides several fundamental advantages:

- **Small positive steering offset**, for best steering feel and control under all road conditions. Though the two arms don't actually intersect, if you extend their axes to a point where they do intersect, you find a "virtual pivot point" that is ideal for achieving this result. Steering offset is the "lever arm" through which road forces act on the suspension system.
- **Large steering caster**, for outstanding stability in straight-line driving and excellent steering return action coming out of curves.
- **Space for large brakes**, by virtue of the arrangement of the two lower arms.

Further advantages are found in the details:

- The trailing (forward) lower arm has a rubber/hydraulic cushion, which provides the most effective "compliance" for reducing road shock and thus improving riding comfort.
- The transverse (rearward) lower arm is cushioned by a finely tuned rubber element that fosters direct and precise response to the steering wheel in curves and corners.

In all rear-wheel-drive models there is extensive aluminum componentry in the front suspension

for low unsprung weight. This improves the suspension's response to bumps and other road irregularities; it can markedly enhance riding comfort and, on any irregular road surface, handling as well. Typically, aluminum components include –

- Both lower arms (forged aluminum)
- Wheel carriers (also forged)
- Brake calipers (not part of suspension, but part of unsprung weight as it moves up and down with the wheel)
- Brake shields (stamped pieces; also not part of suspension, but part of unsprung weight).

Multi-link or "double-wishbone" front suspension (7, 6 & 5 Series, B7, M6, M5, X6 & X5)

These models employ a multi-link system that, while retaining the double-pivot lower arms, adds an upper lateral link that relieves the strut of its wheel-location function and reduces friction in the system. As good as the strut system is, this somewhat more complex system advances both handling and riding comfort in these larger, heavier vehicles. Suspension of this type is typically called a "double-wishbone" or double-A-arm" system¹⁰.

5-link rear suspension (3 & 1 Series, Z4, X3)

This system could be described as a double-A-arm system with an additional lateral track rod; the upper and lower A-arms actually consist of two links each, their vertical positions differing. (This is

10 – These terms refer to the classic system of two A-shaped lateral arms or "wishbones," one upper and one lower, determining suspension geometry.

BMW features

The following key features appear in more than one BMW Series:

similar to the front suspension's dual lower arms.)

Advantages are extensive:

- As at the front, there is a virtual pivot point for each pair of links, giving the engineers similar freedom in optimizing the system's geometry. The result is very precise handling, especially insensitive to road disturbances.
- Under cornering forces, the system controls geometry in such a way as to achieve great agility while also ensuring predictable, stable handling.
- Contributing to this outstanding geometry is the wide and rigid basis with which the rear tires are "planted" on the road. The lateral links are extremely rigid too, as is the subframe.
- All the suspension's links connect to the subframe; no longer does any link pivot directly from the body structure. This further reduces any effects of road irregularities on passenger comfort, and improves handling precision as well.
- Here too, the large and elaborate subframe contributes to energy management in a rear-end crash.

Integral rear suspension (7, 6 & 5 Series, B7; X6 & X5 including M models)

As at the front, this is a multi-link system; BMW calls it the Integral system for a small, essentially vertical Integral Link connecting the upper and lower lateral control planes.

The Integral concept has been in use for some years in BMW automobiles, appearing in 4-link form (Integral IV) in the M6, M5, X6 and X5; and 5-link (Integral V) in the 7, 6 and 5 Series including B7.

Either type, precisely matched to the vehicle platform, approaches the perfect combination of handling response, road adhesion and riding comfort.

Why the different systems in different BMW Series? Because between the more compact, lighter platforms (3 & 1 Series, Z4, X3, X1) and the larger, heavier ones (7, 6 & 5 Series, X6, X5), there are differing demands on the suspension as well as various engineering priorities – for example, customers expect a higher degree of comfort and refinement in the larger, more costly vehicles.

Twin-tube gas-pressure shock absorbers (all models)

Instead of air, an inert gas under pressure fills space inside the shock absorber not occupied by the working fluid. This prevents foaming, which can occur with conventional shock absorbers in fast driving on rough roads.

The twin-tube feature means two separate sets of valves. You can feel this in the remarkable compliance of BMW suspension over small, sharp bumps, yet equally remarkable firmness when you're driving hard. It's almost like two suspension systems in one.

Sport suspension (M Sport Package, Sport or M Sport Line 3 Series RWD models; optional or standard 1 Series; X5 35i Sport Activity & X1 M Sport Package)

As the various forms of Electronic Damping Control (EDC) have been available in more and more BMW models, the more traditional sport suspension is less widely offered. Mostly it's

the M sport calibration, option code 704; this is optional in 128i models, standard in 135i models, and optional in all rear-wheel-drive 3 Series models (via the M Sport Package, or Sport or M Sport Line) except the two 335is models, where it is standard. It is also part of the M Sport Package on the X5 35i Sport Activity model. X6 and X5-X6 M models have a decidedly sporty suspension calibration as standard; all X1 models' M Sport Line includes the non-M sport calibration as code 226.

Compared to the standard suspension calibration of models where it is offered, sport suspension enhances handling at some loss of riding comfort. Its essential elements include:

- Lowered ride height
- Firmer springs and shock absorbers
- Differently sized anti-roll (stabilizer) bars, usually larger and firmer than the standard ones.

Via various option schemes, Active Roll Stabilization provides a higher-tech path to reduced body roll in corners in the 7, 6 and 5 Series, X6 and X5; see **Active Roll Stabilization**, next.

Active Roll Stabilization (ARS) (7, 6 & 5 Series, B7, X6, X5, X5-X6 M)

This high-tech innovation is offered as follows:

- 7 Series – stand-alone, all 740/750 models except ActiveHybrid; standard 760Li
- ALPINA B7 – standard all models
- 6 Series – stand-alone, all models
- 5 Series GT – Dynamic Handling Package, all models; listed as 2VA Adaptive Drive

- 5 Series Sedans – Dynamic Handling Package, 535i and 550i models; listed as 2VA Adaptive Drive
- X6 – Dynamic Handling Package or stand-alone, always in combination with Electronic Damping Control as 2VA Adaptive Drive
- X5 – stand-alone, all models except base 35i, in combination with Electronic Damping Control as 2VA Adaptive Drive
- X5-X6 M – standard.

ARS reduces body roll, popularly known as "lean," in cornering. It improves handling by virtue of better suspension geometry (wheel angles relative to vertical), but there is a psychological component as well: Drivers and passengers alike marvel at the "flat cornering" that results from ARS. The system consists of:

- Active anti-roll bars, replacing conventional mechanical ("passive") front and rear bars.
- Valve/sensor block containing various system valves and sensors.
- Lateral-acceleration sensor to detect how hard the vehicle is cornering.
- Electronic control unit (ECU) regulating the entire system.
- Oil pump providing hydraulic pressure for ARS and (unless it's electric) power steering.

Whenever the vehicle enters a corner or curve, or begins an avoidance maneuver, "lateral acceleration" is generated. This is read by the sensor, which transmits a signal to the ECU. The ECU processes this signal and transmits it to the valve/sensor block. In turn, the valve/sensor block determines the hydraulic pressure applied to the active

BMW features

The following key features appear in more than one BMW Series:

anti-roll bars to control body roll.

The key word here is “active.”

Active Roll Stabilization –

1. Generates resistance to body roll by twisting the front and rear anti-roll bars.
2. Does so in a stronger and more highly “tailored” way than can conventional anti-roll bars.
3. Does not offer resistance to bumps in straight-ahead driving, as do conventional anti-roll bars inevitably¹¹.
4. Increases the vehicle’s maximum cornering capability.
5. Improves steering response, particularly in the range of cornering where body roll is most tightly controlled.

M Electronic Damping Control

(optional M3)

Dynamic Damping Control

(standard 7 & 6 Series, B7; optional 5 Series & X3)

Electronic Damping Control

(optional X6 & X5, standard X5-X6 M)

Adaptive M Suspension

(optional 3 Series Sedans; Z4 28i & 35i, standard 35is)

This suspension feature, which adjusts the shock absorbers to current road and driving conditions, appears in different forms in the listed models.

Dynamic Damping Control. This refined evolution of the familiar Electronic Damping Control (EDC) is –

- standard on all 7 and 6 Series models, B7; M version on M6, M5
- included in 535i and 550i Sedans’ Dynamic Handling Package, ActiveHybrid 5’s Sport Package; also stand-alone option on all Sedan models

- included in all 5 Series GT Dynamic Handling Packages, also stand-alone option
- Included in X6 and X3 Dynamic Handling Package
- stand-alone all X5 models except base 35i

Like other EDC versions, DDC controls the shock absorbers to any level of firmness between their softest and firmest settings, precisely adapting to road conditions and the driver’s demands at any given moment. Ride firmness is always at the optimum level for current road conditions, vehicle speed and the load the vehicle is carrying (again, passengers and luggage). On smooth and straight roads, the shocks are kept at the softest appropriate setting; in corners, they are instantly adjusted to a firmer, just-right level. And when the vehicle encounters any irregular road surface, they adjust to the optimum firmness level to control ride motions, preserve riding comfort and maintain adhesion to the road.

Dynamic Damping Control is the first such system to vary the shock absorbers’ jounce and rebound strokes (wheel moving upward and downward) both steplessly and independently; this capability results in a unique combination of desirable firmness (for handling) and superior comfort on bumpy road surfaces. Additional refinements include:

- Transmission of data signals via ultra-fast FlexRay technology
- Adjustment of shock absorbers every 2.5 milliseconds. It provides three modes of operation:

- **Comfort**, likely to be chosen most of the time; a judicious blend of handling precision and riding comfort. Formerly called Normal.
- **Comfort+**, most appropriate for gentle, speed-controlled driving on relatively smooth and straight roads. Formerly called Comfort.
- **Sport**, the firmest setting.

The Driving Dynamics Control on the console selects these three modes and also the Sport+ mode, which retains the shock absorbers’ Sport setting but switches Dynamic Stability Control to its Dynamic Traction Control mode. Recent updates to the system have sharpened the distinctions among the modes so that users will more readily detect them.

M Dynamic Damping Control, a sportier version of DDC; standard on M6 and M5.

Electronic Damping Control, essentially the same as Dynamic Damping Control but affecting only the jounce stroke of the shock absorbers, is offered as part of option 2VA on all X5 models except the base 35i; part of the Sport Package on X6 35i and 50i; and as standard equipment on the X5-X6 M models.

M Electronic Damping Control, optional on M3s and standard on X5-X6 M, also provides three operating modes. They are –

- **Normal**, likely to be chosen most of the time; a judicious blend of handling precision and riding comfort.
- **Comfort**, most appropriate for gentle, speed-controlled driving on relatively smooth and straight roads.
- **Sport**, putting full emphasis on

these M vehicles’ tremendous road capabilities at some sacrifice of riding comfort. In this mode, the shock absorbers are set to 75% of their maximum firmness and are not altered by driving conditions.

Within the Normal and Comfort modes, EDC continuously adjusts shock-absorber firmness to actual conditions. The driver can choose from these modes via the EDC console button, and can program a preferred setting into the MDrive configuration (see MDrive). This comment from *Road & Track* (February ‘08) describes how effective EDC, along with other adjustable parameters, on the M3 is: “The result of all these gizmos is the M3’s ability to switch from Jekyll to Hyde and back with the press of a button or two. Not just for show, these buttons actually make a difference. Changing the M3 from a date-friendly cruiser that will impress passengers to a track car that will likely scare them – we think that’s a wonderful feature.”

M EDC is also part of the Competition Package that’s available on the M3 Coupe, with this distinction: instead of the fixed 75% firmness in the Sport mode, here the firmness is varied according to actual conditions just as it is the other two modes.

Adaptive M Suspension, included in 3 Series Sedans’ Dynamic Handling Package and the Z4 28i and 35i M Sport Package, standard on the 35is. Provides two settings for the

¹¹ – BMW has achieved great sophistication in the way conventional anti-roll bars work – as evidenced by the superb handling and riding comfort of all contemporary BMWs.

BMW features

The following key features appear in more than one BMW Series:

electronically controlled shock absorbers, one favoring crisper handling (Sport) and the other a more comfortable ride (Normal). Selection of the modes is via the Driving Dynamics Control on the console, with a Sport+ mode affecting only Dynamic Stability Control. Also lowers the vehicle by 10 mm/0.4 in.

Self-leveling rear suspension with air springs

(standard all 7 Series, B7, 5 Series GT; X5 50i M Sport Package, included with optional X5 3rd-row seating; standard X5-X6 M)

Air springs replace the usual rear coil springs; self-leveling is achieved by an electrically powered air compressor and ride-height sensors that recognize changes in vehicle loading. Whenever the sensors detect a longer-term change in ride height at the rear (as when a full passenger load is aboard or heavy loads are carried in the trunk or cargo area), the air pressure is increased to bring the vehicle back to its normal attitude.

Variable-assist rack-and-pinion power steering (all models)

All BMW models have rack-and-pinion steering, which provides a tight, responsive connection between the steering wheel and the tires.

Power assist. Every BMW power-steering system gives the driver natural road feel. However, there are differences in the way this assist varies. The following lists these for the various Series' standard power-steering systems.

- 3 Series Coupes-Convertibles, 1 Series. Assist

increases at very low engine speeds (below 1500 rpm); this means greater assist for parking and low-speed maneuvering without any modification of assist at most driving speeds.

- X5 standard. Constant assist, no variation according to engine or vehicle speed.
- 7, 6 and Series, B7, 3 Series Sedans, Z4, M3, X6, X3, X5-X6 M. Via electronic control, assist varies according to vehicle speed; greatest at low speeds, least at high speeds. Called Servotronic, this allows a greater increase in power assist for parking and low-speed maneuvers than the engine-speed-sensitive system described above. In the 7, 6 and 5 Series, B7, M3 and X5-X6 M, Servotronic provides a choice of two levels of assist: Normal and higher-effort Sport.
- RWD 7 Series and B7, 6 Series, 535i GT, RWD 5 Series Sedans, 3 Series Sedans, Z4, X3, X1 sDrive28i. Assist also varies according to vehicle speed, but is provided by an electric servo motor rather than the hydraulic system of all other models. 7, 6, 5 Series, B7, 3 Series Sedans and Z4 provide two levels of assist selected by the Driving Dynamics Control; the X3 offers this via its Dynamic Handling Package.

Steering ratio. In standard-equipped 7, 6 and 5 Series and X3 models, the steering ratio – the number of degrees the steering wheel must be turned to steer the front wheels by 1 degree – is also variable; the ratio gradually becomes

“quicker” (greater steering angle relative to steering-wheel turns) as the steering wheel is turned away from its center position. A number of models offer a special steering capability: electronically controlled variation of the steering ratio according to driving conditions. Called Active Steering, this system is described next. 3 Series Sedans and the X3 offer optional Variable Sport Steering (next), which varies the ratio widely by mechanical means.

Electric power steering (740/750/B7 RWD models, 6 Series RWD, 550i GT, 5 Series RWD Sedans, 3 Series Sedans, Z4, X3, X1 sDrive28i)

Generating steering assist electrically instead of hydraulically, electric power steering (EPS) has always been employed on the Z4; now it's employed in the much wider range of models listed above. EPS draws engine power only when the steering wheel is being turned, rather than (via a hydraulic pump) anytime the engine is running. A secondary advantage is that the steering's return action can be actively programmed into the system for optimum feel.

The electric servo motor is mounted adjacent and parallel to the steering rack and thus provides excellent road feel. Because of BMW's outstanding reputation for steering qualities, BMW engineers didn't rush to introduce EPS, but rather took the necessary time to develop it in accordance with BMW standards for road feel and precision. In 7 Series and B7 xDrive models and the 760Li, a refined conventional power-steering system

includes special valving that reduces the hydraulic pump's power draw.

Variable Sport Steering (3 Series Sedans, X3)

This attractive and logical system adds a more widely variable ratio – the number of degrees the steering wheel must be turned for each degree of steering angle at the wheels – to the standard variable power assist. It is not Active Steering, which electromechanically varies the ratio according to vehicle speed. Instead, VSS varies the ratio via distinct profiling of the rack and pinion's gear teeth.

The ratio is at its maximum (“slowest”) when the steering wheel is at its straight-ahead (center) position. Essentially equal to that of the standard system, this moderate ratio is chosen to promote a feeling of stability. Then, as the driver turns the steering wheel outward to round a curve or city corner, make a U-turn or execute a parking maneuver, the ratio progressively decreases, reaching its minimum with the steering wheel turned 100° in either direction. From this point out to the locks – i.e. the maximum steering angle, as in a U-turn – the mechanism maintains this “quick” ratio. The result is that less turning of the steering wheel is required for these maneuvers – thus greater agility and ease of maneuvering.

Though it doesn't vary the ratio as much as Active Steering (next), Variable Sport Steering has appealing benefits for the sporting customer, who will appreciate the enhanced agility it bestows on these already agile

BMW features

The following key features appear in more than one BMW Series:

vehicles; and customers who simply like less turning of the steering wheel in low-speed and parking maneuvers. And it is less costly than Active Steering.

Active Steering (front)

(optional 335i RWD/335is Coupe & Convertible, 135i/is, X6, X5 35i & 50i)

Active Steering offers remarkable benefits:

Widely variable ratio. Electronically varies the steering ratio (number of degrees the steering wheel must be turned for a 1° steering angle at the front wheels) on the basis of vehicle speed and other driving conditions. The variation in steering ratio is much greater than that achievable by the purely mechanical means of the 7, 6 and 5 Series' and X3's standard setup, or even the Variable Sport Steering described nearby – so great, in fact, that steering-wheel movements required in parking maneuvers, U-turns and sharp corners are greatly reduced. This results not only in greater convenience, comfort and feeling of agility, but controls located on the steering wheel – such as multi-function buttons on the wheel's face and shift paddles – can be operated more easily and naturally while the driver is steering.

Optimized driving dynamics. Measures many factors of operating conditions and varies the steering ratio to enhance the vehicle's response to the steering wheel.

Vehicle stabilization. In situations that would normally diminish stability, Active Steering can intervene to preserve it.

Authentic steering feel. Active Steering retains a direct mechanical connection between the steering wheel and the steered wheels. Steering assist is applied in a proven BMW way (Servotronic, vehicle-speed-sensitive). This is not a "drive-by-wire" system.

Reliability. The direct mechanical connection serves as a fail-safe provision to ensure that even if there is a system electrical or electronic failure the driver can steer the vehicle.

How Active Steering works. The steering column takes motion down from the steering wheel to the hydraulically assisted rack-and-pinion steering gear between the front wheels. Between steering wheel and rack, Active Steering interposes an electrically driven planetary gearbox, which increases the amount of rotation there relative to the driver's turning of the steering wheel. The degree to which this adds to the driver's input is determined by several electronically measured factors:

- **Vehicle speed.** Servotronic provides more assist at low speeds to help us park and maneuver, less at high speeds for a firm feeling of the road. The electronic vehicle-speed input also feeds into Active Steering, causing the small gearbox to add to the driver's steering-wheel motions and therefore reduce the effective steering ratio. At its maximum at a standstill, this addition gradually decreases until a speed of approximately 75 mph, at which point the system stops affecting the steering ratio.

- **Stability.** Via its inputs of vehicle speed and steering angle, the system can compare actual vehicle motion with that desired by the driver. Even at small deviations from the desired motion, Active Steering can (unnoticed by the driver) adjust the steering to enhance stability.
- **Uneven road surfaces.** If the driver applies the brakes while the vehicle is moving on a surface with uneven traction – for example, if one side of the roadway is slick and the other isn't – the brakes' uneven effect on the two surfaces could cause the vehicle to pull to one side (yaw). Active Steering recognizes and measures this incipient instability and steers against it. The driver does not have to correct, and is most likely not aware that the system is doing so.

Please note: In models equipped with a console Sport button or Driving Dynamics Control (described nearby), selecting the Sport mode does not affect Active Steering. It decreases the level of power assist of the standard Servotronic steering, but not that of the Active Steering system.

Integral Active Steering (standard 760Li; optional RWD 740i/Li & 750i/Li except ActiveHybrid, RWD 6 & 5 Series except ActiveHybrid)

Front-wheel Active Steering operates as described above and adds rear-wheel Active Steering.

Via a servo motor acting on track rods, the rear wheels can be steered up to a maximum of 2.5° or 3° depending upon model. At low speeds, they are steered

oppositely to the front wheels; depending on vehicle speed, the turning circle can be reduced by more than 2 ft. – which, combined with the front wheels' reduced steering ratio, dramatically improves maneuverability.

At higher speeds, the system steers them in the same direction as the fronts, enhancing the more important attribute of stability at these speeds. A further benefit is that the yaw rate in any given road-speed maneuver is reduced, which would be perceived by rear-seat passengers as an improvement in riding comfort.

MDrive: M technology at the driver's disposal (M6, M5, M3 & X5-X6 M)

Each of these M vehicle groups enables its driver to program a variety of vehicle-dynamics settings into an MDrive setup for 1-touch recall of the driver's preferred combination of same via an MDrive button on the steering wheel. The three groups' MDrives differ, and are described in their respective sections of this edition.

4-wheel disc brakes

(all models)

BMW brakes are generously dimensioned compared to those of most competitors. To enhance fade resistance, the front and rear discs (rotors) of all models are ventilated.

As part of Dynamic Stability Control, all current BMW models have antilock braking (ABS), Dynamic Brake Control (DBC) and other special braking functions; for explanations see **Dynamic Stability Control**.

BMW features

The following key features appear in more than one BMW Series:

Aluminum/cast-iron composite brake rotors (7, 6 & 5 Series, B7, 3 Series Sedans, Z4 35i & 35is, X5-X6 M)

In this patented construction, the brake rotor (disc) consists of a high-carbon cast-iron outer portion, which functions as the surface onto which the brake pads grip to slow or stop the vehicle; and an aluminum "hat" in the center, which mounts the rotor to the vehicle. Advantages include:

- **Reduced unsprung weight.** Compared to all-cast-iron rotors, actual weight is reduced a significant 2.2 lb. at the front, 1.5 lb. at the rear.
- **Reduced rotor deformation** under hard braking, by approximately 20%. This means less tendency to vibrate when hot, and reduced likelihood of rotors cracking under extreme heat.

Depending upon the model, this brake construction appears on either the front brakes only, rear only, or front and rear brakes.

Compound, cross-drilled brake rotors (M6, M5 & M3)

Going beyond even the aluminum/cast-iron composite brake rotors (with benefits described above), this most elaborate BMW brake concept also employs 2-piece rotors. But whereas in the composite construction the hat and outer portion are riveted together, here they are connected by steel pins.

This construction fully allows the two rotor components to expand differently, saves an equal amount of weight and totally eliminates deformation. In practical terms, this means virtually no

tendency of the brakes to vibrate when hot, and minimal likelihood of the rotors cracking even under the extreme temperatures that typically might be encountered in driving on a track.

Additionally, these rotors are cross-drilled. Visible through the wheels, cross-drilling enhances heat dissipation beyond the rotors' internal ventilation, further increasing fade resistance. Cross-drilling also further reduces weight – unsprung weight – by up to 1.5 kg/3.3 lb. per rotor. The front calipers are fixed and have multiple pistons, another upgrade; front and rear calipers – highly visible through the wheels – have an eye-catching gloss finish: black on M3, blue on M6, M5 and X5-X6 M.

Non-asbestos (NAO) organic brake pads (7, 6, 5, 3 & 1 Series, Z4, X3 & X1 except as noted)

These brake pads not only address an environmental concern but also produce less dust. Thus the wheels don't soil as quickly.

Currently and until further notice, not employing NAO pads are all M models, 760Li, ActiveHybrid models, X6 and X5.

Electromechanical parking brake

(7, 6 & 5 Series, B7, Z4, M6, M5, X6, X5, X3, X5-X6 M)

Replacing the traditional pull-up handbrake lever between the front seats, this form of parking brake is actuated via an electric control in approximately the same location. Analogously to the mechanical lever, the electric control is pulled up to set the brakes, pushed down to release them.

Dynamic Stability Control (standard all models)

This all-encompassing traction, antilock and stability system is an important safety feature that also has benefits in terms of handling and driving enjoyment, particularly in BMW M models. It is described in detail under the **safety & security** heading.

Electronic limited-slip differential (all RWD models)

As a function of the Dynamic Stability Control system, this sporty feature was first introduced on the 1 and 3 Series, and is now standard on most BMW RWD models. Engaged when the driver purposely deactivates DSC, it simulates a traditional mechanical limited-slip differential by selectively applying the inside rear wheel's brake during cornering to hinder wheelspin and thus transmit a higher proportion of the driving torque to the outside wheel. As that wheel has more traction, this enhances the car's cornering capability. Not intended for driving on public roads.

M Variable Differential Lock (M3)

Active M Differential (M6 & M5)

For the M3 and previous-generation M6 and M5, BMW M engineers developed a more capable mechanical limited-slip differential, specifically suited to M Cars' extreme performance levels and track-ready handling. The main distinction between a conventional limited-slip "diff" and the M Variable Differential Lock is that where the former senses torque, the latter senses wheel speed (rpm).

On all current BMW models, electronic traction control (a function of Dynamic Stability Control, nearby) addresses this issue, although not in a manner conducive to sporty, M Car-style driving. (This is one reason why BMW provides a "DSC off" switch on most models.)

The M Variable Differential Lock specifically addresses low- and split-traction situations in a way that reinforces sporty handling, imparting a remarkable slippery-road ability. Any time a speed difference develops between the two rear (driven) wheels, a shear pump, driven by this difference, develops pressure in the unit's silicon viscous fluid. This pressure is directed to a multi-disc clutch that transfers driving torque to the wheel with the better road grip ("select high"). The greater the speed difference between the two wheels, the harder the clutch engages. As this difference in wheel speeds diminishes, the clutch begins to ease off.

This mechanism accomplishes its sophisticated action by entirely natural means. There is no external pump, no external source of lubrication or operating fluid. The very motion to be controlled – differences in speed between one wheel and the other – generates its locking action. Viscous fluid is so-called because it develops internal force (via an increase in viscosity) whenever it is sheared; a relatively small difference between one wheel speed and the other can generate the necessary locking action.

For the X5-X6 M Models, the Dynamic Performance Control serves a similar purpose.

BMW features

The following key features appear in more than one BMW Series:

Active M Differential. This further development, introduced in the current M6 and M5, substitutes an electronically controlled internal clutch for the viscous/mechanical one of the M Variable Differential Lock to achieve fundamentally similar, but more precise and finely tuned limited-slip action. See the **M5 & M6** section for details.

Alloy wheels (all models)

BMW alloy wheels are strong, weight-efficient, appropriately styled for each model and generously sized: Widths provide a solid “footprint” for excellent cornering and braking, and diameters are large enough to provide plenty of space around the brakes for air cooling:

- At least 16-in.; 17-in. and 18-in. on most models
- 19-in. standard 760Li, 750i/Li, 650i, M6, M5, X6, X5 35i Premium; optional 740i/Li, 640i, 535i & 550i Sedans & GT, 3 Series Sedans, 335i/s Coupes and Convertibles, Z4 35i/s, M3, X5 50i, X3, X1
- 20-in. standard X5-X6 M, X5 35i Sport Activity; optional 750i/Li except ActiveHybrid, all 6 Series, all GT, X5 35d and 50i, X6
- 21-in. standard ALPINA B7.

Design of course plays an important role here too. Across the BMW line, all our alloy wheels display tasteful design and their construction details are elegant too. ALPINA has its own unique 20-spoke design. Standard and optional wheel designs are chosen for each model according to that model’s character and performance capabilities, and most models offer at least one wheel-and-tire

option; most models offer multiple choices.

Wide radial tires (standard all models)

Every BMW model is equipped with premium steel-belted road tires. Performance capabilities vary according to model:

- Standard all-season equipment on many models (usually H-rated)
- Performance (V-rated) all-season on an increasing number of models, including all 7, 6 and 5 Series, 3 Series Sedans, both X3 models
- Performance tires, such as those that are standard on the 135i Coupe (Y-rated) and all Z4 models (V- or W-rated); also Sport and M Sport Packages for RWD models or Package upgrades for xDrive models
- Very high-performance rubber standard on BMW M models (W-rated X5-X6 M; Z-rated M6, M5 and M3)
- Z-rated performance tires are also standard on the ALPINA B7.

For details on the tires of each model, see **performance & efficiency and packages & options** as well as the **standard & optional features and technical specifications** tables within each Series section.

The low-profile performance tires offered on most models as standard equipment, stand-alone options or part of Sport, Sport Activity and M Sport Packages, are to be presented to customers with a disclaimer¹².

Tire Pressure Monitor: direct pressure measurement at the tire (standard all models)

Pressure in each individual tire is measured directly and monitored via telemetry. If pressure in any tire drops below a defined level, this is indicated by a warning in the instrument cluster. Thus even if all tires lose pressure in unison, the driver will be warned.

Run-flat wheel-tire system (standard all except B7, M6, M5, M3)

BMW’s run-flat wheel-tire system is an important advance in safety, convenience and space utilization. The system consists of self-supporting tires, special wheel rims and the Tire Pressure Monitor described above.

The tires are distinguished primarily by their special sidewalls, which include specific inserts and highly heat-resistant rubber compounds. A deflated tire can maintain its essential shape and guidance characteristics for a considerable distance, so that when confronted with a flat the driver can continue on at reduced speed until reaching a place to have the tire repaired or replaced.

While maintaining essentially the handling and safety standards expected of all BMW tires, the run-flat system offers several advantages:

No roadside tire changes. The driver need not stop and change a damaged tire. Even with no air in the tire – a condition revealed to the driver by the Tire Pressure Monitor – one can continue on to find a safe place to stop and seek a tire change (see next column).

Tire stays on rim, thanks to specially developed Extended Hump wheel rims. Stability systems remain functional. All DSC functions remain functional, even with a deflated tire.

Increased trunk space. No spare is needed, so the trunk can be larger. In all current models except X5 and X6, the trunk or cargo area is configured to take advantage of this and the spare is eliminated; this is true even of certain models that don’t have run-flats but do come with the M Mobility system (below).

Reduced vehicle weight, which in turn affects fuel consumption favorably. Omitting the spare tire saves about 45 lb. of weight.

Guidelines for how far and at what speed one can drive with a deflated tire have been amended recently as follows:

- **Average vehicle load – 50 miles at 50 mph.**

Previous guidelines, which specified different distances and different levels of vehicle loading, are superseded by this rule.

Customers may have read or heard that run-flats degrade riding comfort, are relatively costly to replace, that tire stores may be reluctant to repair them, that they have relatively short tread life, and that given their still relatively small market share a correct replacement may be difficult to find. The customer with such doubts should be reminded of the undeniable safety advantage

12 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. Some models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

BMW features

The following key features appear in more than one BMW Series:

of “no roadside tire changes”;¹³ and that the latest run-flat tires, as found on current BMWs, now provide important evolutionary improvements:

- **Riding comfort** that approaches that of non-runflat tires
- **Reduced rolling resistance** that has a positive impact on fuel consumption and riding comfort, while still ensuring good grip in wet-road conditions.

Mobility System

(standard B7, M6, M5 & M3)

Run-flat tires that meet the extreme performance requirements that ALPINA and BMW M set for these vehicles are not yet available. Thus these models include the M Mobility System for use in case of a flat tire.

The Mobility System consists of a container of rapid sealant, a small compressor, and a hose to connect the compressor to the damaged tire. All this is carried in a container in the trunk or cargo area; the system can seal punctures up to approximately 1/4 inch across. When using the Mobility System, it is important to follow the instructions on the compressor and sealant bottle as well as the description in the Owner’s Manual. The system’s effectiveness is restricted to minor damage of the tire tread, requires application immediately after the damage occurs, and is limited in terms of distance and speed driven after the temporary repair.

Like those of BMWs with run-flat tires, these models’ wheels incorporate the so-called Extended Hump rim shape, which helps keep the tire on the rim in case of deflation.

A space-saver spare is available on all X5 and X6 models, including the Ms.

M Sport Package

(7, 6, 5, 3 & 1 Series, Z4, X3, X5)
Superseding the “regular” Sport Packages in nearly all current Series¹³, these equipment groups add an even greater degree of sportiness. Though content varies from model to model, generally they include the following features and more:

- M sport suspension calibration or other special suspension features
- M-design alloy wheels and low-profile performance or all-season tires
- An increased top-speed limiter in combination with performance tires
- Aerodynamic exterior treatment
- Specific exterior color selection
- Shadowline or other special exterior trim
- Distinctive interior trim
- Sport or Multi-Contour front seats
- M doorsill trims
- M sport steering wheel
- Anthracite-color headliners in closed-body models
- M driver’s footrest

BMW M Performance Parts (5 & 3 Series Sedans, 135i models)

In a new development for 2013, BMW has released a second major wave of center-installed BMW M Performance Parts, designed and tested to bring to 5 and 3 Series Sedans an authentic transfer of M technology and design. Available items include:

- Aerodynamic treatments – front splitters, side-sill blades, rear spoilers and diffusers, M Sport Package or Line retrofit kits

- Driver’s footrest and pedal covers
- Alcantara-trimmed Electronic Steering Wheel, with flat-bottom rim and extensive displays in EfficientDynamics, Sport and Race modes
- Performance suspension kit
- Performance brake and exhaust systems
- Performance V Spoke wheels

Availability varies according to specific 5 and 3 Series models; see BMWUSA.com for details.

For the 1 Series and X6, Performance Power Kits continue to offer enhanced power and torque; for X5 35i and 50i models there are a new M Performance Package (also including the engine upgrades) and a center-installed M Performance Package selection of BMW Performance aerodynamic, wheel and tire, and exterior/interior enhancement products.

Comfort & convenience

What’s new for 2013 or since last edition

- Soft-close doors available in 6 Series and throughout 5 Series Sedans
- Comfort Access standard on all 7 Series and Z4 models; adds hands-free trunk opening on 7, 5 GT
- BMW Universal Transceiver standard on all 3 Series Sedans, Z4
- Auto-dimming interior and exterior mirrors standard on 3 Series Sedans, Z4 (include power-folding exterior mirrors)
- Active Cruise Control with Stop & Go function & Approach Control available in 7 Series, 3 Series Sedans

- Power front seats standard in 328i Sedan, Z4 28i
- New-generation Navigation system in 7 and 5 Series, B7, ActiveHybrid 3; includes updated/enhanced Voice Command
- Slimmer, weight-saving front seats in 7 and 6 Series
- Automatic climate control standard in Z4 28i; thus now standard in all 2013 models
- Climate controls get new icons: “M” indicating manual operation of air recirculation; “A/C” replaces snowflake as a/c-on symbol; “OFF” added to blower-speed control for turning off system (all Series)
- Logic7 audio system standard in 750iLi and 650i Coupe-Convertible
- “CD” menu key at iDrive controller changed to “Media” (all Series)
- Split folding rear seats standard in all 3 Series Sedans including ActiveHybrid, 5 Series Sedan models except ActiveHybrid
- Bang & Olufsen audiophile audio system available in 7 and 5 Series, B7, M6, M5
- New-generation Rear Seat Entertainment in 7, B7 and 5 Series
- BMW Individual Composition available on 5 Series Sedans
- Color switch included with Ambiance Lighting in 7 Series; continues in 3 Series Sedans (Sport and Luxury Lines), newly in X1 (xLine)

¹³ – Instead of an M Sport Package, 3 Series Sedans and X1s offer an M Sport Line with similar content. X6 models now offer an M Performance Package (ZMX) that includes an engine upgrade.

BMW features

The following key features appear in more than one BMW Series:

Heated exterior mirrors and windshield-washer jets

(standard all models)

When the outside temperature drops below a specific level, the mirrors and windshield-washer jets are automatically heated if the ignition switch is on.

Vehicle and Key Memory with Personal Profile

(all models)

The capabilities of microprocessor control allow considerable vehicle personalization to customer preferences. Although these choices stem from the same electronic system, BMW has divided them into two categories: functions that react the same to all remote controls, and those influenced by individual remote controls. (Two remote controls are provided with the vehicle; up to four remotes can be accommodated.)

All models now incorporate System Personal Profile functionality. The system actually provides many more possibilities than outlined here; BMW believes these are the important ones for most customers. Customers who desire more detailed information may obtain it from their BMW center and are encouraged to study their Owner's Manual.

An asterisk (*) indicates functions that are captured automatically by System Personal Profile; otherwise, they can be programmed to the customer's preference by the BMW center or by the user.

Identical function for all remotes:

- **Audible confirmation** (siren chirp) when the alarm is armed; can be activated or de-activated. Visual confirmation (via signal lights) is always active.

- **Daytime running lamps.** On or off.
- **Pathway Lighting.** Allows use of headlight flasher switch to turn on headlights and interior lights for up to several minutes.
- **Automatic locking** of central locking system once vehicle is in motion (locks at 10 mph, or does not lock).
- **Selective unlocking.** Unlocks all driver's door on first actuation of "unlock" button on remote, then other doors, trunk or tailgate and fuel door upon second actuation; or unlocks all doors and trunk or tailgate at once.

Controls functions according to which remote (i.e. which user) is in use:

- **Automatic climate control.** Sets temperatures* and air distribution* to key user's last settings when vehicle is unlocked by that user's remote.
- **Radio-station presets** return to those last set by key user*.
- **Seat/mirror/steering-wheel memory.** Sets driver's seat and exterior mirrors* (3 and 1 Series, Z4, M3 with power seats; X3, base X5 35i, X5 35d, X1 28i) plus steering wheel (7, 6 and 5 Series, M6, M5, X5 with power-adjustable steering wheel, X6, X5-X6 M) to last setting of particular user when vehicle is unlocked by user's remote, or does not set them.
- **Audio tone settings** return to those last set by key user*.
- **Central-locking preferences** as above, but specific to each remote.
- **Language of displays and voice functions.** Programmed in iDrive or, in vehicles without iDrive, by BMW center.
- **Lighting preferences.**

In models with iDrive, some of these choices may be made within the iDrive system; without iDrive, they are selected via the turn-signal stalk and instrument-cluster display.

Mobile Profile

(7, 6 & 5 Series, B7, M6, M5, X3)

This feature enables the import or export of the above personal settings to another so-equipped vehicle, via a USB stick and a USB port in the glove compartment or center-console compartment depending on Series.

Multi-function remote control (all models)

A theft-deterrent alarm is standard on all 7, 6 and 5 Series; 335i Sedans, 3 Series Coupes and Convertibles, Z4, M6, M5, M3, X6, X5, X3 and X1; optional on 328i Sedans and 1 Series.

For 2013, a panic button with red icon is added to the remote of 7, 6 and 5 Series, B7, 3 Series Sedans with alarm and X3.

Locking, unlocking and alarm functions are controlled by the remote. Functions include:

- **Unlock vehicle/disarm alarm** – Press unlock button once to unlock driver's door and disarm alarm; press a second time to unlock the other door(s), trunk/tailgate and fuel-filler door. (See **Vehicle & Key Memory** nearby.)
- **Lock vehicle/arm alarm** – press lock button.
- **Release trunklid or tailgate** – press release button. If alarm system is armed, it will be disarmed while trunk is open, then re-armed as it is closed. For special details of 5 Series GT's Dual-Access Tailgate, see that model's Owner's Manual.

- **Panic function** – Press panic button (7, 6 and 5 Series, B7, 3 Series Sedans, X3) or trunk/tailgate release button (3 Series Coupe-Convertible, 1 Series, Z4, X6, X5, X1) and hold until alarm sounds. To deactivate panic function, press unlock button.
- **"Car finder"** – With vehicle locked, press lock button. This switches on the interior lights and (where present) exterior door illumination or Welcome Light; can help locate the car at night or confirm that alarm has been armed.
- **De-activate tilt sensor and motion detector** – With vehicle unlocked, press lock button twice. This arms the alarm, but with the tilt sensor and motion detector de-activated. Useful on ferries, for example.
- **Open windows and moonroof** if present – press and hold unlock button.

The remote's battery is charged anytime the remote itself is in the ignition slot, and thus does not have to be replaced periodically. (If a particular remote is not used for a long period of time, the battery may discharge, however.)

In vehicles with Comfort Access or Keyless Start (no dash slot), the battery will need periodic replacement. 7, 6 and 5 Series, B7, 3 Series Sedans, M6, M5 and X3 do not have a dash slot (Keyless Start).

Start/stop button (all models)

The engine is started by pressing the button after inserting the remote in its instrument-panel slot or (7, 6 and 5 Series, B7, 3 Series Sedans, M6, M5 and X3 or other models with available

BMW features

The following key features appear in more than one BMW Series:

Comfort Access) entering the vehicle with an authorized remote. In vehicles with manual transmission, the clutch pedal must be depressed to start the engine; in vehicles with automatic transmission or DCT, the brake pedal must be applied. The engine is also shut off by pressing the button.

Comfort Access keyless entry (standard 7 & 6 Series, B7, Z4, M6; otherwise optional)

Eliminates the need to activate a remote to unlock or lock the vehicle, or to insert it into the dash slot (if present) before starting the engine.

- **Keyless access** – User enters vehicle merely by pulling a door handle, or opens the trunk by actuating the trunk release. Presence of the remote (say, as in the user's pocket or purse) has already confirmed that the user is authorized.
- **Keyless starting** – User authorization is confirmed by presence of the remote inside the vehicle; the driver starts the engine by merely pressing the start/stop button.
- **Keyless engine switch-off and vehicle locking** – Driver turns off engine via start/stop switch, touches a door handle to lock vehicle after exiting. If user has left remote in interior, vehicle will not lock. If remote has been left in trunk and the trunklid, tailgate or liftgate is closed, it will open again as a reminder to retrieve the remote.

Soft-close doors

(standard 760Li, 750i/Li, B7; optional 740i/Li, 6 Series Coupes & Convertibles, all 5 Series, M6, M5, X6, X5 except base 35i, X5-X6 M)

The user closes the door gently, not needing to slam it shut; an electric mechanism draws it fully in. Inadvertent slamming of the door, though not recommended, does not interfere with its operation.

BMW Universal Transceiver

(Premium Package 3 Series Coupes & Convertibles, 1 Series, M3, X3, X1; otherwise standard)

According to Series, the BMW Universal Transceiver is positioned either above the windshield or in the interior rearview mirror's housing. As part of the Homelink® system, the Transceiver can control up to three functions external to the vehicle, such as a garage-door opener or a home lighting system.

Automatic High Beams

(standard 760Li, optional other models)

Controlled by a sensor on the forward side of the interior rearview mirror, this option switches automatically between low and high beams. It is activated by setting the main light switch to Automatic while the headlights are on low beams, then actuating the steering-column lighting stalk in the high-beam direction. The benefits are several, both convenience- and safety-related:

- The driver need not switch between low and high beams manually, removing a distraction.
- High beams are likely to be used more often; in today's typically dense traffic, drivers

often forget to even use the high beams.

- Other drivers and pedestrians are less likely to be blinded by high beams inadvertently left on.

Three conditions trigger the switch to low beams –

- Oncoming traffic
 - Vehicle ahead
 - Sufficient ambient illumination, as in towns and cities
- and the system is engineered to distinguish between these conditions and lights from miscellaneous sources.

The driver can override automatic operation at any time via the steering-column stalk.

Automatic-dimming interior and exterior mirrors

(standard 7, 6 & 5 Series, B7, 3 Series Sedans, Z4, M6, M5, X6; X5 35i Premium & Sport Activity, 50i; X5-X6 M; otherwise Premium Package)

Electrochromic action reduces glare from headlights of following vehicles, progressively and almost imperceptibly; rearward vision is preserved, but potentially glaring lights appear in a soft, non-disturbing green tint. The system can adjust from its minimum 15% to maximum 70% glare reduction in just 5 seconds.

Auto-dimming exterior mirrors (only) are included in M3 Premium Packages; an auto-dimming interior mirror is standard.

Leather-wrapped tilt/telescopic multi-function steering wheel (standard all models)

Puts numerous frequently used controls within the driver's fingertip reach; the number and functions of these controls vary according to Series and model.

Among the possible functions are:

- Search up/down:
- Radio stations
- Satellite Radio stations
- CD tracks
- Memory phone numbers¹⁴
- Audio or hands-free phone¹⁴ volume
- Radio/phone¹⁴ selector
- Phone¹⁴ (to begin or end a hands-free call)
- Programmable buttons
- Voice Command System¹⁵.

Steering-wheel adjustments are as follows:

- 3 and 1 Series, Z4, M3, X3, X5 35d and base 35i – manual tilt/telescopic
- 6 and 5 Series, X5 35i Premium/Sport Activity and 50i, all X6, X5-X6 M – power tilt/telescopic with automatic tilt-up for entry/exit, memory
- 7 Series – power tilt/telescopic with automatic tilt-away, memory.

(Tilt-up – moves to uppermost position when remote is removed from its slot or ignition switched off, then returns to preset position when remote is re-inserted or ignition switched on. Tilt-away – moves to its uppermost and full-forward position.)

Dynamic cruise control (standard all except M3)

Not to be confused with Active Cruise Control. In addition to controlling the engine to maintain the set speed, this system can

14 – Phone controls active when approved cellphone is paired with Bluetooth interface.

15 – Standard 7 & 6 Series, B7, 550i models, M6 & M5, X6 & X5 50i, X5-X6 M; included with optional Navigation system in 3 & 1 Series, Z4, M3, X6 & X5 35i/35d, X3, X1. Voice activation of hands-free phone functions standard all except 1 Series.

BMW features

The following key features appear in more than one BMW Series:

also apply the brakes (lightly) if necessary. This gives it greater capability in controlling speed, for example, in rolling terrain. Also specific to Dynamic cruise control is a 2-step choice of increasing or decreasing speed: A light tipping of the lever forward/rearward increases/decreases speed by 1 mph; a harder push/pull alters speed by 5 mph. Note that cruise control is standard in M3s, but does not include the braking function or 2-step speed choice.

In vehicles with cruise controls on the steering wheel, the set speed is varied in the same manner by pushing a rotary tab upward or downward.

Active Cruise Control (optional 335i Coupes & Convertibles)

In addition to the speed-maintaining, acceleration and deceleration functions of the standard cruise control, ACC can adjust the BMW driver's speed according to traffic conditions.

Employing a radar sensor unit at the front of the vehicle, ACC senses the speed of vehicles traveling ahead, and adjusts the BMW driver's speed to maintain a safe following distance. Among its features:

- Four radar sensors in sensor unit, providing a field of vision of +/- 8°.
- Can interact with GPS Navigation to enhance ACC operation.
- The radar sensors' lenses are heated, so that the system functions dependably even in bad weather conditions.

Operation is as follows: When the road is clear, operation is essentially as with standard cruise

control, though with certain specific nuances:

- Current speed is captured by tipping cruise-control stalk forward or rearward. Thereafter, each time stalk is tipped forward or rearward, set speed is increased or decreased by 5 mph.
- Driver can also adjust the speed (upward only) in increments of 1 mph by pressing inward on the slider button at the left end of the stalk. When cruise control has been canceled (by braking, for example), this button is used to resume.
- Set speed is indicated by an arrow at the speedometer scale and a digital display.

When traffic is encountered ahead, ACC's special capabilities come into play:

- Driver can choose from four following distances by adjusting rotary dial on control stalk. Via four bars below "vehicle ahead" icon, chosen following distance is displayed briefly after election (more bars = greater distance).
- When radar sensor detects a vehicle ahead, "vehicle ahead" icon illuminates. ACC adjusts the BMW driver's speed to maintain the selected following distance.
- In adjusting vehicle speed, ACC may apply brakes. It may also apply brakes when the driver changes set speed abruptly. If brake application causes DSC or ABS to activate, a specific warning indicator appears in the instrument-panel display.
- If a vehicle pulls into the BMW driver's lane ahead, ACC

recognizes that vehicle only when it has fully moved into the lane. If the vehicle cuts suddenly into the lane, ACC may not adjust speed quickly enough, in which case the vehicle icon is surrounded by a blinking triangular warning signal indicating that the driver should take evasive action. ACC does not react to stationary vehicles or other objects ahead.

- When traffic ahead clears, ACC automatically resumes the previously set cruising speed.

ACC can also reduce vehicle speed when a curve is entered at too high a speed. However, the system does not "look ahead" to curves, so any such adjustment occurs only after the curve is entered. In sharp curves, ACC may react briefly to oncoming vehicles; the driver can cancel this action by stepping on the accelerator.

ACC is an advanced, stress-reducing driving enhancement, particularly in fast-moving yet congested traffic. The buyer of a BMW so equipped should be given a careful and thorough explanation of ACC's functions and benefits, and should be advised to study the system's operation. **The capabilities of ACC in no way relieve the driver of responsibility to devote full attention to driving, to traffic and to all aspects of the driving environment!**

Active Cruise Control with stop-&-go capability, Frontal Collision Warning System (standard 760Li; optional other 7 Series, 6 & 5 Series, B7, 3 Series Sedans, all X6, X5 35i Premium/Sport Activity & 50i; requires automatic transmission on 328i, 335i, 535i & 550i Sedans; not available on other models) The Active Cruise Control for these Series adds two important features:

- **Stop-and-go**, which can bring the vehicle to a complete stop if traffic calls for it. Then, when the driver presses the accelerator, ACC accelerates the vehicle back to the set speed, or whatever speed it chooses to maintain the set following distance.
- **Frontal Collision Warning System.** Utilizes the radar sensor to detect critical closing-rate situations with standing and moving objects, even with ACC switched off. This system then takes action (function must be activated via a switch to left of steering column):
 - A "soft" warning in the instrument cluster comes first, followed by an "acute" warning both visual and audible
 - Pre-pressurizes the brakes' hydraulic lines
 - Lowers the threshold to activate Dynamic Brake Control
 - Optimizes the emergency braking action of Dynamic Brake Control
 - Pre-tensions the front safety belts (this is reversible).

For '13, the 7 Series and AL-PINA B7 add Approach Control capability to this Active Cruise Control. See the 7 Series section for details on this safety-related function.

BMW features

The following key features appear in more than one BMW Series:

Ergonomic control center (all models; encompasses iDrive control display & controller where present)

A masterpiece of design and ergonomics. Immediately in front of the driver is the main cluster, with the principal instruments (including at least speedometer, tachometer and fuel gauge) and the most urgent warning lights (ABS, brake fluid, check engine and others).

BMW's "secondary" control and display zone is always above the center console and stack. This zone includes less urgent displays and warnings (such as the On-board Computer), climate-control system and audio system, plus the iDrive control display if present. The iDrive controller and some less frequently used controls and are on the center console.

ActiveHybrid models add specific instrumentation and readouts, especially in their iDrive systems; see **BMW Full Hybrid 2.0 power system**, earlier in this section.

Electronic analog instruments (all models)

Every BMW main instrument cluster has round analog dials for speedometer and tachometer. The fuel and (where present) coolant- or oil-temperature gauges are also here, and relatively large. This arrangement provides not only easy reading but a distinctive, BMW-only look. The instruments are electronically driven, with no mechanical cables or connections to wear out.

Black Panel display (7, 6 & 5 Series, B7)

In these models, the entire instrument cluster is a high-

resolution Black Panel display, in which BMW's classic four circular instruments and other displays and readouts appear in their various graphic forms. In "dormant" state, the cluster is a mostly blank form; pointer needles, scale markings and other elements of the instrumentation illuminate in elegant, dramatic ways to convey an especially premium display of driving and informational information.

In "dormant" state, Black Panel presents a mostly blank space, defined by its chrome-toned periphery and including only pointer needles, scale markings and the tachometer's warning zone within it (all subtly illuminated). The circular instruments' numerals, as well as integrated displays for current fuel economy and range on remaining fuel, are entirely electronic, and not visible until a door is opened for entry.

Thus the advantages of mechanical and electronic displays are ideally combined – with fascinating visual and graphic effects. As the user enters the vehicle, the circular instruments' "chrome rings," until now open at the bottom, close and become brighter. Once the ignition is activated (by pressing the Start/Stop button), the numerals plus all other displays and warnings illuminate. As the engine starts, functions that have been previously activated by the driver are revealed.

Extensive digital and graphic displays, as well as analog readouts of current fuel economy, Brake Energy Regeneration and range on remaining fuel, are set between the speedometer and tachometer, and across the bottom of the display. Most facets

of this instrument and display cluster correspond to those of the 7, 6 and 5 Series.

Check Control (all models)

Placement and extent of monitored functions vary from model to model, but the purpose of this system is always to help the driver be aware of the operational readiness of important functions, such as the lighting system and fluid levels. Each model's Owner's Manual (whether printed or within iDrive) provides a detailed listing and description of the various systems and functions monitored.

On-board Computer (all models)

Two versions are offered:

- **"Basic" with 4 functions**
(3 Series Coupes-Convertibles, 1 Series, Z4 without iDrive). The functions are –
 - Acoustic freeze warning
 - Average fuel economy since last reset
 - Average speed since last reset
 - Expected range on remaining fuel.
- **"Premium" with at least 8 functions;** included in optional Navigation System of 1 Series, 3 Series Coupes-Convertibles, Z4 and M3, and in standard iDrive system of 7, 6 and 5 Series and 3 Series Sedans as well as X3, X5 and X6. Functions are found in the On-board Info and Trip Computer menus, and include –
 - Expected range on remaining fuel
 - Distance to destination
 - Estimated time of arrival
 - Average fuel economy since last reset

- Average speed since last reset
- Speed-limit warning
- Departure time
- Trip duration
- Trip distance
- Date.

iDrive (optional 3 Series Coupes & Convertibles, 1 Series, X1; otherwise standard)

BMW pioneered iDrive with the then-new 7 Series generation in 2001. With its multi-menu color display and a mouse-like controller usable by driver and passenger alike, iDrive supplants a potentially crowded landscape of buttons and knobs with computer-logic control paths. The present, evolved generations of iDrive build upon that pioneering development while making it more natural, more intuitive, simpler and more elegant.

The overarching attribute of iDrive is the spatial separation of control (via the console controller) and display (the centrally placed control display). This basic strategy remains; the controller has been further developed and control displays are mostly larger than originally:

- All 7 and 6 Series, B7, 5 Series with Navigation – 10.2 in.
- 3 and 1 Series, Z4, X6, X5, X3, X1 with Navigation¹⁶ – 8.8 in.
- 5 Series without Navigation – 7.0 in.
- 3 Series Sedans, X6, X5, X3 without Navigation – 6.6 in.

Positioned at dash center, the control display sets industry standards for logical, readily understood menus and attractive

¹⁶ – 1 Series, 3 Series Coupes-Convertibles, Z4 & X1 have iDrive only in combination with Navigation system.

BMW features

The following key features appear in more than one BMW Series:

graphics. The controller has been refined for comfortable, intuitive selection and activation of functions via standardized turn, push and tilt motions while being augmented with more direct-select keys.

User-friendly: controller with direct-select keys. Benefiting from the newest biomechanics R&D, the state-of-the-art controller operates with tactile precision and clearly structured motions. Evolved control elements, menu schemes and graphic representations in the control display become evident upon first use, yet user appreciation grows over time. A graphic depiction of the controller in the display itself (including instructions such as Tilt or Press) helps orient the user to the next control step; the rotation, pressing and tilting motions generally correspond to those of a computer mouse.

Thus interpreted, rotation of the controller takes the user through menu selections; pressing it makes the choice. Tilting the controller to the left or right effects a navigation through various menu levels. Via clear graphic organization in the form of stacked layers and onscreen depiction of controller movements, the user enjoys highly intuitive navigation. Menus are structured according to a consistent scheme, so that one is almost immediately at ease; menus are broad so that the user can view relatively numerous options without switching to another level. Also, functions are arranged so that in longer-term use the most important options are reached more rapidly.

An additional refinement is four

direct-select keys, placed directly next to the controller, for the most frequently used menus. These allow quick selection of media, radio, phone and navigation menus, and are augmented by three further keys of general utility: one takes the user directly to the start menu (MENU), one to the most recently active menu (BACK), and the third (OPTION) presents various options within the current area. Thus searches are likely to be shorter, or altogether unnecessary.

Programmable Memory Keys. Positioned with the audio controls, these keys (8 of them in 7, 6 and 5 Series, B7, M6, M5, 3 Series Sedans and X3, 6 in other Series so far) allow the user to store favorite or frequently used functions (radio stations, phone numbers, navigation destinations for example) on various keys and recall them instantly. The stored functions can be as specific and detailed as a navigation map in the preferred scale, an audio balance setting or a selected chapter in the Integrated Owner's Manual (7, 6 and 5 Series, 3 Series Sedans, X3). And because the keys are sensitive not just to being pressed but also to being merely touched by the user's finger, one can see the stored function on the control display by lightly touching the key. If it's the right one, the user need only press the key and it's there, ready to use.

High-resolution display, preview maps and full-screen images. In either of its four sizes, the display's 1280 x 480-pixel resolution means remarkably true-to-life images. It's a system appropriate to the vehicle it's in,

achieved via up-to-date hardware and software. White-on-black menu lists; effective symbols and icons; contemporary graphics; and clear, consistent color-coding are among the elements that enhance not only function but also esthetics.

Menu structures, too, make finding desired functions easier. In the Start Menu, all functional areas served by iDrive are listed. Selecting a given item leads to its menu layer, where the options of that level are listed. This consistency in navigation assists in orienting the user, as does the "stacking" of menu layers in the display. Visual assists further contribute to clarity. And if the user gets to a place where he or she didn't mean to be, the Back key usually reverses the error.

GPS Navigation. This overall refinement of functionality means simpler and more enjoyable use of the standard GPS Navigation. Full-screen map displays offer outstandingly detailed views of the geography; maps as well as specific symbols can be shown in 3-dimensional form. Selected points of interest along the travel route appear with near-photographic realism.

Mere input of destinations reveals the new system's impressive capabilities. If the destination appears on a list in the system, a preview map appears as the user scrolls the list; this can help distinguish between places with similar or identical names. If a destination (or a phone number) needs to be entered manually, this is done with a new, circular "speller" that makes the entry go more quickly than before.

The Navigation system is standard in all 7 and 6 Series including B7; 550i models, ActiveHybrid 5, X5-X6 50i, and X5-X6 M; otherwise it is optional. In the 1 Series, 3 Series Coupes-Convertibles, Z4, M3 and X1, the Navigation option includes iDrive as iDrive is not present in these models without Navigation. In 528i and 535i models, 3 Series Sedans, X5-X6 35i and X3, iDrive is standard but Navigation is optional.

Simultaneous voice entry and controller operation possible. Yet another iDrive innovation is its ability to combine voice and controller entry, called Multimode Input. The user can go back and forth between the two methods while actually inputting; indeed, voice recognition can remain active during input via controller and the user can modify an input via voice. Voice Command is activated by its function key on the steering wheel, and de-activated either upon completion of the action or by pressing the key again. Voice Command is simplified by visual display of the available commands, yet its capabilities go further in that numerous synonyms of these commands are also recognized.

BMW Online. As an expansion of functionality to the BMW Assist Convenience Plan (available at extra cost; see **BMW Assist**), BMW Search was enhanced in model year 2010 to become BMW Online. Users now receive fuel prices, weather forecasts and major U.S. stock indices in addition to Google Maps™ business-search capability. 3-day weather forecasts are displayed graphically for the vehicle's current location or a destination.

BMW features

The following key features appear in more than one BMW Series:

Various stock indices are updated by Bloomberg; trends and then closing values are shown on business days.

Subscribers can access BMW Online to find a desired business with just a key word, benefiting from the world's most famous online search engine. After finding the desired information, users can immediately start route guidance or a hands-free call with the Bluetooth-linked phone at just a simple push of a button.

Utilizing hardware operating on the AT&T Mobility GSM network, this unique service identifies the current location and destination of the vehicle automatically and then displays the local results with details of address, phone number and distance. For example, one can look up business information like the names of restaurants, hotels, service stations, banks, supermarkets, cinemas and public facilities such as schools or city halls, all by the simple use of a keyword. One can also easily ask for a search at another location.

In a nutshell, BMW Online, using Google search technology and intelligence, saves time and reduces frustration with destination entry on the Navigation System. The information you look up is continuously updated by Google. BMW Online is the next logical and consequential development of the link between the automobile and the Internet.

In its evolved form, iDrive helps create an incomparable user experience.

New-generation iDrive + Navigation

(7 & 5 Series, Active Hybrid 3)

These models introduce a dramatically evolved iDrive system. Its user interface includes enhanced graphics, with higher resolution, higher contrast and 3-dimensional effects throughout; individual menus, for example, are presented in virtual-3D spaces. A more powerful, 1.3-GHz processor and dedicated 3D graphics card enable new levels of animation and dynamic transitions between menus and options.

Along with this general iDrive evolution, GPS Navigation displays in particular have been revised and enhanced, with map displays and route guidance now sharper and more brilliant. Additional function bars, superimposed as an extension of the initial map that has been selected, open up additional navigation and driving options that allow –

- Advanced Real Time Traffic Information (ARTTI) and weather updates to be superimposed
- Points of interest to be displayed
- Maps to be switched quickly and simply from top to perspective view.

Similar menu-bar strategies appear in other iDrive menu areas, such as multimedia, where the control bars enable convenient selection of the wide range of audio sources. Additionally, special functions can be enjoyed directly from users' points-of-interest entries. Depending on the information one has stored about a point of interest, users can call up the place, read any stored information, alter the

map view and even call there if the phone number is part of the stored data.

The iDrive split-screen setup also adds new functions. Upon entering a destination by city and address, that destination can then be displayed in the map view on the split screen; then the zoom function can be used to verify that the destination is the intended one.

For the navigation process itself, the familiar arrow guidance in the split screen is augmented by a high-level guidance feature. This is automatically activated when the driver reaches a certain point ahead of the next navigation instruction, which varies according to the category of road. The arrow display turns into a schematic, perspective view of the surroundings, evolving as one continues toward the next intersection, junction or guidance change; a dynamic vehicle icon pinpoints the car's current position relative to it.

Voice-to-text and other new capabilities. Other enhancements include expanded speech recognition and voice control to complete the portfolio of office functions provided by BMW ConnectedDrive. Among the new capabilities is a dictation function, which lets drivers dictate text freely and compose short text-based messages simply by saying what they wish to write. Once a dictation is complete, the text appears in the display; drivers also have simple-to-use, speech-based editing tools for putting final touches to e-mails and text messages easily and – most importantly – safely.

Further expansions of voice control include activating additional menu functions via simplified voice command. The system is able to recognize contact data irrespective of format; even independently of first name and surname order. Two phones can be paired at the same time and their data transferred to a shared list that's then available for phone calls and sending e-mails.

Hard drive for data storage: High capacity, fast retrieval (included in all models with Navigation system)

An 80-gigabyte hard drive provides data storage for the iDrive system, GPS Navigation, entertainment systems, Voice Command and phone system. Storage capacity on the 2.5-in. hard disc is apportioned as follows:

- GPS Navigation – 65 GB
- Entertainment server – 8 GB
- Gracenote® music-track database – 4 GB
- iDrive system – 2 GB
- Voice Command – 0.5 GB
- Phone contacts – 0.5 GB.

The hard drive has many advantages for users:

- Facilitates complex graphics, such as 3-dimensional perspective views in Navigation.
- Makes it possible to maintain a music collection via Gracenote® music-track database.
- Provides faster retrieval of data, such as navigation guidance or music files.
- Significantly improves Voice Command operations and expands it to include three languages.

BMW features

The following key features appear in more than one BMW Series:

Head-up Display

(standard 760Li & B7; optional 740i/Li & 750i/Li, 6 & 5 Series, 3 Series Sedans, M6, M5, X6; X5 35i Premium & Sport Activity, 50i; X3, X5-X6 M)

HUD displays important driving information in color on a 6 x 3-in. field in the windshield. A virtual image is projected onto the windshield, appearing approximately in line with the end of the hood in the driver's field of sight. Thus the driver can observe the information with essentially no diversion from the road ahead. Via the iDrive control display's i-menu, the driver decides which information is to be displayed here and the brightness of the display; the display can be turned on and off via a switch in the lighting control center, to the left of the steering column.

Information of the following categories can be displayed:

- Check Control and On-board Computer warnings, prioritized according to their urgency, such as vehicle defects, engine-oil level, low windshield-washer fluid
- Navigation instructions
- Cruise-control (standard or Active Cruise Control) set speed
- Current vehicle speed (the only HUD information that displays continuously when selected)
- Current transmission mode and gear (X3 only)

In addition to basic brightness selected via the iDrive system, the display's brightness is also automatically regulated according to ambient light and moisture conditions via sensors that govern the automatic headlight control and rain-sensing wipers.

Settings chosen by the driver are captured by the Key Memory System, and re-captured when the individual user unlocks the car. The X3, X5 and X6 HUD is height-adjustable.

Appearing for '13 in 7 and 6 Series, B7, M6, M5 and 3 Series Sedans, a 2nd-generation HUD ads full color, 3-dimensional effects, higher resolution and an expanded range of displayed information. Sophisticated new graphics allow the 3D indications to be blended into the actual view ahead, and can display them in the foreground or background depending upon their relevance. Other enhancements include automatic adjustment to ambient light conditions, adjustable viewing height and basic brightness, and a wider choice of information to be displayed.

In M6, M5 and X5-X6 M models, the HD is a special M version; see the **M5 & M6** and **X5 M & X6 M** sections for details.

Speed Limit Info (7, 6 & 5 Series, B7, 3 Series Sedans)

Via the same camera used by Lane Departure Warning, this useful function captures current speed-limit and other signage, such as "no passing," and shows it on the iDrive display.

Voice Command (included in all models with Navigation system)

Voice Command, BMW's system of voice control of vehicle functions, can now be used to control external devices (such as an iPod or smartphone) and select their program material. With this new capability and a significant evolution in September '09, BMW has

raised the driver/vehicle dialogue to a new level of excellence.

A single voice command is sufficient to enter the desired destination into the navigation system; the driver's verbal statement specifying the place, street and number is processed immediately by the system.

BMW was also the first European carmaker to offer voice recognition serving not only to choose the appropriate audio source, but also to find individual music titles. The system monitors and interprets the user's voice commands regarding the type of music, name of artist, album or individual title to achieve precise access to the desired material. Operation of the navigation, communication and entertainment systems is made highly reliable and convenient.

The latest iDrive/Navigation generation, as found in 2013 7 and 5 Series as well as the AH3 (where Navigation is optional), features full speech recognition and optimized Voice Command to complete the portfolio of Office functions, as described under Mobile Office on a succeeding page.

The system incorporates a text-to-speech engine, which makes it possible to translate various text messages, such as radio-station names, into voice form. Via interaction of graphics and speech, the user might select a radio station via Voice Command; the monitor would then display this choice. Using the available Bluetooth interface and a paired mobile device, once the phone menu is selected, one can dial the number of a programmed phone contact merely by speaking

his or her name. It is also possible to obtain GPS guidance to a city or town by vocally spelling its name.

In summary, Voice Command puts its advanced user interface to work controlling the –

- Phone system
- Address book
- GPS Navigation
- Short Message System (SMS)
- Audio system
- Climate control
- External devices such as iPod and smartphones.

Capable of recognizing more than 3000 words, Voice Command adjusts in unique fashion to the user's personal preferences, offering the most intuitive and comfortable mode of operation in every situation.

Real Time Traffic Information (included in all models with Navigation system)

RTTI is received in the vehicle via an FM data broadcast. It is processed in the vehicle's Navigation system to notify the driver of potential traffic problems (i.e. congestion, construction) on the programmed route, and offers an alternate route or the option of automatic re-routing around the problem. RTTI is available in more than 50 metropolitan markets in the United States; BMW offers it to customers for a minimum of 4 years from the in-service date without recurring monthly bills – a considerable advantage over competitors that charge an RTTI monthly premium or require satellite radio service in addition to a monthly premium. With the newest-generation Navigation (see previous pages), RTTI becomes ARTTI (Advanced), with further capabilities.

BMW features

The following key features appear in more than one BMW Series:

BMW Ambiance Lighting (standard all models)

As originally introduced, BMW Ambiance Lighting, or “waterfall” lighting, consists of two small LED lamps in the ceiling. These lamps, themselves barely noticeable, bathe the console area in soft orange light, helping occupants find controls at night and adding a warm, subtle touch to the cabin.

As time goes on and new vehicle platforms are introduced, Ambiance Lighting is becoming more extensive; see the individual Series section for these functionally and esthetically appealing lighting features. The latest development is a color switch, appearing in the 7 Series, 3 Series Sedans and X1 and offering a choice of colors for the extensive Ambiance Lighting that’s standard or available in these models.

Automatic climate control (standard all models)

BMW’s automatic climate control provides both effective automatic control and a high degree of manual “override” control should users desire it. In the 7, 6 and 5 Series, X6 and X5, and 3 Series Sedans, the system provides full left/right control of most functions, plus additional functions programmable in the iDrive system. The 3 Series Coupes and Convertibles, 1 Series, Z4, X3 and X1 systems provide left/right temperature settings only.

Key features of BMW automatic climate control include (in all Series unless otherwise noted):

- **Activated-charcoal microfilter ventilation** – adds a layer of active-charcoal particles to an electrostatically charged microfilter. Active charcoal has

a gigantic surface area relative to its mass (over 16,100 sq ft. per gram!), which enables it to absorb and hold substances such as carbon monoxide, sulfuric acid, nitrogen dioxide and ozone. Many odors are also reduced. The electrostatic action of BMW microfilters captures atmospheric particles down to a size of 5 microns, removing pollen, plant dust and spores; cement, coal and asphalt dust; and others. One or two filters depending upon Series; they are to be changed periodically according to the BMW maintenance schedule.

- **Versatile override controls.** When users have specific preferences, they can override automatic functions. Air distribution to windshield, dash and footwells can be combined as desired; fan speed can be adjusted manually. In X6 and X5 models, independent left/right controls are provided for air distribution and fan speed via iDrive; in the 7, 6 and 5 Series these overrides are outside of iDrive. In 3 Series Coupes-Convertibles, 1 Series, Z4, X3 and X1, these overrides have single controls.
- **Intensity control.** An additional control option is 5 settings for the intensity of climatization, selected via iDrive (where present) and affecting the system’s Automatic operation. All models.
- **Temperature- and volume-controlled air for rear compartment** (all models with rear seats, except 1 Series) via controls at the outlets in the rear of the center console.
- **Fuzzy logic** – refines temperature control by incorporating human comfort perceptions.

- **Bi-directional solar sensor** for front compartment: takes into account the intensity and direction of solar heat to determine cooling action.
- **LED temperature displays** – showing temperature settings and current fan speed.
- **Automatic recirculation control** – recognizes high air pollution and automatically switches to recirculating air. Manual selection of recirculation is also possible from the climate-control panel. (In many models, a convenient steering-wheel button either controls, or can be programmed to control, this function.)
- **Max. A/C** – 1-touch selection of maximum air-conditioning output.
- **ALL control** (7, 6 and 5 Series, B7, Z4, X3) – gives driver control over both sides of vehicle.
- **Misting sensor (all models)** – via the windshield wipers’ rain sensor, windshield misting is sensed visually and system operation adjusted automatically to clear it up.
- **Climate-controlled center console compartment** (7, 6, 5 and 3 Series, B7, M3).
- **Recall of individual users’ settings** via Key Memory/Personal Profile: temperatures and any manually selected air distribution.

The many air outlets can be adjusted individually – all of them for airflow, the ones at dash level (in 3 Series and X3) for temperature and airflow. A thoughtful design for the outlets’ grille slats allows them to be fully closed too.

4-zone climate control (standard 7 Series, B7, ActiveHybrid 5; optional X6, X5, X5-X6 M)

Gives rear-seat passengers a degree of control over their climate comfort similar to that afforded the front-seat occupants. Beyond the dual-zone system that’s standard in all these models, this state-of-the-art system includes –

- Separate rear blower
- Additional air outlets in B-pillars
- Full rear control panel with left/right temperature and air-distribution settings
- Individual heating elements in the rear foot space
- Separate automatic programs front/rear.

AM/FM/HD/CD audio system (all models)

Every BMW model’s audio system includes at least the following features:

- An attractive and legible display
- Programmable memory for at least 12 FM and 6 AM stations
- Autostore of 6 FM and 6 AM stations
- Search, seek and manual tuning
- Operation of certain functions from steering-wheel controls
- Radio Data System (RDS), including Program Type (PTY)
- HD Radio
- In-dash single-disc CD player
- Audio muting for phone use (with approved cellphone and Bluetooth interface).
- Auxiliary audio input.

Some models’ optional or standard audio systems have significant additional features, such as: Digital Sound Processing (DSP); subwoofers; Surround Sound; and the numerous special features of the Harman Kardon,

BMW features

The following key features appear in more than one BMW Series:

Logic7 and the Enhanced Premium Sound System of M models (nearby). Single-disc CD players, standard in every model, include MP3 capability. An iPod/USB Adapter is now standard in most models, as is USB connectivity.

Logic7 audio system

(standard 760Li, 750i/Li, B7, 650i Coupe-Convertible, M6, M5; optional 640i, 6 Series Gran Coupes, 5 Series, X3)

This state-of-the-art audio system upgrades sound quality to premium level. It enhances the entire audio system with –

- Significantly increased audio power
- DIRAC (Dual Input Room Acoustics Calculator) signal processing, see **Enhanced Premium Sound System**, next
- Discrete 5.1 multi-channel sound possible
- Higher-caliber speakers throughout:
 - 760Li, 750i/Li, B7 – 16-speaker Logic7 system standard. vs. 12-speaker system of 740i/Li
 - 650i, M6 – Coupe 16, Convertible 12 speakers vs. standard 640i models' 9
 - 5 Series, M5 – 16 speakers vs. standard 12
 - X3 – 16 speakers vs. standard 12
- 7-band Digital Sound Processing (DSP), adjusted along with other Logic7 parameters on iDrive control display
- Surround Sound simulation
- Vehicle-speed-dependent equalizing of bass tones.

Speakers are as follows; an asterisk (*) denotes additional speakers over the standard system. Unless otherwise noted,

speaker specifications are common to all models where Logic7 is offered; all speakers except subwoofers are aluminum-membrane type.

- 100-mm midrange fill speaker, center of dash*
- 25- or 26-mm fill tweeter, center of dash*
- 100-mm midrange in each front door
- 25- or 26-mm tweeter in mirror triangle of each front door
- 100-mm midrange in each rear door (except 6 Series)
- 100-mm midrange in each rear side panel (6 Series)
- 100-mm midrange surround speaker at each side of rear shelf* (except 5 Series GT, 6 Series Convertible, X3)
- 100-mm midrange in each D-pillar (X3)
- 100-mm midrange in each C-pillar (5 Series GT)
- 25-mm tweeter at each side of rear shelf, inboard of surround speakers (5 Series Sedan, 6 Series Coupe)*
- 25- or 26-mm tweeter in each rear door* (7 Series, 5 Series, X3)
- 25-mm tweeter in each rear side panel* (6 Series)
- 25-mm tweeter in each C-pillar* (5 Series GT)
- 26-mm tweeter in each D-pillar (X3)
- 210-mm central bass (subwoofer) in cavities at bases of B-pillars or under the front seats. Use of these "sill cavities" is patented by BMW, and enhances audio quality beyond even similar systems in competitive models.

Developed by Lexicon, Logic7 incorporates a satisfying Surround Sound process, as in

current Harman Kardon home A/V receivers. Exclusive to Harman International brands, this process provides truly unique and realistic reproduction, generating a 360° sound field and accurately re-creating the acoustic intent of the studio master. Logic7 offers –

- A multi-channel format
- Unparalleled acoustic realism and clarity
- A benchmark for the automotive industry
- A significant point of differentiation for our customers.

Series other than those listed here offer premium audio systems that are not Logic7 but are comparable:

- 3 Series, X1 – Harman Kardon surround-sound system, 16 speakers (Sedans), 13 (Coupes) or 11 (Convertibles, X1) vs. standard 8
- 1 Series – Harman Kardon surround-sound system, 10 speakers vs. standard 8
- Z4 – 14 speakers vs. standard 11 in 28i and 35i; standard 35is
- X6, X5 – 16 speakers vs. standard 10
- X5-X6 M – 16-speaker system standard, Enhanced Premium system optional.

Details on all these systems except the Enhanced Premium are in these Series' sections.

BMW Individual Enhanced Premium Sound System (optional M3 & X5-X6 M)

Logic7 set new standards for audio quality in automobiles; with this system BMW takes another step toward sound perfection.

Developed by BMW M audio engineers as part of the BMW Individual product spectrum,

this system addresses an audio-reproduction issue most of us didn't even know existed: delivery of audio reproduction in the correct, original time sequence. And it proves a time-honored axiom: as good as we thought things were, they can always be better.

The core challenge was how vehicle interiors affect sound after it emerges from the speakers. The many surfaces, shapes and textures cause sounds to be delivered out-of-sequence, so to speak, bouncing off here and there and arriving at occupants' ears in a different order than they did when the music was recorded.

To counter this, the system employs an advanced technology called DIRAC (Dual Input Room Acoustics Calculator), which measures the interior's characteristics and cancels out the time distortions they cause. In its March 28, '07 issue, Germany's *auto motor und sport* magazine, which regularly reviews vehicle sound systems, likened the process to "electronically controlled suspension that precisely knows the surface of the road ahead – in advance."

The other, less surprising aspect of the Enhanced system is its exotic speaker technology – after all, if we're going to hear those audio impulses in their correct sequence, they'd better be crystal-clear. Made by German speaker specialist LPG, they are (to quote *auto motor und sport* again) "the race cars of loud-speakers, because they have strong engines (Neodymium magnets) and a highly rigid, yet lightweight chassis (Hexacone

BMW features

The following key features appear in more than one BMW Series:

membranes)." In all listed models unless otherwise noted, these include:

- 100-mm coaxial center-fill midrange/tweeter atop the instrument panel (2)
- Tweeter in each front door's mirror triangle (2)
- 100-mm midrange in each front door panel (2)
- 100-mm coaxial midrange/tweeter in each rear door (X5-X6 M) (4)
- 100-mm midrange and separate tweeter in each rear side panel (M3 Coupe and Convertible) (4)
- 100-mm midrange and separate tweeter in each D-pillar of X5 M, or in rear roof section adjacent to liftgate of X6 M (4)
- Two 100-mm coaxial midrange/tweeter under rear shelf (M3 Coupe) (4)
- Two 220-mm subwoofers under front seats (2)

Thus the M3 Coupe and the two Ms have 16 speakers altogether (counting the coaxials as two each), the M3 Convertible 12. These are driven by an 825-watt (Coupe/Ms) or 675-watt (Convertible), 9-channel amplifier that can produce up to 112 dB of volume and a frequency range of 18 Hz – 24 kHz. Signals are transmitted from the amplifier to the midrange speakers and tweeters in the front doors and mirror triangles via two especially capable diplexers. To compensate for varying vehicle noise levels, the system includes speed-dependent volume. 7-band Digital Sound Processing is also included, controllable via iDrive (standard in X5-X6 M, required with this system in M3 models).

Designed by BMW Individual, the speaker frames and grilles signal their quality and capability visually via style and colors. Users select settings via an audio submenu within iDrive: tone, balance, fader, vehicle-speed effect, equalizer and surround settings; switching to and from surround sound is also accomplished simply within this menu. *auto motor und sport* declared that the system "has astoundingly little self-generated sound, reproducing instead with great detail precision. One could hardly make a higher compliment...the most impressive sound system in the world."

Bang & Olufsen audiophile audio system (optional 7, 6 & 5 Series, B7, M6, M5)

Having made its debut in the '12 6 Series, this industry-leading audiophile system becomes available in these further models for '13. Carrying the option code of 6F2, it has 1200 watts of audio power and 16 speakers (Sedans, Coupes, Gran Coupes) or 1000 watts and 12 speakers (Convertibles). These speaker counts and their placement are the same as for the Logic7 system, but otherwise, the system is completely distinctive – and incomparable.

Designed for BMW by the renowned Danish purveyor of high-end audio products **Bang & Olufsen**, this system features sound technology never before offered in an automobile. It is a fully **active** system, which means that each speaker, including the underseat subwoofers, has its own amplifier. The electrical signals are converted into precisely

defined sound waves using neodymium magnet drivers that combine very high performance with low weight; this makes them the ideal solution for a car hi-fi system. The midrange speakers also feature extremely rigid, yet lightweight Hexacone diaphragms.

The exceptional sound quality is due not only to vehicle-specific placement of high-quality speakers, but also to innovative amplifier technology. Digital signal processing allows the signals to each speaker to be individually controlled, which compensates for any sound reflections inside the vehicle via appropriate signal modifications.

In addition to all the usual controls, a choice of two overall sound settings is offered: **Studio**, for the crystal clarity of a sound studio; and **Expanded**, which creates the perception of an expanded acoustic space. The latter uses Dirac Dimensions™ technology to recreate the acoustics of a given "reference" listening environment in the passenger compartment. This prevents the inevitable closeness of vehicle passengers to the speakers from affecting the sound experience, and lets occupants enjoy identical sound quality wherever they are sitting. The signals are precisely tuned to give the impression that the speakers are outside the vehicle. All this technological excellence is accompanied by exclusive styling: illuminated speaker bezels of high-quality aluminum and, most notably, the center-fill speakers in the instrument panel. When the audio system is activated, the midrange speaker

grille pops up and the tweeter lens is extended to distribute sound evenly throughout the car.

HD Radio (standard all models)

Higher-quality sound from terrestrial transmitters; requires no subscription. FM reception is of digital quality; AM achieves virtually the quality of conventional FM. HD Radio represents the greatest step forward in radio sound quality since the advent of FM broadcasting.

HD programming comes largely from established radio stations, but the compressed digital signals allow three or more stations within the bandwidth used by one conventional station; thus a continuing expansion of available stations is expected. At this writing, more than 2,000 stations have added digital transmission capability in the U.S.; more than 1000 are offering the extra stations (HD-2 or HD-3) that are possible.

The HD equipment receives both analog and digital signals. BMW pioneered the offering of HD Radio in motor vehicles.

Diversity antenna system (all models)

Multiple antenna lines (in various locations according to model and body type) independently receive FM signals; these signals differ from each other because of the lines' separate routing. A system computer continuously monitors the signals and selects the better or best one.

In all models, a diversity antenna system improves FM reception significantly over a single-circuit antenna. X3 and

BMW features

The following key features appear in more than one BMW Series:

X1 employ a patented WING layout for the antennas in its rear window that further improves antenna performance. Patented by BMW, this arrangement obtains FM signals from the heating wires in the semicircular area defined by the rear-window wiper. AM signals cannot be obtained from heating wires, so the AM wires are divided into left and right “wings,” freeing up that entire semicircular area for heating and FM reception and providing space for a powerful AM antenna.

Satellite Radio with 1-year subscription

(standard 760Li, B7 & 6 Series Coupes-Convertibles, otherwise optional)

The option includes a prepaid 1-year subscription to “The SIR-IUS Everything” package. This package also includes “The Best of XM,” featuring popular XM channels including Oprah Radio, MLB Home Plate, NBA and NHL games, The PGA TOUR Network and XM Public Radio.

Additional features include the following:

- The channel list may be displayed as channel name, artist and song title.
- Artist and song-title listings give listeners a “sneak peek” at what is currently being played on the channel.
- Channel surfing is made easier by Direct Channel Input.
- Instant Replay allows users to time-shift or replay a favorite song or program.
- Favorite Alert notifies users when a favorite artist, song, or game is being played.

- Traffic Jump allows users to automatically tune to the traffic message of a chosen metro area when the message becomes available to avoid missing important updates.

Signals are delivered by multiple powerful satellites for seamless coverage anywhere in the continental U.S., and optimized for superior sound resolution by proprietary S>PLEX technology. Hardware for the vehicle consists of a –

- Satellite Receiver
- Satellite antenna
- Satellite Radio-compatible audio system.

Once the equipment is activated, the customer simply selects the satellite radio mode. As with FM and AM, users are able to scan and set favorite presets.

iPod/USB Adapter (standard all models)

Allows BMW users to listen through the vehicle audio system to music or other material stored in their iPods, mobile phones, flash drives or other devices.

The USB port is immediately next to the auxiliary audio input. Depending on how the vehicle is equipped, drivers can control the input source from iDrive or the Multi Information Display, and from the multi-function controls on the steering wheel.

There are various connection possibilities; suitable USB cables are available. Steering-wheel and in-dash audio controls can be used to control playback volume, start and stop music, and scroll through selections on the iPod or other source. Most USB sticks are compatible, though not all USB players. If contained in the

song megadata, album cover art can be displayed in the iDrive display in vehicles so equipped.

Bluetooth mobile-device interface (standard all models)

When a BMW-approved mobile device is paired with the Bluetooth interface, BMW’s in-vehicle hands-free memory, dialing and calling features are available via vehicle controls. Phone functions may also be voice-activated.

As part of the new connectivity strategy that appeared first in the current X3, with BMW Assist (Packages or stand-alone option), additional user benefits are provided via an enhanced version of the Bluetooth/USB connectivity technology. With Bluetooth and USB connectivity now standard in all models, BMW Assist (whether optional or standard) brings with it Enhanced Bluetooth and USB interfaces, as described next.

Enhanced Bluetooth and USB interfaces (included with BMW Assist, all models)

With the Bluetooth and USB interfaces now standard in all models, BMW Assist upgrades Bluetooth and USB connectivity to include:

- Viewing of data from user’s mobile device on the iDrive control display by selecting “office” from the menu (Mobile Office)
- Viewing of contact photos from user’s mobile device on control display
- At any time two mobile phones and one audio player may be paired via Bluetooth. Album covers from the audio source can be viewed in iDrive if present.

- 1-wire USB connection gives fast data access from an iPhone.
- User can update multi-media and telephony settings via the USB interface.

For current details on iPhone 5/iOS 6 connectivity, see Product Planning & Strategy Bulletin B-31-1012-13-iPhone5/iOS6.

BMW Apps (optional all models, includes Smartphone Integration)

This further advance in BMW’s ConnectedDrive strategy (next) enables the integration iPhone/iPod/iPod Touch apps into the vehicle, including Facebook, Twitter, Pandora, MOG and Stitcher; also enables communication between vehicle and mobile device. Examples of the latter include getting the fuel-tank reading from outside the vehicle, or storing the vehicle’s location on the mobile device to assist in finding the vehicle and the way back to it.

Smartphone Integration, included in this option, allows access to music stored within the mobile device, can improve phone reception, and charges the device. Smartphone Integration requires an accessory snap-in adapter to fully integrate the option into 3 Series Coupe-Convertible and 1 Series models; these adapters and compatible mobile devices/phones are available as center-installed accessories.

For details on some of the current BMW Apps capabilities, see Product Planning & Strategy Bulletins:

- B-26-0712-13-Apps-01 NBT and BMW Apps, July 31, 2012
- B-28-0812-13-All_Models-04 Stitcher, August 7, 2012

BMW features

The following key features appear in more than one BMW Series:

BMW ConnectedDrive (all models as described)

This is BMW's "umbrella concept" for interaction of the vehicle and its occupants with the world. BMW ConnectedDrive is synonymous with advanced and intelligent networking of the driver, vehicle and environment; the features, its systems and technologies have been, and are being, introduced progressively. For Model Year 2013, BMW customers can already acquire and enjoy a wide variety of ConnectedDrive amenities (availability depending on model):

Vehicle management – making driving and operating the vehicle more convenient and efficient:

- iDrive, with control display and turn-and-press controller giving driver and passenger a multitude of vehicle functions
- BMW TeleService – communicating service needs and appointments between BMW Center and customer
- Comfort Access keyless entry, now including hands-free opening of trunk or tailgate
- Personal Profile for setting various vehicle functions according to personal preferences

Travel and navigation

- Navigation system, now in newest generation in 7 and 5 Series, ActiveHybrid 3
- Real Time Traffic Information, informing driver of Navigation-equipped vehicle of traffic conditions, accidents, road blockages and other relevant factors affecting one's travel time and safety
- Head-up Display, including new generation with color displays, 3D effects (see **Head-up Display** heading for details)

- Speed Limit Info, helping driver keep aware of present limits (see **Speed Limit Info** heading for details)
- Google Search
- Active Cruise Control with Stop & Go capability, Collision Warning, Approach Control

Parking

- Surround View exterior cameras
- Parking Assistant

Mobile Office and telephone

- BMW Online Office (see **BMW Online Office** heading for details)
- Software update
- Message dictation (see **Voice Command** heading for details)

Entertainment

- BMW Apps
- Audio streaming via Bluetooth or iPod/USB Adapter

Driver Assistance and Safety

- ECO PRO mode of Driving Dynamics Control
- Automatic High Beams
- Lane Departure Warning
- Active Blind Spot Detection
- Night Vision with Pedestrian Detection
- Approach Control
- BMW Assist:
 - MyInfo
 - BMW Online
 - Automatic Collision Notification
 - Emergency calling (SOS)
 - Roadside Assistance

BMW Mobile Office

(7 & 5 Series, B7, ActiveHybrid 3, M5)

As a key element of ConnectedDrive, Mobile Office has been taken to its highest degree of development in these models with the new-generation iDrive/Navigation system). Full speech recognition and optimized Voice

Command now include dictation capability, which enables drivers to dictate text by speaking what they wish to write. Just a few seconds after dictation is completed, the transcribed text appears in the control display and can be read out if desired. Drivers also have a number of simple-to-use, speech-based editing tools for putting the final touches to e-mails and text messages easily and, most importantly, safely. The multi-lingual system can recognize six languages.

An additional speech-based option is voice memos that can be sent directly via e-mail; thus the driver can quickly store ideas or to-do items and send them. The system is also able to recognize contact data regardless of the format in which it is stored.

Additionally, two phones can be paired at the same time and their contact data combined for in-vehicle phone calls and texts. All this is facilitated by high-performance hardware that enables rapid translation into visual display.

Rear Seat Entertainment

(optional 7 & 5 Series, B7, M5, X6, X5 except base 35i, X5-X6 M)

Adding another dimension to rear-seat luxury in these spacious models, this option includes:

- A DVD player at the back of the center console
- Two high-resolution, angle-adjustable 8-in. color monitors integrated into the front seats' backrests
- Ports for connecting MP3 players, game consoles and other inputs

- Access to other vehicle entertainment functions
- A dedicated remote.

The system functions with 1 internal input and 1 external input, or 2 external inputs as follows:

- Rear DVD drive or 6-disc front DVD changer (internal inputs)
- Internal DVD (front or rear) on one monitor, an external input (Playstation, a personal DVD player, MP3/AVI player, etc.) on the other. Each monitor has its own video input that accepts the standard red-yellow-white input jacks; if an external source is plugged into either, it overrides the internal source and that monitor will show the external input.

New generation in 7 and 5 Series, B7 and M5 adds:

- **Larger color monitors**, 9.2 in.
- **iDrive controller** in rear center armrest, new features
- **Separate GPS Navigation**, which allows rear-seat occupants to input a destination and transmit it to the front iDrive for driver or front passenger's acceptance

Wired and wireless earphones are available as accessories.

Telematics

For information on BMW's telematics hardware and programs, see the **BMW Assist** pages.

Multi-zone seat construction (all models)

All BMW seats are built around a complex inner structure based on current orthopedic knowledge; in fact, BMW always aims at having some of the best seats in the industry. Over a base of steel springs (tuned to the suspension characteristics of each BMW Series), multi-zone

BMW features

The following key features appear in more than one BMW Series:

polyurethane foam cores provide various degrees of support and vibration damping at different points in accordance with human anatomy.

Power front seats

(optional 128i & 328i Coupes, M3 Coupe; otherwise standard) Ergonomically designed controls on the seats' outboard sides enable occupants to find the optimum seat position quickly and easily. The number and types of adjustments vary according to Series and model; see the appropriate Series section for details on the power seats of each model.

Sport seats

(standard 335is & 135is models, Z4 35i/is, M6, M5, M3, X5 Sport Activity, X5-X6 M; Sport or M Sport Line 3 Series Sedans; M Sport Package 328i/335i Coupes & Convertibles, 128i/135i models, Z4 28i; Sport Activity & M Performance Packages X6, Sport Activity & M Sport Packages X5 35d & 50i, X3)

All BMW sport seats incorporate at least the following features:

- **Differentiated backrest contours.** The backrests have prominent side bolsters near the bottom, then a narrower upper backrest section. The idea is to provide the desired lateral support, but without possible constriction around the shoulders.
- **Flared cushion side bolsters,** for additional lateral support.
- **Adjustable thigh support** is included on all models' sport seats via a manually movable front cushion segment. Most models also include:

- **Variable-width backrests.** All currently available sport seats have variable-width backrests. Although 6 and 5 Series Sport and M Sport Packages do not include sport seats as such, their Multi-Contour seats include variable-width backrests among their very extensive adjustments. All 7 Series models come standard with these seats, which are described nearby.

3 Series Coupes, 1 Series and M3 Coupe sport seats are available in manual or power form; all other sport seats are always power, except for their manual thigh-support adjustment. 4-way power lumbar support is offered in combination with front sport seats as follows:

- 328i Coupes and 1 Series – by combining Premium Package or stand-alone optional power seats with Sport or M Sport Packages
- M3, X3 – via Premium Package.

In some Series, notably 7, 6 and 5, sport seats are no longer offered; instead, the Multi-Contour seats incorporate all the adjustments of BMW's traditional sport seats plus more. These are described next.

20-way power Multi-Contour front seats

(standard 750i/li, 760Li, B7, 650i, 550i, X6 50i, X5-X6 M; Packages or stand-alone 740i/Li, 640i, 528i, 535i, ActiveHybrid 5, X6 35i, all X5 except base 35i) Formerly called Comfort seats in some Series; option code 456. These premium front seats are offered as listed above.

Beyond the standard 10-way power seats, the power adjustments include –

- 4-way lumbar support
- Thigh support
- Upper backrest angle (articulated; adjustable separately from main backrest angle)
- Backrest width (the backrests' side bolsters spread or narrow to accommodate the occupants' back and shoulders, as on most of the sport seats).
- In the 7 Series, along with the steering wheel's tilt-away function, the backrest bolsters widen out for easier entry and exit.

In addition, the head restraints incorporate adjustable side extensions that can help support the head of an occupant using them as headrests, as for example when sleeping.

M Multi-Function Seats (M5 & M6)

These are similar to the Multi-Contour seats, but are distinguished by their exclusive M esthetics and materials. In M6s they have 20-way adjustment; in the M5 they're 18-way. See the M5 & M6 section for details.

Heated seats

(optional or standard all models) Heated front seats provide prompt, welcome warmth in cold weather. Rear-seat heating is available in 7 and 5 Series, B7, 3 Series Sedans, X6, X5, X3 and X5-X6 M. 7, 6 and 5 Series' heated front seats include special features; see those sections for details.

Active Seat Ventilation

(Executive Package 740i/Li & 750i/Li, M5; Executive or Luxury Seating Package 6 Series, Luxury Seating Package 5 Series, X6, all X5 except base 35i; standard 760Li) Fans inside each front seat gently blow air upward through

an internal web and special perforated leather to provide pleasant ventilation and help keep occupants' clothes free of perspiration.

Active Support (same availability as Active Seat Ventilation)

Employs two stretchable hollow cavities, filled and emptied alternately with a freeze-proof liquid. The slow, gentle process (about once a minute) creates a cyclical raising and lowering of the cushion's left and right halves by about half an inch, helping relieve fatigue during extended driving. In the 7, B7, 6 and 5 Series, M5 and M6, both front seats; in X6, X5 and X5-X6 M, driver's seat.

Leather upholstery

(standard or optional all models) Where leather is optional, the standard upholstery is leatherette. Availability is as follows:

- **7 Series** – Dakota standard 740i/Li, Nappa optional 740i/Li, standard 750i/Li, 760Li. Full Merino as part of BMW Individual Composition or stand-alone.
- **B7** – Nappa standard, Full Merino stand-alone.
- **6 Series** – Dakota standard 640i, Nappa 650i models. Nappa-trimmed dash optional all models. Nappa optional 640i models; Full Merino, BMW's finest leather grade, in BMW Individual Composition or stand-alone all models.
- **5 Series** – Dakota, Premium Package or stand-alone 528i Sedan, standard other models. Nappa stand-alone all models, Extended Merino in BMW Individual Composition 535i, 550i & ActiveHybrid Sedans.

BMW features

The following key features appear in more than one BMW Series:

- **3 Series Sedans** – Dakota, Premium Package or stand-alone all models; special Dakota schemes optional or standard within Lines.
- **3 Series Coupes, Convertibles** – Dakota, Premium Package or stand-alone all except 335i/is Convertibles.
- **1 Series** – Boston leather, Premium Package or stand-alone all models.
- **Z4** – Kansas leather, stand-alone 28i, standard 35i/35is. Extended Kansas optional 35i/35is. Extended Canyon Brown Merino and Alcantara/Nappa in various packages.
- **M5-M6** – Extended Merino standard, Full Merino, BMW Individual Extended or Full Merino stand-alone.
- **M3** – Cloth/Novillo leather, standard Coupe, Novillo leather stand-alone Coupe, standard Convertible. Extended Novillo stand-alone both models.
- **X6** – Nevada standard, Nappa stand-alone. Alcantara/leather optional at no extra cost.
- **X5** – Nevada, stand-alone all except base 35i. Perforated Nevada mandatory with Active Ventilated Seats Package; Nappa as stand-alone in combination with Multi-Contour front seats all except base 35i.
- **X3, X1** – Nevada, Premium Package or stand-alone.
- **X5-X6 M** – Extended Merino standard. Stand-alone Full Merino adds further coverage. The perforated leather that's required with the Active Ventilation Seats Package is also in the Full treatment. Some very bold colors are available for the non-ventilated Full treatment.

For greater detail about Extended and Full Leather interiors, refer to the various Series sections' **comfort & convenience** and **packages & options** sub-sections.

Alcantara

(7, 6 & 5 Series, B7, Z4, X6, X5-X6 M)

Alcantara upholstery or interior elements are available in these seven current BMW lines; see their sections for availability details.

The material's namesake, Alcantara, is a region in Spain; the Alcantara company, however, is in Italy and the material used in BMW vehicles is made there. Here's what Alcantara the company has to say about Alcantara the material:

"Those who appreciate the quality and attributes of Alcantara know that it's not merely a beautiful material, but a robust one that stands up to tough use...

There could be no better alliance [than that with BMW]. Alcantara was always a concept unto itself, a unique material that doesn't fit into any category." Alcantara is suede-like, yet not made from animal hides.

Genuine wood interior trim (optional or standard all models)

Whether optional or standard, factory- or center-installed, BMW's wood interior trim is always genuine wood. Great variety and interesting wood tones and grains are available: See the individual Series' **comfort & convenience** and **packages & options** sections for details.

Galvanic interior trim (all models)

Elegant, contemporary material appearing in a variety of finishes. Although its core is plastic, a true metallic surface is applied galvanically in several layers, with clearcoat on top to protect against corrosion. The surface is cool to the touch, though not as cool as solid metal. See the Series' **comfort & convenience** sections for details on the trim as it appears in the various models.

Power windows with 1-touch and key-off operation, closing from driver's door lock, opening from remote (all models)

Every BMW includes at least 1-touch open/close and key-off operation of all door windows:

- Sedans and Sports Activity models have 1-touch open/close operation of all door windows.
- 3 and 1 Series and M3 Coupes have 1-touch open/close for door windows; fixed rear side windows.
- 3 and 1 Series and M3 Convertibles and Z4 have 1-touch open/close door windows and 1-touch open rear side windows.
- 3 Series and M3 Convertibles and Z4 add an all-window switch.
- 6 Series Coupes and Convertibles have 1-touch open/close door and rear side windows; Convertibles add an all-window switch.

BMW's 1-touch closing allows the driver to leave a toll booth with both hands on the wheel. The 1-touch closing includes anti-trapping protection; that is, if the window encounters an obstacle on the way up, it reverses direction.

Power door-window sealing system

(3 Series & M3 Coupes & Convertibles, 6 Series, 5 Series GT, 1 Series, Z4, M6)

When a door is opened, the window (if closed) drops slightly; when the door is closed, it rises to seat firmly into the weatherseal. Compared to arrangements that rely on the window merely pressing against the weatherseal, this system improves sealing when the windows are up, especially at higher speeds. The 6 Series Gran Coupe and 5 Series GT, with frameless windows on all doors, are the only BMW 4-door models to include this feature.

2-way power glass moonroof with 1-touch opening, opening from remote

(optional or standard all Sedans, 3 & 1 Series Coupes, M3, X6)

Offers a choice between tilting the panel up for extra ventilation or sliding it fully open. On most models it also includes a manual sliding interior shade, which moves forward approximately 3 in., as the glass panel closes from its fully open position to facilitate reaching back to pull it closed. On 7 and 5 Series and B7, the interior shade is powered. The moonroof has 1-touch opening and closing. On models with the powered interior shade, that operation is also 1-touch. (Closing from remote is omitted for safety reasons.)

The M3 Coupe has a fixed carbon-fiber roof panel that reduces weight and lowers the vehicle's center of gravity, although the moonroof is available optionally.

BMW features

The following key features appear in more than one BMW Series:

Power tilting glass moonroof (6 Series Coupe & Gran Coupe, M6 Coupe)

On these models, the relatively short roof panel precludes a sliding moonroof and the moonroof tilts open only.

Dual-panel Panoramic moonroof

(5 Series GT, X5, X5, X1)

With its extra-large roof opening and dual glass panels, this feature gives occupants almost the feeling of being in a convertible. On the X5 and X1, both panels can be tilted up at the rear. The forward, larger panel can also be slid open. On the 5 Series GT and X3, the rear panel is fixed.

Together, their glass area is amply dimensioned:

- 5 Series GT – 37.1 x 45.7 in.
- X5 – 41.0 x 35.6 in.
- X3 – 41.0 x 35.6 in.
- X1 – 29.5 x 31.5 in.

Although the glass is effectively tinted, there is also a power-operated interior shade; a wind deflector rises at the front of the opening to reduce wind buffeting when panels are open. (On the 5 Series GT, this deflector rises to different heights on the basis of vehicle speed for especially effective reduction of wind noise and buffeting.) 1-touch operation is provided for all motions, including that of the interior shade.

Contour moonroof

(7, 6 & 5 Series, B7, X3)

Exemplifying BMW's attention to subtle details, the front edge of these models' moonroof, whether single- or dual-panel, parallels the curvature of the top of the windshield.

Retractable hardtop

(3 Series & M3 Convertibles, Z4)

Both hardtop concepts have much in common:

- Fast, quiet raising and lowering
- Harmonious design, blending beautifully with the lower body for a Coupe-like appearance with the top up
- Elegant, clean open-car look with the top down
- Better outward vision for the driver compared to their soft-top predecessors
- Greater body rigidity with the top up than their softtop predecessors
- In combination with available Comfort Access, a Comfort Loading (intermediate) position is provided to facilitate loading trunk with top down.

They also differ in some important respects:

- 3 Series hardtop is 3-piece because of its greater length; shorter Z4 top is 2-piece.
- 3 Series hardtop is steel, Z4 is aluminum.

Variable-capacity trunk

(6, 3 & 1 Series Convertibles, Z4)

On models with a softtop (6 and 1 Series) or retracting hardtop (3 Series, M3, Z4), a variable top storage compartment makes it possible to maximize trunk space when the top is up. Adjusted manually via a convenient lever, the compartment has two positions: up for when the top is raised, down for when the top is lowered.

See these Series' **comfort & convenience** sections for details on what their trunks can accommodate with their Convertible or Roadster tops raised or lowered.

Through-loading capability

(5 Series GT, 5 & 3 Series Sedans, 3 & 1 Series & M3 Coupes & Convertibles, Z4)

As option 4UT or 4UY for these model groups, a through-loading system, consisting of a cargo bag and a pass-through between the interior and trunk, enhances cargo-carrying versatility. Larger than the traditional ski bag, the cargo bag can accommodate bulky objects such as golfbags, snowboards, multiple pairs of skis and other sports equipment. Current 3 and 1 Series Convertibles include 4UT as standard.

Option 465 is 60/40 split folding rear seats, now standard in all 5 Series Sedans except the Active-Hybrid, and 3 and 1 Series Coupes; X6, X5 and X3 also have these as standard. These of course give ultimate through-loading capability, though not including a ski or cargo bag.

See these model groups' **packages & options** for details on these functional and useful options.

40/20/40 3-segment folding rear seats

(standard 5 Series GT & 3 Series Sedans, X1; optional X3)

The "wagon-type" BMW Sports Activity models – X5, X3 and X1 bodies are similarly configured but completely different from each other – provide:

- Seating for five occupants (X5 offers optional 3rd-row seating for two more)
- 2nd-row seating with 60/40 split and fold-up center armrest with dual cupholders; X5 rear seats fold flush, X3 backrests fold down

- 40/20/40 split rear seats – optional X3, standard X1
- 3-point safety belts and head restraints for all occupants
- Left/right front reading lights (left/right rear reading lights standard X5-X6 M, X6, X5 except base 35i, optional X3)
- Carpeted cargo area with retractable/removable cargo cover and accessory power outlet; rails for adjustable tie-downs standard in X6, X5-X6 M, otherwise Premium Package
- High-opening liftgate tailgate
- Underfloor toolkit (all Sports Activity models) and space-saver spare wheel/tire (optional all X5 and X6 models including M)

Roof rails, optional on X3 and (in two forms) X5, further enhance the carrying capacity of these BMW Sports Activity models. X1s come standard with matte-black rails; Satin Aluminum finish is optional.

Power liftgate/tailgate

(standard 5 Series GT, X6, all X5 except base 35i, X5, X3, X5-X6 M)

This amenity comes in three forms:

- 5 Series GT – for liftgate function of Dual-Access Tailgate
- X5 – as upper portion of 2-piece tailgate
- X3 and X6 – as 1-piece liftgate.

Users can initiate a full opening from a console button, the remote or, close up, a button on the liftgate itself. (For the latter method, the vehicle must be unlocked.) For user safety, power closing of the liftgate is possible only from close up; in addition to this precaution, anti-trapping protection is included. In the X6, the power liftgate includes 5-position opening height, adjustable in iDrive system.

BMW features

The following key features appear in more than one BMW Series:

Integrated owner's manual (IOM)

(7, 6 & 5 Series, B7, 3 Series Sedans, X3)

In an analogy to the Help functions in, or accessible from, today's computers, BMW now delivers the owner's manual electronically, via iDrive. In just seconds, the user can access information on virtually any detail of the vehicle's equipment, systems, operation, etc...like a traditional owner's manual, only better and in thoroughly contemporary form. Subjects are presented in animations or slide shows with sound, in clearly understandable form. So that users can study the IOM at home, a separate DVD and a printed Quick Reference Guide are supplied with the new vehicle. B7 models also come with a printed supplemental guide to the unique ALPINA features and systems.

Another highly desirable departure from the traditional owner's manual is that the IOM is vehicle-specific; that is, the version that goes with each new BMW vehicle corresponds to that exact vehicle, with its specific model designation and options. Various information paths – brief instructions, visual search, keyword and context searches – are available to the user, and particularly important subjects can be stored on the Programmable Memory Keys. Further, the IOM can be updated as appropriate via the BMW center.

So it is, then, that with this fitting innovation, BMW proclaims the fully contemporary motor vehicle in a unique, wholly appropriate and contemporary way.

Safety & security

What's new for 2013 or since last edition

- Speed Limit Info available on more models: now 7, 6 and 5 Series, B7
- Panic button with red icon added to remote of 7, 6 & 5 Series, B7, alarm-equipped 3 Series Sedans, X3

Active safety

It is a long BMW tradition to endow our automobiles with exceptional qualities and capabilities in this area. BMW strengths include:

- Suspension, steering and brakes that communicate road conditions accurately to the driver, and respond precisely to the driver's commands
- Powerful, fade-resistant 4-wheel ventilated disc brakes
- Ergonomically correct and efficient controls, with excellent tactile feel
- Excellent outward vision for driver through large glass areas, slender roof pillars¹⁷
- Driver-assistance systems that enhance active safety (next).

Lane Departure Warning

(standard 760Li; optional 740/750 models, B7, 6 & 5 Series, 3 Series Sedans; X6, X5 except 35i base & Premium, X3)

An especially useful feature given the many distractions inherent in today's driving environment. Employing a camera near the interior rearview mirror, this system monitors road lane markings. When switched on, anytime the vehicle begins to move across a lane marking without the turn signals activated, this system vibrates the steering wheel. If the driver does activate the turn

signals, LDW does not react. Correct operation is predicated on clear lane markings that are not obscured by rain, snow or other masking factors.

In the 7 Series and B7 only, LDW appears in a new version, incorporating Approach Control; this is described in the 7 Series section.

Active Blind Spot Detection (standard 760Li; optional 740/750 models, B7, 6 & 5 Series, 3 Series Sedans)

Radar sensors at the rear of the vehicle monitor traffic in adjacent lanes, taking in an area from the driver's blind spot rearward 60 meters/almost 200 ft. An illuminated triangular warning LED appears in the exterior mirror if there is a vehicle in this critical area; if the driver activates the turn signal, the LED blinks and, as with Lane Departure Warning, the steering wheel vibrates to warn the driver not to make a lane change.

Night Vision with Pedestrian Detection

(optional 7, 6 & 5 Series)

This advanced technology helps the driver perceive critical situations at night or during twilight. An infrared camera at the front of the vehicle transmits a picture to the iDrive display; the greater the object's warmth, the brighter its image on the display.

The camera scans a range up to 1600 ft. ahead of the vehicle. Its maximum 36-degree view is relatively large, and is varied according to the road's path and driver input. To capture more distant objects at higher speeds, a digital zoom function can be activated. Brightness, contrast

and other image parameters can be adjusted via the iDrive system; Night Vision can be turned on or off via a switch in the lighting control group.

Night Vision is particularly valuable under such conditions as –

- Poor vision on dark, rural, undivided highways
- Obstacles or sharp curves that low headlight beams reveal too late
- Less-than-ideal driver judgments regarding speed, following distance and other driving variables
- Blinding headlights from opposing traffic.

With Night Vision, the driver can possibly recognize danger significantly earlier than with the headlights alone. Thus conceivably, the driver might be able to begin reacting to a possible hazard sooner.

Night Vision includes **Pedestrian Detection**, which detects the direction a pedestrian near the roadway is moving. If it's parallel to the road, the system senses and displays the presence on the iDrive display (or, if present, Head-up Display) but doesn't warn the driver. If the pedestrian is on a path to cross the road, it displays a warning¹⁸.

As with many sophisticated technologies, Night Vision is highly beneficial, but no substitute for careful driving or attention to traffic and the road ahead. Weather conditions can affect the function of Night Vision, in that rain or fog filters infrared light and thus

¹⁷ – Because of limitations to size of rear window, this benefit applies less to softtop Convertibles.

¹⁸ – Pedestrian Detection functions only at ambient temperatures of 82.4°F or below. softtop Convertibles.

BMW features

The following key features appear in more than one BMW Series:

degrades the quality of images it captures.

Exterior cameras

(7, 6 & 5 Series, B7, M6, M5, X6, X5, X3, X1, X5-X6 M)

Exterior cameras improve the driver's ability to see in various directions when maneuvering the vehicle. They appear in four forms in today's BMW models, mostly as optional equipment.

- **Rear-view camera.** Now standard on all 7 and 6 Series, B7, 550i models, M6 and M5; optional 3 Series Sedans, X6, X5, X3 & X1. Incorporates extensive functions that assist driver in maintaining the desired path in backing up.
- **Top-view camera** (7, 6 & 5 Series, 3 Series Sedans, B7, X6, X5, X3). Consists of two video cameras, one in each exterior mirror housing; activated when the selector lever or manual shift lever is moved to the Reverse position, or manually by pushbutton. Produces a "bird's-eye" view of the vehicle.
- **Side-view cameras** (7, 6 & 5 Series, 3 Series Sedans, B7, X6, X5, X3). Cameras at both sides of the front bumper provide an early view of approaching traffic for pulling away from building exits or crossing intersections with limited visibility to one or both sides.
- **Surround-view** is the combination of top- and side-view cameras. These cameras create a view from above – "wicked cool if you've ever seen it, and it should eliminate ever curbing your wheels again!" noted *Roundel* in its October '10 issue.

All these cameras offer safety, convenience and vehicle-protection benefits deriving from their capabilities of improving the driver's outward view.

Dynamic Stability Control (all models)

DSC encompasses the functions of traction control, braking enhancements and cornering stabilization, as follows:

Traction control. Adjusts engine power and brakes to limit wheelspin, improving the driver's control of the vehicle under conditions where wheels might spin, primarily on slippery roads. DSC continually processes data from wheel-speed sensors. Anytime a drive wheel begins to lose traction (rear wheels on RWD models, any wheel on AWD models), the system senses this and acts on the engine's throttle(s) or Valvetronic and ignition timing to reduce engine torque. It also acts on each brake individually as necessary to help bring wheelspin under control, enhancing driving stability on slippery surfaces (or even on dry roads under extreme acceleration or cornering).

BMW's traction control is an all-speed system. Engine intervention is possible at any speed. Below 25 mph, the brakes are also applied selectively and separately as necessary to optimize traction very quickly. Between 25 and 50 mph, the rear brakes are applied as a pair. Above 50 mph, traction control operates entirely through engine intervention.

Dynamic Traction Control (DTC). Dynamic Stability Control functions (except antilock braking) can be de-activated via a

console switch. In all except M models, a capability called Dynamic Traction Control is also incorporated. DTC improves utilization of available road traction under specific conditions –

- on sand, gravel, deep snow or packed snow
- climbing hills with deep or packed snow
- when there is deep snow on only one side of the road
- when driving with tire chains.

In 3 Series Coupes-Convertibles, 1 Series, Z4 and X1, DTC is selected via a brief push on the DSC console or dash switch; full de-activation of DSC requires a longer (2 sec.) push on the switch and even if DSC is de-activated, ABS always remains functional. In other models, DTC can also be selected in this way but the Driving Dynamics Control's Sport+ setting also affects the DSC mode.

M Dynamic Mode (M6, M5, M3, X5-X6 M). In these models, not only is DSC's overall calibration M-specific (geared to sportier performance), the system takes on a further M dimension by offering this special mode.

Activated by the console DSC button in the same manner as DTC in corresponding non-M models (see above), M Dynamic allows more oversteer and wheelspin, which can be useful to an expert driver on a track. It is not recommended for use on public roads.

Electronic brake proportioning. When the driver applies the brakes, a vehicle's front end becomes more heavily loaded; the rear "gets lighter." To deal with this, front-to-rear proportioning of braking force is varied

according to braking severity. Via wheel-speed sensors, EBP actually measures slip at each wheel when the brakes are applied¹⁹, and regulates front/rear pressure accordingly. Braking force is thus apportioned optimally at all times, making best use of available braking traction at the tires and helping distribute brake and tire wear more evenly.

Antilock braking (ABS). During braking, anytime a wheel begins to lock up (slide), DSC releases and re-applies (cycles) the individual wheel brakes to prevent sliding. As only a rotating tire can deliver effective braking and steering forces to the road, the antilock function helps the driver achieve quick, controllable deceleration or stopping when necessary, helping avoid skidding.

Dynamic Brake Control. Reinforces the driver's brake-pedal effort in emergency braking. The system recognizes when the driver has made a "panic" brake application, and increases the level of assistance. By forcing the ABS to function optimally, this helps ensure that the most effective braking is achieved. DBC is affected by the Frontal Collision Warning System of some models with Active Cruise Control.

Cornering stabilization. For this important DSC function, the following inputs are employed:

- Wheel-speed sensors
- Steering-angle sensor (measures turning of the steering)
- Lateral-acceleration sensor (measures how "hard" the vehicle is cornering)

19 – Tires always slip to some degree as they transmit acceleration, braking or cornering force; this is not skidding, which is an extreme form of slip.

BMW features

The following key features appear in more than one BMW Series:

- Yaw sensor (measures the vehicle's rotation around its vertical axis)
- Brake-pressure sensor (informs the system of any application of the brakes by the driver).

With these inputs feeding into the powerful DSC microprocessor, the system detects any deviation from the normal cornering path (abnormal understeer or oversteer) and gently applies individual wheel brakes to help the driver keep the vehicle on the intended path. Thus when the driver may be attempting a maneuver beyond the normal control range of the vehicle, he or she is more likely to retain control and avoid an accident.

Although it obviously affects the vehicle's handling, this function is primarily a safety feature; in other words, it should not be interpreted to allow faster cornering or more abrupt maneuvers.

Hill Descent Control (all xDrive models). Helps driver maintain speed and stability on steep downhill runs. The driver presses a dedicated button on the console; HDC takes over, gently applying the brakes as necessary to keep the speed to a brisk walking pace.

Additional braking functions. DSC adds an array of functions that make driving even more reassuring and pleasant:

- **Brake Standby.** When the driver lifts off the accelerator abruptly, DSC recognizes that sharp braking may be imminent, and applies just enough brake pressure to snug up the pads against the rotors. Thus when the driver's foot reaches the brake pedal, the

short lag of bringing the pad to the rotor is eliminated. Actual braking sets in more quickly; the reduced stopping or deceleration distance could reduce the likelihood of an accident. If the driver does not apply the brakes after the abrupt lift-off, no actual braking occurs.

- **Brake Drying.** Acting on input from the windshield wipers' rain sensor, the pads are periodically brought up to the rotors – just enough to eliminate any film of water between pads and rotors, but not enough to cause any brake application.
- **Start-off Assistant.** This function keeps the vehicle from rolling backward when stopped facing uphill. The driver can then start up on a steep hill without juggling the pedals; this function holds about 1 sec. 7, 6 and 5 Series, B7, X6, X5 and X3 models also a feature called **Automatic Hold** that can hold the brakes for a longer period of time before the accelerator is pressed. (Via a console switch, Automatic Hold can be selected or deactivated.)
- **Modulated ABS function.** Analog control of the DSC brake valves smoothes the anti-lockup function (ABS). Instead of simply being fully applied and released, the application and release of these valves are modulated.
- **Brake Fade Compensation** (all except M models). "Brake fade" is the loss of effectiveness when brakes heat up under hard use; a given degree of deceleration requires more pressure on the brake pedal. As brake temperature rises,

this function increases hydraulic pressure in the brake system relative to pedal application, so the driver need not press harder on the pedal.

Dual brake circuits (standard all models)

Even if one hydraulic circuit is ruptured and brake fluid is lost, the other circuit provides partial brake operation.

Other active-safety features

All BMW vehicles excel in features and attributes that make driving both safer and more pleasant. Here are the key points and how they contribute to active safety; because their primary benefit may not be safety, many of them are described under other headings of this **BMW features** section denoted by the headings that follow.

Exterior design & function:

- Xenon Adaptive headlights with auto-leveling – by providing outstanding forward illumination, "steering" around curves and staying aimed correctly, benefit the BMW driver and passengers as well as those in other vehicles. Standard on most BMW models, optional on some.
- Cornering lights – provide targeted illumination to the side for turning corners or sharp curves at relatively low speeds. Present on 3 and 1 Series, X3 and X1 with optional Xenon Adaptive headlights; standard all other models.
- Automatic headlight control – turns on headlights in conditions of marginal ambient light, when the driver might not yet think to do so. Standard all models.

- Foglights – standard all except 135i/is, 335is Coupe and M models. Halogen on all models except 7 and 6 Series, which have LED foglights.
- Automatic High Beams – standard 760Li, otherwise optional
- Rain-sensing windshield wipers – standard all models
- Park Distance Control – lessens likelihood of fender-bending and bumper-scratching low-speed collisions, also of running over infants and animals. Standard front/rear on 7 and 6 Series, B7, 5 Series GT, 550i Sedan, M6, M5, X6, X5; front/rear optional 528i/535i Sedans, 3 Series, Z4, X3, X1. Rear-only optional M3, 1 Series.
- Adaptive brakelights – indicate to following drivers when the BMW driver brakes hard, potentially lessening the probability of a rear-end collision. Standard all models.

Performance & efficiency:

- Responsive, predictable handling made possible by advanced and sophisticated suspension design, generously dimensioned wheels and tires, accurate steering, and special features like Electronic or Dynamic Damping Control, Adaptive M Suspension, Active Roll Stabilization, Active or Variable Sport Steering, Dynamic Performance Control and Performance Control.
- Powerful 4-wheel ventilated disc brakes with antilock braking (ABS) – enhanced by DSC braking functions described under Dynamic Stability Control.
- Run-flat tires – eliminate necessity of potentially dangerous roadside tire changes. All except B7, M6, M5 and M3.

BMW features

The following key features appear in more than one BMW Series:

- Tire Pressure Monitor – via direct measurement of pressure at each tire, alerts driver to pressure loss. Standard all models.

Comfort & convenience:

- Auto-dimming interior and exterior mirrors – by automatically reducing glare from headlights and foglights of vehicles behind, improve BMW driver's ability to see ahead and concentrate on driving. Optional 3 Series Coupes-Convertibles, 1 Series, M3²⁰, base X5 35i, X3, X1; otherwise standard.
- Dynamic cruise control – can apply brakes lightly to help control downhill speed, and reduce speed in curves. Standard all except M3, whose cruise control does not include braking capability.
- Active Cruise Control – adjusts vehicle speed to traffic conditions; helps maintain safe following distance to vehicles ahead. Optional 7, 6, 5 and 3 Series except ActiveHybrid, B7, X6, X5 except base 35i and 35d.
- Active Comfort driver's seat – helps reduce fatigue on long drives. Optional 7, 6 and 5 Series, B7, M6 and M5, both front seats; X5 except base 35i, X6, X5-X6 M, driver's seat only.
- Head-up Display – by projecting selected driving information onto windshield, close to driver's natural forward line of sight, reduces distraction from road. Standard 760Li and B7; optional 740/750 models, 6 and 5 Series, 3 Series Sedans, X6, X5 and X3. In 7, 6 and 5 Series, B7 and 3 Series Sedans, HUD appears in its

new, enhanced 2nd generation; in M6, M5 and X5-X6 M models it is a unique M display.

- Real Time Traffic Information – Navigation System function; alerts user to potential traffic problems on programmed route. Present in all vehicles with Navigation.
- Automatic High Beams – besides enhancing convenience, can facilitate use of high beams and thus enhance forward vision at night.

Passive safety

Active safety – those qualities that help drivers avoid accidents – is a central focus of BMW vehicle concepts. Yet our vehicles are also outstandingly engineered and equipped for passive safety, which is the vehicle's capacity to protect occupants from the consequences of crash impacts.

Body structure with energy-absorbing front and rear ends (all models)

The front and rear ends of each current BMW model are carefully engineered to manage impact energy in a controlled way.

In a frontal or rear-end collision, this means the energy is absorbed smoothly, and the forces on occupants' bodies (with safety belts fastened) are kept relatively moderate. All this occurs within a split-second – but the difference between a well engineered automobile body and one that's not so well engineered is critical.

To help achieve optimum front-end energy absorption in a variety of real-world front impacts, BMW employs extensive crash testing in its development of each new model (next).

BMW safety testing

As it is being developed, each BMW vehicle must survive an exhaustive matrix of tests that simulate virtually any conceivable type of crash impact. These include:

Frontal impacts –

- Straight into barrier at 30 mph, belted and unbelted occupants
- Into barrier at 30°, 30 mph, belted and unbelted occupants
- The *auto motor und sport* test, named after an authoritative German auto magazine that conducts its own offset crash tests; 64 km/h (almost 40 mph), with just 50% of the front end contacting the crash barrier.
- Offset crash, 35 mph into barrier with 40% of front end (driver's side) contacting rigid barrier
- Offset crash, 64 km/h with 40% of front end contacting deformable barrier
- Frontal impact into pole at 35 mph
- NCAP (New Car Assessment Program) test, frontal at 35 mph. This is the test whose results are reported to the U.S. public in terms of "stars": 5 stars, 4 stars, etc. for driver and passenger.
- Euro-NCAP (European version of NCAP test), offset at 40 mph with 40% of front end.

Side impacts –

- Vehicle-into-vehicle side-impact test
- Pole into side of vehicle at 25 mph –
 - At front seating area
 - At fuel tank
- "SUV side impact," with a 3300-lb barrier simulating a hefty impact from a tall vehicle at 30 mph

- EU-NCAP side impact, with a 950-kg (2094-lb.) moving barrier impacting vehicle side at 50 km/h (31 mph)

...and more.

Rear impacts:

- Offset at 50 km/h (31 mph), 40% coverage, battery or fuel-filler side, with rigid barrier
- Straight impact at 30 mph
- Offset at 50 km/h (31mph), 40% coverage on fuel-filler side with deformable barrier.

Rollovers:

- Straight rollover
- Angled rollover (one side of vehicle goes up ramp, vehicle rolls)
- Sand bed, simulating a vehicle sliding sideways into a bed of sand
- Going off road, simulating a vehicle drifting off course into bush-type vegetation and dropoff of shoulder

Pedestrian protection:

- Simulation of forces on four regions of a pedestrian's body as it is thrown over vehicle's front end upon impact
- European regulations for pedestrian protection in frontal impacts are being introduced progressively in new models; 7, 6 and 5 Series, B7, 3 Series Sedans, Z4 and X3 front-end designs reflect this factor.

As any entirely new BMW Series or model is being developed, the latest knowledge is incorporated into the vehicle structure and safety features to achieve optimum occupant protection. This process produces a steady march of progress in the occupant-protection qualities of BMW vehicles.

²⁰ – Auto-dimming interior mirror standard in M3s.

BMW features

The following key features appear in more than one BMW Series:

Ergonomic safety-belt system (all models)

The inboard latches of all front safety belts are attached to the seat, so they adjust with the seat position and thus also help achieve an optimum belt fit on the occupant. In all Sedan models, the outboard lap-belt anchor is also attached to the seat for the same reason.

In 6 Series Convertibles and Gran Coupes, and 3 Series/M3 Convertibles, the front belts are fully integrated with the seat structure itself. This concept virtually eliminates belt stretch between the belt mounting and seat, and always positions the belt consistently relative to the occupant for ideal restraint performance. Also, the front belts do not impede persons entering the rear seats of the 2-door Convertibles. The belt and head-restraint height are power-adjustable in these models.

Automatic front safety-belt tensioners and force limiters (all models)

Automatic tensioners tighten the front belts in a collision impact, further optimizing the restraint of occupants. They are integrated into the belt latches, at the inboard side of each front seat. Upon impact the mechanism moves the latch downward to tighten the shoulder and lap belt portions directly.

All current BMW front safety belts are also equipped with **force limiters**, which once the belts are tensioned place an upper limit on the amount of force they can exert on the occupant's body. For maximum safety relative to the deployment of airbags, adult occupants

should fasten their safety belts at all times.

The 7 Series' and B7s' front belts also incorporate pre-tensioning upon emergency braking; see 7 Series section for details.

Automatic tensioners and force limiters are provided at outboard rear seating positions as follows:

- 7 Series, B7, X3 – tensioners and force limiters
- 5 Series, 3 Series Sedans, X6, X5 – force limiters

All current BMW safety belts also incorporate **belt stoppers**, which once the belt is fastened allow a slight easing of force on occupants for enhanced comfort.

LATCH attachments at outboard rear seating positions (all models with rear seats)

LATCH attachments (Lower Anchors and Tethers for Children) provide for securing a child restraint seat at each outboard rear seating position. Approved child restraint seats are offered by BMW centers.

2-stage front-impact airbags (Smart Airbags) (all models)

This feature is in addition to the dual-threshold feature described under **differentiated deployment**. To ensure that the force of airbag inflation is appropriate to the severity of the impact, both front-impact airbags are designed to provide "softer" deployment in lower-speed impacts, "harder" deployment only in higher-speed impacts.

De-activation of front passenger's airbags (all models)

Provision for de-activating the front passenger's airbags is present in

all current BMW models when –

- The front passenger's seat is unoccupied
- When a child is seated in an approved child-restraint system attached to the front passenger's seat.

The system's primary criterion for seat-occupation detection is weight, and incorporates assumptions about what a child or an adult weighs. A seat-occupant detector incorporating advanced technology is present in all U.S. models. Customers should refer to their Owner's Manual carefully and consult with their BMW center about any remaining questions, particularly those concerning transporting children.

Front and rear Head Protection System (HPS) (all models with rear seat)

BMW extends the Head Protection System concept to the rear-seat passengers of all models that have a rear seat, thus all except Z4. Two types of HPS are used in the various models:

Curtain-type (all except Convertibles and Z4). Though the name "curtain" implies a relatively simple shape, this system has a complex shape, designed to provide the protection where occupants' heads are likely to be in crash situations.

Sidebag-type (6, 3 and 1 Series Convertibles, M6 & M3 Convertibles, Z4). In these models only, the Series' seat-mounted side-impact airbags extend upward to add head protection for the front-seat occupants.

The inflatable elements remain inflated for several seconds after the initial impact and deployment

(which takes just 20-22 milliseconds), an especially important function in case of rollover.

Rollover Protection System (standard 6, 3 & 1 Series, M6 & M3 Convertibles)

Basic occupant protection is afforded by these Convertibles' strong body, reinforced windshield frame, front- and side-impact airbags, interlocking anchoring of the side doors, seat-integrated front safety belts and 3-point rear belts. The 3 Series/M3 Convertibles bring something further to the equation: their retractable hardtop, with much of the strength of a fixed metal roof structure when it is raised.

This system, which offers additional, convertible-specific protection, consists of:

- Two interdependent modules, one behind each rear seat, each with a mechanical actuator and a deployable rollbar
- A highly sophisticated rollover sensor/control module
- A g-sensor to detect the vehicle's becoming airborne, also included in the control module.

The rollover sensor's action is based on a clinometer, with three level floats to detect body tilting as well as transverse deceleration (such as hitting a curb) for deployment of the rollbars. LED transmitters and phototransistor receivers are positioned to read the floats' air bubbles as they move in their glass tubes. Normally, the liquid in the floats prevents transmission of the LED signal. If the vehicle starts to roll over sideways or end-to-end beyond critical angles, an air bubble will move enough to allow transmission of the LED signal.

BMW features

The following key features appear in more than one BMW Series:

The control-module electronics then trigger the rollbar actuators.

There is also a g-sensor to deploy the rollbars should the vehicle become airborne. If either sensor system is triggered, the two electromagnetic rollbar actuators are supplied with electric power. Normally held in their retracted position, the rollbars are then deployed upward by powerful springs, and locked into position to sustain rollover forces. All this occurs in just a fraction of a second.

The rollbars and deployment modules are entirely of aluminum, and each bar has a molded pad at its top. When retracted, they are concealed by the head restraints. After deploying, the rollbars can be reset by a BMW technician.

Rollover Protection (Z4)

The Z4's rollover protection is also enhanced by two rollbars, but these are fixed rather than deployable. Thus they offer protection similar to that of the Convertibles' deployable system; as with the 3 Series Convertibles, this is enhanced by the Z4's retractable hardtop.

Rollover Sensor

(all X6, X5 & X3 models)

Measures the body's angle along its longitudinal axis, and the rate at which that angle is changing. Additionally, acceleration data in two directions are measured to test the plausibility of a rollover signal. The Rollover Sensor is networked with the vehicle's Dynamic Stability Control, which delivers data on lateral acceleration (cornering) and any possible skidding.

On the basis of these measurements, an algorithm determines if the vehicle is about to roll over. If this is indicated, the front and rear Head Protection System is deployed on both sides, and all safety belts with tensioners are tensioned.

Active Knee Protection

(6 Series Gran Coupes, 5 Series Sedans, 3 Series Sedans & Convertibles, Z4, M6, M5, M3 Convertible)

To meet U.S. safety regulations, all U.S. BMW models incorporate specific knee protection in the lower instrument-panel areas. In the models listed above, BMW provides this benefit via Active Knee Protection: dedicated airbags backing up the padded surfaces that meet occupants' knees in a frontal impact. Active Knee Protection:

- Reduces the amount of space occupied by the knee protection, leaving room for features customers value.
- Increases the knee protection's effectiveness.
- For belted occupants, allows finer "tuning" of the other restraint systems (safety belts and front airbags).

Active front head restraints

(all except 3 Series Sedans, 1 Series, Z4, X1)

BMW's Active Head Restraints employ fast-reacting pyrotechnic activation. Via two additional impact sensors at the rear of the vehicle, a rear-end collision causes the front head restraints to pivot forward into close proximity with the occupants' heads. Thus for normal use occupants are able, if they prefer, to adjust the restraints away from direct contact with their heads, yet

gain optimum protection against whiplash or more serious neck/head injuries.

Differentiated deployment of front-impact restraint systems (dual-threshold deployment) (all models)

In this outstanding technology, BMW's differentiated deployment of passive restraint systems manages deployment as follows:

- There are two thresholds of frontal impact severity.
- At the lower threshold, if the occupant is belted, only the belt tensioner is deployed. If the occupant is not belted, the front-impact airbag deploys.
- At the higher threshold, the front-impact airbag and belt tensioner are deployed. If the occupant is not belted, only the airbag is deployed.
- If the passenger seat is not occupied, neither the belt tensioner, front-impact airbag, Head Protection System, side-impact airbag nor (if present) Active Knee Protection for that seat will be deployed.

In cases where the vehicle can be repaired after an accident, this differentiated deployment strategy can save repair costs (and therefore be favorably reflected in insurance rates).

The deployment strategy for unbelted occupants must not be seen as a rationale for not fastening one's safety belt.

Maximum protection of occupants can be achieved only if the occupants are wearing their safety belts.

Advanced Crash Safety Management (all models)

Every current BMW has a highly sophisticated, all-encompassing network that manages the safety devices' and systems' complex actions and interactions. Because each new vehicle generation incorporates the latest technologies, technical details vary from Series to Series. Yet the overall philosophy and strategy are the same across the BMW vehicle line; the term Advanced Crash Safety Management applies to all of our vehicles' overall safety strategy.

In developing and evolving ACSM, safety engineers at BMW's Engineering and Research Center in Munich work not merely to meet governmental safety regulations, but to surpass them and to tailor the restraint systems' response to a precise reading of each accident sequence. To achieve this, ACSM employs a multitude of sensors that achieve the "tailoring" goal; they also help minimize unnecessary deployment of airbags. Though the actual count is not the same for all Series, these generally include –

- A number of deceleration sensors.
- A sensor that reads collisions under the front of the vehicle, that is, running over an obstruction.
- "Delta-V" sensors that analyze the change in velocity that occurs during the collision.
- Side-impact sensors. By sensing pressure change within the door structure, they are able to signal for deployment of side-impact airbags very early

BMW features

The following key features appear in more than one BMW Series:

in an impact, yet still minimize the chance of an unwanted deployment.

Thanks to this elaborate constellation of sensors, the deployment of airbags – front, side, Head Protection System and in some models Active Knee Protection – can be finely tuned to actual accident circumstances. As the science of automotive safety moves ever forward, much of the progress is due to faster, more powerful electronics and such enhancements as fiber-optic cables that are not susceptible to electromagnetic disturbances. BMW safety-system software can be updated over the life of the vehicle; data useful to researchers can be retrieved from accident vehicles.

All sensing and triggering functions for the front-impact airbags and safety-belt tensioners are combined in a single highly sophisticated electromechanical unit that facilitates differentiated deployment, 2-stage airbags and other passive-safety refinements.

Another function of this technology is that in case of accident, the doors are automatically unlocked, the interior lights and 4-way hazard flashers are switched on and the fuel pump is switched off. Thus even after an accident, BMW's safety strategy is still at work.

Side-impact airbags

(front – standard all models)

All current models are equipped with seat-mounted front-seat side-impact airbags. BMW has provided requisite side-impact protection for rear-seat passenger without rear side airbags.

Energy-absorbing padding of pillar and roof areas

(all closed-body models)

As a further element of head protection, every closed-body model incorporates specific padding in the A-, B- and C-pillars as well as along the roof above the doors.

Fuel-tank features for safety

(all models)

In each model, the fuel-tank location has been chosen to provide protection from impacts.

Battery Safety Terminal

(all models)

In case of a severe accident impact, the Battery Safety Terminal fires a tiny pyrotechnic charge to break the connection between the battery and starter cable. This helps prevent a possible short circuit at a high-current point in the electrical system. (Because of the high power carried by the starter cable, unlike most electrical circuits in the vehicle this connection is not protected by a fuse or circuit breaker.)

The device triggers whenever an airbag deploys. Once the connection is severed, the engine cannot be cranked; but separate wiring provides power for all operating and safety systems (such as power windows, central locking system and emergency flashers).

BMW Assist

(standard 7, 6 & 5 Series, B7, Z4 35is, M6, M5, X6, X5, X5-X6 M; optional 3 & 1 Series, Z4 28i/35i, M3, X3, X1)

This constellation of safety, security and convenience features is standard or available with all BMW models. For details, see the **BMW Assist** pages of this **Fast Facts** edition.

Security features

Central locking system

(standard all models)

A central interior switch locks or unlocks all doors and the trunk or tailgate. With the system locked in this manner (that is, from the inside with the central switch), the fuel door remains unlocked and the doors can be unlocked from the inside. This offers two benefits:

- **Freedom to exit.** Those wishing to remain inside a vehicle that has been locked from the outside can unlock and exit the vehicle if necessary or desired.
- **Security while fueling.** Occupants can remain inside with the car locked while having an attendant fill the tank.

There is a way to get out in case one is locked inside the vehicle from the outside: Push the central lock switch, then pull any door handle twice. That door will be unlocked; the trunk and other doors remain locked and the alarm (if present) is triggered.

Coded Driveaway Protection

(standard all models)

In vehicles without Comfort Access or Keyless Go, the remote is equipped with a tiny transponder which stores an electronic code transmitted by an antenna at the dash slot. Each time the remote is removed, this code is changed; the next time, the car can be started only if the remote matches the new code. This feature is called Coded Driveaway Protection, and it has been shown to be highly effective in reducing the frequency of theft of BMW vehicles.

In vehicles with Comfort Access or Keyless Go, the code is changed

with each use of the vehicle.

Two types of battery are employed in the remote:

- Without Comfort Access or Keyless Go – battery is charged when remote is in ignition slot; replacement is rarely required.
- With Comfort Access or Keyless Go – battery must be replaced periodically.

Keyless Go refers to models that have no ignition slot but may not be equipped with Comfort Access: current 7, 6 and 5 Series, B7, 3 Series Sedans, X3. Some models – 3 Series Coupes and Convertibles, 1 Series, X6, X5, X1 – have ignition slots even if equipped with Comfort Access, but it is not necessary to insert the remote in the slot.

Alarm system

(all models)

Controlled from the multi-function remote, the BMW alarm system is standard on –

- All Series automobile models from 335i upward
- B7
- All 3 Series Coupes and Convertibles
- All Z4 models
- All M models
- All Sports Activity models including new X1.

For 2013, the models on which the alarm system is optional are the 328i Sedans and 1 Series.

Evolved multi-function remote

(7, 6 & 5 Series, B7, 3 Series Sedans, X3)

The multi-function remote of these models, all of which except 328i Sedans come standard with the alarm system, gets a new panic button with a red horn

BMW features

The following key features appear in more than one BMW Series:

icon. (The remote of vehicles without the alarm system does not have a panic button.)

Durability & reliability

Outstanding corrosion protection

BMW's thorough treatment for corrosion resistance is impressive. Dependent upon Series and model, up to 85% of the body panels are galvanized on both sides. A substantial additional portion is galvanized on one side. Galvanizing is used only where it is worthwhile, however, because it does consume a natural resource (zinc) and makes recycling somewhat more difficult.

Reflecting BMW's general policy of process updating at the start of production of a new Series, the current 7, 6 and 5 Series and X3, the most recent all-new platforms, reflect further evolution of BMW's rustproofing and paint processes. In the case of the X3, the new paint shop recently constructed at the Spartanburg production plant, with its innovative "RoDip" conveyor system that rotates the entire vehicle body 360° through each process tank, enhances paint coverage and therefore corrosion resistance.

All current BMW models come with BMW's Rust-Perforation Warranty, which protects customers for 12 years/unlimited mileage.

Reliable electrical connectors

Many electrical connectors in current BMWs incorporate a lever locking mechanism that precludes incorrect assembly, holds tightly, and yet can be disconnected without a tool. Such connectors are widely used in

aircraft, and hence are referred to as aircraft-type connectors.

Onboard diagnosis

Onboard diagnosis continuously monitors various sensors for operational faults. Faults can be recognized and stored in the system memory, then read out by the service technician on a sophisticated diagnostic machine.

Quality

BMW quality processes

In BMW production, computer-controlled techniques are combined with traditional handwork to achieve top assembly and finish quality. Although BMW production is planned to ensure that the car is built right the first time, there is also a rigorous inspection system. At BMW's largest plant (Dingolfing, Germany), some 1000 quality-control employees work to ensure that every BMW meets the company's exacting standards. Each day, four complete body shells are pulled from the production line and their dimensions are checked completely by sophisticated measuring machines.

Refinement of quality processes is an ongoing matter for BMW; new processes and equipment are frequently introduced in BMW's worldwide manufacturing network.

Modular assembly

In this advanced assembly technique, individual elements of the car are to a large extent pre-assembled before being combined or installed on the vehicle; all their functions can thus be tested before installation.

Depending upon model, elements built this way may include the instrument panel, doors, moonroof and tailgate assemblies.

Ultrasonic test for leaks

Each BMW body is subjected to an exhaustive ultrasonic test for leaks, both wind and water, before being released for shipment.

Fit and finish

"Fit and finish" are partially covered by the items above, in the sense that production precision and the control of body surfaces are the foundation of BMW's body quality. But a great deal more goes into ensuring that every aspect of a new BMW is fitted and finished with great precision and care. With each introduction of a new Series, BMW body engineers strive to improve fit and finish further; the changes mentioned nearby for the most recently introduced vehicle platforms' rustproofing and paint process also favorably affect finish quality.

The Client Adviser can point out BMW's quality fit and finish to prospective customers by accompanying them around the vehicle, calling attention to the –

- smooth and consistent luster of painted surfaces
- quality of trim, light lenses, logos
- narrowness and consistency of gaps between adjacent panels (hood, bumpers, doors, trunklid and main body panels)
- fit of attached components such as logos, lights, mirrors and handles.

This quality of fit and finish naturally extends to the structural integrity of each BMW, as documented by an October '12

Car and Driver report on the new X1: "The premium sensations carry over to the driving experience; the body felt rock-solid on the Bavarian roads near BMW headquarters in Munich, and the cabin was hushed even at 100 mph. We expect that the X1 will feel just as refined on our more challenging American pavement."

BMW paint quality

A look down the side of any new BMW will reveal the precise metal stamping and expert surface preparation that preceded painting, and the care with which the paint was applied. Before a BMW body is painted, its surface quality is measured electronically. Panels such as hoods, doors and trunk are hand-fitted and all surfaces are again checked – this time by hand. Then, and only then, does the body begin its long journey through numerous chemical baths and washing operations, spraying booths and drying/baking ovens. In all, more than 20 pounds of primer, color and clear coats go onto each BMW.

Cost of ownership

Many models with outstanding fuel economy

Excellent fuel economy isn't offered by BMW merely because of a runup in fuel prices. Throughout the line, there are models that achieve both BMW performance and impressive EPA ratings. Models that have attained these mileage levels newly for '13 are denoted with an asterisk (*).

BMW features

The following key features appear in more than one BMW Series:

BMW's mileage stars for 2013:

- ActiveHybrid 3, 25 mpg city/33 mpg highway/28 mpg combined*
- X1 sDrive28i, 24/34/28*

Runners-up:

- 528i Sedan, 24/34/26
- 328i Sedan with manual transmission, 23/34/26
- 328i Sedan with automatic transmission, 23/33/26
- 640i Coupe, 23/33/26
- 335i Sedan automatic, 23/33/26
- Z4 28i manual, 22/34/26
- 328i xDrive Sedan, 22/33/26
- 528i xDrive Sedan, 22/33/26
- X1 xDrive28i, 22/33/26
- ActiveHybrid 5, 23/30/26

Highway mileage of 30 mpg or more:

- Mileage stars and all runners-up, above
- 335i Sedan manual or automatic
- 335i xDrive Sedan automatic
- 535i Sedan manual or automatic
- 535i xDrive Sedan
- 535i and 535i xDrive GT
- 640i Convertible and Gran Coupe
- ActiveHybrid 7

Highway mileage of 27 mpg or more:

- All 128i models
- 135i/is models manual
- 328i and 335i Coupe manual or automatic
- 335i xDrive Coupe manual or automatic
- 328i Convertible automatic
- 335i Convertible manual or automatic
- 740i/Li including xDrive
- X1 xDrive35i
- X3 28i

Highway mileage of 25 mpg or more:

- 135i/is models DCT

- 328i xDrive Coupe manual or automatic
- 328i Convertible manual
- 335is Coupe and Convertible manual
- 550i Sedan automatic
- 535i GT xDrive
- 650i Coupe, Convertible and Gran Coupe
- 750i
- Z4 35i manual
- 750i
- X3 35i
- X5 35d

Combined mileage of 22 mpg or more:

- 128i Coupe and Convertible automatic
- 135i/is Coupe and Convertible manual
- 328i Coupe manual or automatic
- 335i Coupe and Convertible manual
- 535i Sedan manual or automatic
- 535i xDrive Sedan
- 535i GT
- 740i/Li including xDrive
- X3 xDrive28i
- X5 35d

M models with 20 mpg highway:

- Both M3 models, manual or DCT

Condition-Based Service (all models)

Traditionally, routine maintenance has been performed according to a rigid schedule – 7500 miles, 15,000 miles, etc. This ignores the fact that freeway driving is easier on a car than stop-and-go traffic; that hard driving and cold starts increase wear. Most other manufacturers continue with a rigid schedule.

Recognizing that each owner uses a car differently, BMW developed an onboard system to recommend routine maintenance

specifically for that use. The Condition-Based Service micro-processor tracks the vehicle's use and calculates when maintenance will be needed.

The mileage and the time at which service should be performed are displayed, and offer information as to when specific service operations should be carried out; this is communicated via iDrive if present, the instrument-cluster display if not. A system called TeleService communicates automatically with a designated BMW center when it's time for maintenance; see next heading.

Owners should follow the recommendations of Condition-Based Service and ignore anyone who recommends servicing at fixed intervals.

TeleService (all models with BMW Assist)

Key vehicle data are transmitted automatically to the BMW center when the Condition-Based Service sensors detect an upcoming service need, or manually when the driver activates the Service Request button under BMW Assist in the control display. The BMW center then contacts the customer to set a service appointment. Functioning of TeleService requires that BMW Assist be current; an annual fee is required after the 4th year of ownership.

BMW Maintenance Program for 4 years/50,000 miles included in base price

As a part of BMW Ultimate Service, upon delivery as a new vehicle, all models come standard with coverage for 4 years or 50,000 miles, whichever comes

first. BMW's included maintenance is an important competitive advantage over most other brands.

The BMW Maintenance Program includes all factory-recommended maintenance as listed in the BMW Service and Warranty Information booklet, plus replacement of wear-and-tear items like brake linings, brake rotors, engine drive belts and wiper blades. Adjustments required by normal operating conditions are also covered. If customers raise questions about the difference between BMW Maintenance and "scheduled maintenance," this is the heart of it.

In addition to this Maintenance Program, BMW Ultimate Service also includes BMW Roadside Assistance; the BMW New Vehicle Limited Warranty; and BMW Assist. With this all-encompassing suite of valuable customer services included with every new BMW, BMW leads the industry in providing its customers real value and reassuring peace of mind.

Extended service intervals

The Maintenance Program addresses the cost of maintenance. Yet every time a vehicle requires maintenance, whether scheduled or not, there's a time expenditure for the customer. All current BMW models are engineered to require relatively infrequent routine maintenance:

- The basic Oil Service (change engine oil and filter and air filters, plus a short list of other maintenance items) can be performed at extended intervals. As always with BMWs, this is not a fixed interval; instead, the Condition-Based Service system determines the

BMW features

The following key features appear in more than one BMW Series:

interval on the basis of actual vehicle usage. These intervals are generally considerably longer than such traditions as the 3000-mile oil-and-filter change.

- Every current BMW engine has hydraulic valve adjustment or lifters, so that valve adjustments are never needed. And BMW engines' camshafts are driven by self-adjusting chain, so there is no timing belt to be replaced periodically.

Self-adjusting clutch

The clutch of manual-transmission models has been engineered to keep pedal effort essentially constant over the unit's life and enhance clutch life significantly.

Stainless-steel exhaust system

Typically exhaust systems have been subject to corrosion, especially if the engine was started frequently from cold without being fully warmed up before being shut off again. In all BMWs, most exhaust-system components are of stainless steel, which though costly is more resistant to corrosion than normal steel and thus results in a longer-lasting exhaust system.

The environment

Emission status of current production models: at least LEV

In states that use LEV/ULEV/SULEV emission ratings, current production BMW models satisfy at least the requirements for Low Emissions Vehicle (LEV). SULEV (Super Ultra Low Emissions Vehicle) versions of several models are sold in California, Connecticut, Maine, Massachusetts,

New Jersey, New York, Oregon, Rhode Island and Vermont:

- 128i Coupe and Convertible
- 328i Sedan, Coupe and Convertible
- 328i xDrive Sedan and Coupe

Advanced powertrain concepts

BMW currently offers three hybrid models: ActiveHybrid 7, 5 and 3. (See the 7, 5 and 3 Series Sedans sections for details.) At major international auto shows such as Frankfurt, Los Angeles, Detroit and Geneva, BMW has shown or is showing various concepts, including further hybrid applications and electric, to reveal to the public the intense forward research the BMW Group is conducting toward reduced fuel consumption and emissions in the future.

Model year 2014 will see the market launch of the first BMW i models, of which the all-electric i3 will benefit from the customer experience and feedback that result from the ActiveE project.

No CFCs used in manufacture

CFCs have been used traditionally in the manufacture of plastic components, such as seat foam and instrument-panel moldings. BMW has discontinued their use in all manufacturing operations.

Water-borne paints

BMW has replaced solvent-borne color coats with water-borne paints. To avoid any misunderstanding: Yes, you can wash a car with water-borne paint. Water is merely the dispersant, just as a conventional solvent would be; either dispersant evaporates in the drying process. The replacement of solvent-borne with water-borne color

coats sharply reduces chemical emissions at the factory, helping protect the local environment.

An advanced type of clear coat, called powder-coat, reduces waste and emissions while further enhancing resistance to acid rain. Modern clear coats in general, with their ultraviolet protection, have been a significant factor in the excellent durability of today's BMW paints.

Saving fossil fuel in BMW production

At BMW's Spartanburg, South Carolina production plant, methane gas from a nearby landfill is being used to power turbines and heat paint ovens, very significantly reducing the factory's use of natural gas.

BMW began use of landfill gas – otherwise emitted directly into the atmosphere – in 2003 to power four turbines that generate electricity and water heating for the plant. Then in summer '06, when the plant was idled to reorganize X5 and Z4 production and prepare for upcoming X6 production, the paint ovens (where BMW's beautiful exterior finishes are baked to perfection) were also converted to operate on landfill gas. Though other automotive factories also use landfill gas to generate energy, BMW is the first to use it for painting operations.

Use of landfill gas is reducing carbon-dioxide emissions at the plant by about 17,000 tons per year – the equivalent of the emissions of more than 72,000 vehicles, according to the EPA – and achieving significant cost savings as well. This innovative, win-win energy strategy earned

BMW the EPA's 2006 Energy Partner of the Year award, shared with Durr Systems Inc., which had supplied the original paint-shop equipment in 1994 and then converted it to landfill gas in '06. Additionally, in '07 Durr received a PACE honorable mention from the respected automobile-industry publication Automotive News.

World's first virtually emission-free foundry

BMW's plant in Landshut, Germany boasts the world's first foundry with virtually emission-free production. This foundry, which produces many of the light-alloy components in today's BMW vehicles, has introduced new sand-core technology for gravity die-casting, in which conventional organic binders are replaced by highly eco-friendly inorganic binders that give off virtually no pollutant emissions. As a result, the foundry's emissions of combustion byproducts are reduced by 90%; the plant's previous waste-air treatment systems have become redundant and have been decommissioned.

The foundry's approximately 1,300 employees produce about 1.8 million aluminum and magnesium castings a year, including engine crankcases and cylinder heads, vehicle structural elements, suspension links and the aluminum frame of the 5 Series GT's Dual-Access Tailgate. The new process was first employed in manufacturing the aluminum crankcases and cylinder heads for BMW's 6-cylinder diesel engines, such as that of the X5 35d.

BMW features

The following key features appear in more than one BMW Series:

BMW's extensive and sophisticated use of such light-alloy castings is a very significant contributor to the fuel efficiency of BMW vehicles, and therefore the reduction of their CO₂ emissions; thus this innovative production process doubly benefits the environment.

Sustainability at the BMW Group

Long-term strategy is the key to the sustainability of the BMW Group – environmental sustainability such as the use of landfill gas in production, the virtually emission-free foundry, and intelligently conceived vehicles. But the Group's long-term strategy also specifies corporate and financial sustainability that makes BMW a viable entity, a coveted source of employment, and an attractive investment in all ways.

With its official corporate Strategy Number ONE, the Group consistently pursues its vision of being the leading provider of premium products and services for individual mobility; all the Group's activities are geared toward continuously increasing the company's value over the long term.

Environmental protection was established as part of the corporate organization back in the early 1970s. Over the years, this policy has evolved from its original, purely local activities into a global commitment: The BMW Group complies with the 10 principles of the Global Compact and the Cleaner Production Declaration of the United Nations Environmental Program (UNEP). In addition, the company adheres to the Organization for Economic Cooperation and Development

(OECD) guidelines for multinational companies as well as the International Chamber of Commerce (ICC) Business Charter for Sustainable Development.

BMW's sustainability efforts are being recognized in the Dow Jones Sustainability Indexes (DJSI) in a major and ongoing way: In January 2012, for the eighth consecutive year, the BMW Group was named the world's most sustainable automotive company. And among the three automotive enterprises listed each year, the BMW Group is the only one to feature in this renowned index every year for the past 14 years.

Sustainability is firmly embedded in the BMW Group's culture and corporate strategy. In 2001, the Group committed itself to the United Nations Environment Program, the UN Global Compact

and the Cleaner Production Declaration. It was also the first automotive company, in 1973, to appoint an environmental officer. Today the Group's Sustainability Board, comprising all members of BMW's Board of Management, defines the corporate strategy in terms of binding targets.

In September '12, the BMW Group was listed in the Global 500 Leadership Index of the Carbon Disclosure Project, achieving its all-time best score: with 99 of 100 possible points in this index, BMW is not only the leader of its industrial sector, but is also among the top three companies from all sectors worldwide.

The BMW Group provides regular, in-depth information on its sustainability activities in its Sustainable Value Report, available at www.bmwgroup.com.

2013 7 Series:

New engines for all 740i/Li & 750i/Li models.

New 740iL xDrive & ActiveHybrid models.

Plus a relevant, all-around LCI freshening.

As BMW's flagship Series of 4-door Sedans, the 7 Series was all-new for 2009 and has undergone steady, significant evolution since then that has included the offering of BMW's outstanding xDrive all-wheel-drive (AWD) system; expansion of the customer base via 6-cylinder 740i/Li models; and the introduction of ActiveHybrid models.

For 2013, the Series gets an all-around Life Cycle Impulse (LCI) freshening that encompasses powertrain engineering for higher efficiency, wider availability of AWD, new lighting technology, discreet stylistic updating, expanded standard equipment and new options.

What's new for 2013

General

- Extensive freshening of BMW's flagship Series of luxury-performance Sedans, affecting virtually all areas of vehicle
- Series includes new models

New models

As of 7/12 production:

- 740Li xDrive – long-wheelbase 6-cylinder model with all-wheel drive

As of 8/12 production:

- 740LiH – new ActiveHybrid model with 6-cylinder engine, all-new full-hybrid technology; replaces former 750i/Li ActiveHybrid V-8 models

New powertrains for all 6- and 8-cylinder models

- 740i/Li models get N55 TwinPower Turbo 6-cylinder engine, replacing previous N54 twin-turbo; equivalent

performance with increased fuel efficiency

- 750i/Li models powered by N63 TU V-8 engine with Valvetronic, replacing previous N63 unit with conventional valvegear; increased power and torque, higher fuel efficiency
- All 740/750 models get new 8-speed automatic transmission¹, contributing to increased fuel efficiency and even smoother performance; replaces former 6-speed.
- Automatic engine start/stop added to all 740/750 models

Other engineering/technology enhancements

- Driving Dynamics Control adds ECO PRO mode (all models except 760Li); other modes now Comfort, Comfort+, Sport and Sport+. In addition to being new to this Series, the 7 Series ECO PRO is first to include two new fuel-saving functions:
 - Anticipation Assistant, in which ECO PRO interacts with newly enhanced GPS Navigation to anticipate curves, municipal boundaries, T-intersections, speed limits and other environmental factors, and display tips on negotiating them efficiently.
 - Coasting or "sailing" mode, which disengages the engine from the drive wheels when the driver lifts the accelerator foot at speeds between 30 and 100 mph
- Extensive suspension and acoustic measures to improve riding comfort and reduce

tire and wind noise; modified suspension geometry front, hydraulic cushions rear, wider range of firmness/softness for standard Dynamic Damping Control

- Electric power steering on RWD 740/750 models; increases fuel efficiency over previous hydraulic. Hydraulic system of AWD models also gains in efficiency.
- Next-generation GPS Navigation with faster processing, enhanced graphics and new features/functions (iDrive and Navigation standard in all 7 Series models since 2001)
- Active Protection safety technology in all models; includes Attention Assistant to detect fatigue and alert driver

Exterior design & function

- Four new metallic paint colors:
 - All models – Mojave, Glacier Silver, Midnight Blue
 - 740Li ActiveHybrid – Liquid Blue
- New front bumper/spoiler ensemble with horizontal chrome elements and air-curtain intakes at outer edges
- Front light clusters newly shaped; LED luminous rings
- LED foglights
- Grilles with more widely spaced vertical slats (9 slats per side, vs. previous 12)
- Side indicator/turn signals moved from body side to exterior mirrors, now LED
- New rear bumper/apron ensemble with integrated chrome accent strip
- xDrive badge moved from body side to trunklid (xDrive models)
- Increased contrast between taillights' light and dark elements

- New standard wheel designs throughout; also new choices in optional wheels

Interior design & function

- Enhanced iDrive display graphics, enabled by 1.3-GB processor with 3D graphics card
- Updated/enhanced Voice Command
- Ambiance lighting expanded to B-pillars; incorporates new choice of two colors
- Chrome highlights at central Control Display and cupholder cover
- Newly designed front seats, more slender construction (both seat versions)
- Four new upholsteries, two new interior trims available

Safety & security

- Active Protection (code 5AL); encompasses range of new and continuing functions
 - Attention Assist – monitors driver's steering behavior; if not consistent, sounds warning (new)
 - Pre-crash measures (continuing): safety belts tensioned, windows and moonroof closed, seat backrests positioned (front passenger, rear Comfort seats if present)
 - Automatic post-crash braking (new)
 - Panic button with red symbol added to remote

Expanded standard equipment

- Self-leveling rear air suspension added to 740i/Li and 750i models¹
- Comfort Access keyless entry added to all 740i/Li models¹, includes new hands-free trunk opening

1 – Thus now standard on or in all models.

- Satellite Radio with 1-year subscription added to all 740i/Li and 750i/Li models¹
- Heated front seats added to 740i¹
- Full LED Forward Lighting, BMW Apps and Speed Limit Info added to 760Li
- BMW Individual Composition, revised content
- Rear Entertainment: upgraded via larger, free-standing flat screens, separate iDrive control and other new features. New option code.

Stand-alone options:

- Enhanced Active Cruise Control incorporating Collision Mitigation; Lane Departure Warning newly included in this option; new option code
- Parking Assistant newly available on all except xDrive models
- Bang & Olufsen audiophile Surround Sound system newly available in all models; includes retractable center-fill speakers as in 5 and 6 Series, M5 and M6
- BMW Individual exterior colors, upholstery and interior trims newly available separately from Individual Composition

New or enhanced packages & options

Packages:

- Lighting: all models except 760Li, where standard. Includes Full LED Forward Lighting, Automatic High Beams
- Executive: all models except 760Li, where standard. Extensive content, varies according to model.
- Driver Assistance: all models except 760Li, where standard; adds Speed Limit Info, Lane Departure Warning adds Collision Mitigation
- M Sport: revised content including steering-wheel shift paddles. As of 9/12 sales, M Sport Package will be a no-charge option on MY13 7 Series models. For details, see Bulletin V-5-0912-44.

7 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 166-181.

740i

“Base” model, newly powered by high-output version of the N55 TwinPower Turbo 6-cylinder engine that has been a sensation in other BMW models since 2011. Also gets an 8-speed automatic transmission in place of the former 6-speed; together, the new engine and transmission bring higher performance and fuel efficiency to this most accessible of 7 Series Sedans.

Exterior design & function

- Choice of standard and metallic paint colors
- Full body-color front bumper/spoiler ensemble with air-curtain intakes at sides
- Weight-saving aluminum hood, front side panels (fenders), roof panel and doors
- Xenon Adaptive headlights, newly styled and with new LED luminous rings functioning as parking lights and Daytime Running Lamps
- Dynamic auto-leveling of headlights with topographical compensation
- Cornering lights
- New LED front foglights
- Newly refined LED taillights
- New LED turn signals in exterior mirrors
- Power-folding exterior mirrors
- Park Distance Control, front and rear
- Rain-sensing windshield wipers
- Ground lighting at door handles
- Welcome Light
- Adaptive brakelights

Performance & efficiency

- 3.0-liter TwinPower Turbo 6-cylinder engine with direct fuel injection, Valvetronic variable intake-valve lift, Double VANOS² variable intake- and

exhaust-valve timing; 315 hp/330 lb-ft., EPA combined rating 22 mpg

- 8-speed STEPTRONIC automatic transmission with E-shift control lever
- Automatic engine start/stop
- Driving Dynamics Control – variable settings for engine response, transmission shifting, shock-absorber firmness, steering assist and (with optional Integral Active Steering) steering ratio; includes new ECO PRO mode
- Brake Energy Regeneration
- Aluminum multi-link front suspension
- Aluminum 5-link Integral rear suspension
- Dynamic Damping Control with Comfort, Comfort+ and Sport modes
- Self-leveling rear air springs
- Vehicle-speed-sensitive variable-assist, variable-ratio rack-and-pinion electric power steering
- 4-wheel ventilated disc brakes with weight-saving aluminum/cast-iron front rotors, aluminum front calipers
- 18 x 8.0 alloy wheels, V Spoke design #425
- 245/50R-18 run-flat all-season performance tires
- Dynamic Stability Control with Dynamic Traction Control, electronic limited-slip differential, extensive braking functions including Automatic Hold
- Tire Pressure Monitor

1 – Thus now standard on or in all models.

2 – VANOS = **V**ariable **N**Ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

7 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 166-181.

Comfort & convenience

- Comfort Access keyless entry with hands-free trunk opening
- Stepless door checks
- Illuminated doorsill trims
- BMW Universal Transceiver (3-function garage-door opener)
- Ambiance lighting with choice of two colors (orange or white)
- Leather-wrapped power tilt/telescopic sport steering wheel with auto tilt-away
- Dynamic cruise control
- Instrument cluster in Black Panel technology
- 14-way power/heated front seats
- Memory system for driver's seat, steering wheel and exterior mirrors; 2 positions per user
- Enhanced iDrive system with 10.2-in. high-resolution control display, GPS Navigation, Voice Command, Real Time Traffic Information, Integrated Owner's Manual and other features
- Dakota leather upholstery, available in three color schemes
- 80-GB hard drive providing data storage for enhanced iDrive system, GPS Navigation, entertainment systems, Voice Command, phone system
- Fine Line high-gloss wood interior trim
- 4-zone automatic climate control
- Power 2-way Contour moonroof with power interior shade, vehicle-speed-sensitive wind deflector
- 12-speaker AM/FM/HD/CD/MP3 audio system with Radio Data System, CD player, auxiliary audio input, USB input port and other features
- Satellite Radio with 1-year subscription

- Enhanced Bluetooth mobile-device interface
- iPod/USB Adapter
- Multiple power outlets for users' electronic devices
- Floor mats front and rear

Safety & security

- Dynamic Stability Control (DSC), including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement; Brake Fade Enhancement, Standby and Drying; electronic limited-slip differential, Start-off Assistant, Automatic Hold
- Rear-view camera
- Active Protection system, including new Attention Assistant
- Safety belts with automatic tensioners and force limiters at all seating positions
- Front- and rear-seat Head Protection System
- Active front-seat head restraints
- Advanced Crash Safety Management (ACSM) for control of vehicle safety systems
- Coded Driveaway Protection
- BMW Assist Safety Plan with 4-year subscription, automatic collision notification, many other features and benefits
- Anti-theft alarm system
- Pathway Lighting

Packages & options

- Available packages:
 - Executive (soft-close doors, 20-way Multi-Contour front seats, front-seat Active Ventilation, Head-up Display, 16-speaker premium audio system, BMW Apps, Smartphone Integration, power trunklid with hands-free opening)

- Driver Assistance (Lane Departure Warning with Collision Mitigation, Active Blind Spot Detection, side- and top-view cameras, Speed Limit Info)
- Lighting (Full LED Forward Lighting, Automatic High Beams)
- M Sport (M Design 19-in. wheels w/performance tires³, M aerodynamic treatment, Shadowline exterior trim, specific exterior color selection, M sport steering wheel w/shift paddles, M driver's footrest, Anthracite-color headliner; 20-in. wheels/tires and Alcantara headliner at additional cost)
- Cold Weather (heated steering wheel and rear seats, ski bag)
- Rear Entertainment (enhanced Rear Seat Entertainment w/iDrive control, 6-disc DVD changer)
- Priority 1 package:
 - BMW Individual Composition (BMW Individual 19-in. wheels w/performance tires, Shadowline exterior trim, Individual rear badge, Individual doorsill trims, Full Merino leather upholstery, leather-trimmed dash, choice of Individual interior trim)
- Stand-alone options:
 - Active Roll Stabilization
 - Integral Active Steering
 - Night Vision with Pedestrian Detection
 - 20-in. wheels w/performance tires³
 - Enhanced Active Cruise Control
 - Parking Assistant
 - BMW Individual steering wheel with inlaid-wood trim
- Nappa leather upholstery
- Choice of interior trims at no extra cost
- Ceramic-trimmed controls
- 20-way Multi-Contour front seats
 - Active Support front seats
 - 16-speaker Bang & Olufsen super-premium audio system
 - BMW Apps + Smartphone Integration
 - Power rear-window and rear door-window sunshades
- Priority 1 stand-alone options:
 - BMW Individual Full Merino leather upholstery, choice of six color schemes
 - Choice of three BMW Individual interior trims

740Li

Variant of 740i with 5.5-in. longer wheelbase, correspondingly greater rear-seat leg room and overall length, and a distinctive roofline that adds rear-seat head room. Like 740i, it enjoys higher performance and fuel efficiency from its new TwinPower Turbo engine, 8-speed transmission and auto engine stop/start. Points of differentiation from 740i include:

- 126.4-in. wheelbase, vs. 120.9 for 740i
- Vehicle length 205.3 in., vs. 199.8
- Greater rear leg room (+5.4 in.)
- More front/rear head room (+0.2/+0.4 in.)
- Packages and stand-alone options as 740i, plus –

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 7 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

7 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 166-181.

- Luxury Rear Seating Package, available in combination with Executive and Cold Weather Packages; includes 14-way power rear comfort seats with Active Ventilation and massaging function.

740Li xDrive

New model, first offering of all-wheel drive in a 740 model. In addition to BMW's outstanding xDrive system, the AWD⁴ model differs from the RWD 740Li (xDrive is not offered in a regular-wheelbase 740i version) in these aspects:

- xDrive badge, newly positioned on trunklid
- M Sport Package wheels and tires are performance all-season, same size all around, vs. 740i/Li performance tires in differentiated front/rear sizes. 20-in. equipment offered as Package upgrade, same as for RWD model.
- Integral Active Steering not offered
- Parking Assistant not offered

ActiveHybrid 7

New model, featuring a brand-new hybrid powertrain that's even more advanced and fuel-efficient than its 750Li AH predecessor. Delivering acceleration matching that of the regular 740Li, the 740Li AH is distinguished by Full Hybrid technology that allows a certain range and speed of all-electric operation. Though the AH is available with a wider range of packages and options than its predecessor, some of the fully combustion-powered model's options are not available.

Differences are as follows:

- Full Hybrid 2.0 power system, combining 315-hp TwinPower Turbo 6-cylinder engine (as in 740i/Li models) with 55-hp electric motor integrated into hybrid-specific 8-speed automatic transmission. Combined system power is 350 hp.
- Hybrid system includes specific auto start/stop function, "coasting" mode, Brake Energy Regeneration, Dynamic Stability Control, Driving Dynamics Control modes
- Compact, high-performance lithium-ion high-voltage battery pack, carried at forward end of trunk
- All-electric driving at speeds up to 37 mph; all-electric range of 2.5 miles at 22-mph average speed
- Fuel economy approximately 14% higher than that of combustion-powered 740iL according to European test cycle; EPA mileage rating to be determined
- Active-Hybrid 7 identification on C-pillars and trunklid
- Additional, signature exterior color available: Liquid Blue
- Active-Hybrid 7 identification on doorsill trims
- Special instrumentation with hybrid-specific functions
- Navigation system with expanded functionality
- Packages and options as 740Li, except:
 - M Sport Package deletes increased top-speed limiter; 20-in. wheels/tires not available as upgrade
 - BMW Individual Composition, 20-in. wheels/tires not available as upgrade
 - Cold Weather Package deletes ski bag

- Integral Active Steering not available
- Unique stand-alone wheel option: 19-in. Streamline design #357 with all-season tires

750i

The trimmest, most attainable V-8 model. Built on the "standard" wheelbase, it can also be considered the sportiest, most agile model – and like all 2013 7s, its innate sportiness can be enhanced with the available M Sport Package, Active Roll Stabilization, Integral Active Steering and a choice of upgrade 20-in. wheels and tires. For perspective, the 750i is compared here with the standard-wheelbase, 6-cylinder 740i; the 750i's increments of performance and features include –

- 4.4-liter TwinPower Turbo (twin-turbo) V-8 with direct fuel injection, Valvetronic variable intake-valve lift, Double VANOS² variable intake- and exhaust-valve timing; 440 hp/480 lb-ft., EPA combined rating 19 mpg
- Higher-capacity version of 8-speed automatic transmission
- Larger brake dimensions
- 19-in. wheels and tires³ standard, vs. 18; different wheel design, V Spoke #426
- 20-way front Multi-Contour seats, vs. Executive Package
- Nappa leather upholstery standard, vs. optional
- Features that are standard, vs. 740i Executive Package: soft-close doors, 20-way front Multi-Contour seats, premium audio system, power trunklid

- Packages and options as for 740i, except –
- Executive Package deletes standard 750i features listed at bottom left; adds power sunshades, leather-trimmed dash, ceramic-trimmed controls
- M Sport Package priced lower because 19-in. wheels/tires standard
- 20-in. wheels/tires not available stand-alone

750i xDrive

With its standard wheelbase, this is the most compact and agile AWD 7 Series model. It differs from the RWD 750i as follows:

- xDrive all-wheel drive system
- DSC adds Hill Descent Control
- Upper and lower lateral suspension links of forged steel, vs. aluminum
- EPA city and highway mileage ratings 1 mpg lower, but combined mileage (19 mpg) same
- 0-60-mph acceleration actually slightly quicker, thanks to enhanced traction
- Packages and options as 750i, except –
- Wheels and tires of M Sport Package: same size all around, performance all-season tires vs. differentiated front/rear performance tires. Same #302M wheel design.
- Integral Active Steering not offered
- Parking Assistant not offered

2 – VANOS = **V**ARIABLE **N**OCKENWELLEN **S**TEUERUNG = variable camshaft control, or variable valve timing.

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 7 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

4 – All-wheel drive.

7 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 166-181.

750Li

Long-wheelbase, RWD V-8 model. Compared to 750i, this model's points of differentiation are identical to those of 740Li vs. 740i.

750Li xDrive

Long-wheelbase model with AWD. Distinctions from RWD 750Li are as for 750i xDrive vs. RWD 750i.

760Li

Flagship model powered by BMW's magnificent twin-turbo V-12 engine – a masterpiece, distinguished by not only its greater power and torque but also the V-12's inimitable sound and velvety smoothness. Distinctions from the V-8 750Li are very extensive; virtually everything that's optional on other 7 Series models is standard on or in the 760Li – and then some. New for '13 distinctions include Full LED Forward Lighting and Speed Limit Info, and some features that are standard here (such as Lane Departure Warning) have been enhanced:

- 6.0-liter twin-turbo V-12 engine: 535 hp vs. 445, 550 lb-ft. torque vs. 480, 0-60 mph 4.5 sec. vs. 4.8, EPA combined rating 15 mpg
- Distinctive grille shape
- V-12 script on front flanks
- Wheels/tires now same size/rating as 750i/Li models, but standard wheel design is Multi-Spoke #235 vs. V Spoke #426
- Additional standard equipment over 750Li:
 - Active Roll Stabilization
 - Integral Active Steering
 - Full LED Forward Lighting

- Automatic High Beams
- Heated steering wheel
- Climate Comfort laminated glass: infrared-reflecting windshield and windows with theft-deterrent acoustic film
- Head-up Display
- Speed Limit Info
- Ceramic-trimmed controls
- Nappa leather-trimmed upper dash and door panels
- Active Support feature, both front seats
- Active Ventilation on front and rear seats
- 14-way power/heated rear Comfort seats
- Rear Seat Entertainment, new enhanced system
- 6-disc DVD changer
- BMW Apps + Smartphone Integration
- Ski bag
- Side- and top-view cameras (Surround View)
- Power rear-window and rear door-window sunshades
- Lane Departure Warning with Collision Mitigation
- Active Blind Spot Detection
- Number of options and packages sharply reduced from 750Li because of this increased standard equipment. Contents of the following 750Li packages are standard: Lighting, Executive, Driver Assistance, Cold Weather, Luxury Rear Seating (except massaging feature), Rear Entertainment
- M Sport Package includes 20-in. wheels/tires, vs. package upgrade on all 740/750 models except ActiveHybrid
- Stand-alone options unique to 760Li:
 - Massaging rear seats
 - Delete rear Comfort seats

7 Series key features

Except as noted, all current 7 Series models offer the following features:

Exterior design & function

7 Series look: elegant, discreetly contemporary, newly freshened

A harmonious blend of sportiness and elegance is the overarching theme of the 7 Series design. A long wheelbase (in the Li, longer), long hood and short front overhang are basic attributes; a "greenhouse" set relatively rearward, flat roofline and overall dynamic proportions say "BMW," and at the same time "the most elegant BMW."

At the front, generously dimensioned lighting units include BMW's distinctive use of the headlamps' luminous rings (newly LED-powered) for Day-time Running Lamps, and are accented at the top by a light band that visually unifies the traditional dual headlights on each side. The foglights are also newly LED-powered. New Full LED Forward Lighting – optional all models except 760Li, where standard – extend this ultra-white lighting technology to the headlights and the accent strips above them; also visible in the front view are new LED turn signals, set into the exterior mirrors. The BMW "kidney grilles" – another traditional element – are notable for their boldness, verticality and low placement. For 2013, these signature dual grilles' vertical slats are "fewer and farther between" with 9 slats per side vs. the previous 12. The 760Li's grille surrounds are shaped differently from those of the other models.

Another facet of the 2013 LCI freshening is an entirely new front bumper/spoiler ensemble

that features horizontal (though slightly angled) chrome elements in the side air intake, plus air-curtain intakes at the extreme outer edges to help feed air to the brakes and smooth airflow around the wheelwells.

In profile, the interplay of convex and concave surfaces associated with recent BMW design appears here in extended, subtly swung contours and lines. Thoroughly free of fussy design details, the clean body sides do present one small "surprise" in the form of a chromed blade that lends character to the strikingly long space between front wheelwell and windshield base. (On the 760Li, these incorporate a discreet "V12" script.) Form follows function: this proportion is a consistent attribute of BMW body design, an outward sign of the rear-wheel drive⁵ and optimum front/rear weight balance that are enduring BMW tenets.

At the rear, the profile's sculptural modeling makes for a graceful transition into the rear deck. Rooflines flow gracefully over the flanks all the way to the bumpers, creating a sporty conclusion to this altogether graceful design. An understated chrome band connects the taillight clusters, which continue the L-shape that has become a BMW tradition. LED technology throughout makes for warm, homogeneous illumination whether tail-, brake- or turn-signal lights or even the 3rd brakelight, set into the rear window's upper edge; for '13 there is increased contrast between the taillights' darker and lighter LED elements.

5 – The all-wheel-drive xDrive models retain BMW's basic rear-wheel-drive orientation and proportions.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

Also for '13, the rear bumper/apron ensemble is newly sculpted and adds a discreetly integrated lateral chrome accent strip between the dual exhaust outlets.

From any angle, wide tracks and a pronounced shoulder line running from front to rear visually express the essence of these automobiles: They are muscular yet elegant, planted firmly on the road, and above all genuine driving machines; yet they are also supremely luxurious, transcendently high-tech, and protective of their users' safety and security – all attributes that have been carefully, conscientiously enhanced in the LCI update.

Other functional elements

Park Distance Control – multiple “eyes” in the front and rear bumpers for parking and maneuvering in tight spaces. Standard on the 7 Series.

Rear-view camera – also standard on all models, teams with PDC to give the driver an even better overview in parking and maneuvering.

Dynamic auto-leveling of headlights with topographical compensation – to minimize glare to oncoming drivers, the headlights level themselves in response to changes in vehicle loading (passengers and cargo) as well as acceleration and braking. And, in a BMW innovation, they also compensate for road topography (such as hill crests, tunnels, steep ramps) in their auto-leveling as an additional safeguard against blinding other drivers.

Adaptive headlights – “steering” the low beams to improve forward illumination on curving roads.

Cornering lights – targeted illumination to the side in low-speed turns; to both sides when backing up. Separate from Adaptive headlights; integrated into the inner headlights.

Side-view cameras – this option (part of the Driver Assistance Package on 740i/Li and 750i/Li models, standard on 760Li) appears as a small circle on each front wheelwell flare; it gives the driver a better view of traffic when emerging from, say, an alley or garage exit into a busy street.

Top-view cameras – enable iDrive to present a “plan view” of the entire vehicle and its surroundings, for additional clarity about possible obstructions not seen directly by the driver. Included with the side-view cameras whether standard or optional. Together, the side- and top-view cameras provide a Surround View, highly useful for maneuvering in close spaces.

Adaptive brakelights – standard on all BMW models; a tangible enhancement of active driving safety.

New and/or expressive wheel designs – a great variety of them, each tailored to the model and equipment configuration. All standard designs are new for '13, and a new Streamline design is a visual expression of the ActiveHybrid's progressive technology.

Exposed, prominent exhaust outlets – integrated into the rear apron and boldly expressing TwinPower Turbo. On all models the outlets are rhomboid-shaped and Titanium-silver chromed. On 740 and 750 models, including the ActiveHybrid, there is one

outlet per side; on the 760Li there are two per side, thus four total.

Performance & efficiency

The 7 Series enters 2013 with new power – new engines and transmission for all 6- and 8-cylinder models, plus an all-new Active-hybrid powertrain. For the most detailed information on all three power concepts, see **BMW features** or, for the Active-hybrid system, the 5 Series section of **Fast Facts 2012**.

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (740i/Li models)

BMW has staked much of its current performance strategy on this engine, which was new for 2011 and now, with its appearance in the 7 Series, powers models in ten Series. In 740i/Li models it replaces the previous Twin Turbo N54 engine and combines a higher performance level with a 10% increase in EPA combined mileage.

While maintaining BMW's distinctive inline 6-cylinder configuration, this award-winning powerplant distinguishes itself via several primary attributes:

- A single Twin Scroll turbocharger that achieves turbo boost comparable to two of the conventional single-scroll type
- Valvetronic variable intake-valve lift, which until '11 appeared only in BMW's non-turbocharged engines
- High Precision direct fuel injection via solenoid-controlled injectors instead of the piezo injectors used in BMW's

previously developed turbo engines.

The N55 powering 740i/Li models is the upgraded version delivering –

- 315 hp @ 5800-6000 rpm, vs. 300 @ 5800 in the 3 and 5 Series
- 330 lb-ft. torque @ 1300-4500 rpm, vs. 300 @ 1300-5000.

In its new 7 Series home, the N55 shines in several ways:

- Compared to the previous 740i/Li, 22 mpg combined vs. 20 in '12.
- Improved performance too, 0-60 in 5.5 sec. for 740i vs. 5.8 in '12. (The new 8-speed transmission plays a role in this too.)
- Compared to its '13 750i/Li stablemates, a lower price point plus higher mileage, 22 mpg vs. 19.

This unit comes standard with automatic start/stop to eliminate much of the fuel consumption that normally occurs during engine idling. The same engine also appears in the new 740i/Li ActiveHybrid.

And of course it performs with the velvety smoothness for which BMW's “sixes” are legendary.

N63 TU 4.4-liter DOHC 32-valve Twin Turbo V-8 engine (750i/Li models)

Although the TwinPower Turbo designation appears on its handsome engine cover, the Twin Turbo designation is equally correct and usefully clarifies its technology.

For 2013, N63 becomes a new TU (Technically Updated) version of this strong, refined V-8 engine. Its highlights are:

7 Series key features

Except as noted, all current 7 Series models offer the following features:

- **Valvetronic variable intake-valve lift.** The N63 TU joins the M5/M6's S63 TU V-8 in combining Valvetronic with turbocharging.
- **Newly engineered direct fuel injection.** This replaces the previous system with piezo injectors and brings the N63 into line with the N55 6-cylinder; its injectors utilizes multiple, inward-directed openings, positioned centrally in the combustion chambers.
- **Two single-scroll turbochargers** as before; thus not single twin-scroll type of N55.

Other changes, mainly directed toward reduced fuel consumption, include:

- 3-pump cooling system with switchable mechanical main pump; 50-watt electric pump for intercooler and engine controls; and a 20-watt electric pump that continues running to cool turbocharger bearings after engine shutoff.
- Volume-controlled oil pump
- Automatic engine start/stop.

The N63 TU continues with its ultra-robust aluminum block and silicon-impregnated, soft-honed cylinder surfaces; like all other current BMW engines it also retains Double VANOS variable intake- and exhaust-valve timing.

This wide-ranging upgrade benefits performance and efficiency:

- **Power output** rises from 400 to 445 hp.
- **Torque output** rises from 450 to 480 lb-ft.
- **Vehicle performance** naturally reflects these increased outputs. Again comparing parallel models, 0-60 times improve from 5.1 to 4.7 sec. for the 750i, 5.2 to 4.8 for the slightly

heavier 750Li.

- **Fuel efficiency** too – EPA ratings up from 14 city/16 highway/16 combined mpg to 17/25/19 (750i).

Thus: Once again, BMW achieves higher performance in combination with higher fuel efficiency. These great automobiles become even greater!

N73 6.0-liter DOHC 48-valve Twin Turbo V-12 engine (760Li)

The 760Li engine applies BMW's Twin Turbo concept to a V-12. As a masterwork of engineering art, it delivers no less than 535 hp and – as is typical of BMW's turbocharged engines – a monumental torque output of 550 lb-ft.. Thus it comes as no surprise that this power unit can launch such a commodious automobile from rest to 60 mph in just 4.5 seconds.

Twin turbocharging, direct fuel injection and variable valve timing, configured to the V-12 engine layout

As in BMW's other Twin Turbo engines, two identical turbochargers – optimized for efficiency, charging performance and response characteristics – each serve half the engine's cylinders.

Yet the system configuration differs from that of BMW's V-8s.

Those engines' turbochargers are between the two cylinder banks; their valvetrain puts the intake valves outboard and the exhaust valves inboard. On the V-12, with its narrower angle between cylinder banks (60° vs. the V-8's 90°), the turbochargers are outboard of the cylinder banks and, concomitantly, the intake

valves return to the conventional inboard intake and the outboard exhaust.

In either case, the turbocharging benefits from short, relatively straight paths from the exhaust valves to the turbochargers, which in turn quicken the turbos' response to the driver's changing power demands. The exhaust headers, left/right mirror images of each other, are pairs of 3-into-1, merging into the single turbocharger input. Catalytic converters are positioned close behind so as to reach their operating temperature quickly after a cold start; in part because of this, the engine meets U.S. ULEV II (Ultra Low Emissions Vehicle) limits and the also strict EU5 limits in Europe.

The engine's turbo-compressed intake air is channeled through two intercoolers: one per cylinder bank, positioned directly at the intake manifold and supplied with coolant by their own separate coolant pump. BMW's also highly responsive Double VANOS² system continuously optimizes valve timing to any instantaneous operating condition.

As a result of such interacting technologies, this engine attains not just spectacular "ratings" – those 535 hp and 550 lb-ft. of torque – but also power-and-torque delivery that makes for a thrilling experience at the wheel.

Impressive power and torque aren't the only *raison d'être* of the 760Li powerplant. The incomparable smoothness and sound of a V-12 contribute to the 760Li driving experience even when it's idling, or gently wafting this vehicle up to a rapid, yet effortless cruising speed.

Impressive, too, in the context of what this engine and vehicle can do, is its relative fuel efficiency. (EPA ratings 13 mpg city/20 mpg highway.)

Yet when it's delivering performance excitement, this engine sounds the part: At higher rpm one begins to hear that distinct V-12 sound, and under full acceleration there can be no doubt that there is a large-displacement, gloriously powerful, multi-cylindere masterpiece under the 760Li's hood.

8-speed STEPTRONIC automatic transmission (standard all models)

With all the Series' engines, this ultimate automatic transmission brings smooth shifting, sportiness and efficiency to an ultimate level of perfection. Previously, it was found only in the 12-cylinder 760Li and the 750Li Active-hybrid.

The 8-speed's "taller" cruising gears help temper fuel consumption and carbon-dioxide emissions, and enhance quietness. And its wider spread of ratios from lowest to highest gear enhances acceleration and response across the range of driving speeds. This aspect of the 7 Series, too, belongs to the BMW EfficientDynamics concept.

Four versions are employed: 8 HP 45 in 740, higher-capacity 8 HP 70 in 750 models, and still higher-capacity 8 HP 90 in 760Li. In the Active-hybrid 7, a special 8 HP 70H version incorporates the electric motor/generator and adds other specific elements as described next. All have the same ratios and essentially the

2 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

same operational characteristics, including such a high level of smoothness that drivers have to “try” to tell when the transmission shifts.

BMW Full Hybrid 2.0 power system (ActiveHybrid 7)

In hybrid power systems, a primary distinction is between “mild” and “full.” Both employ a combustion engine and electric motor(s), the latter providing a portion of the vehicle’s motive power and operating as generator(s) to charge a high-voltage (HV) battery pack.

“Mild” denotes employing an electric motor to augment the combustion engine’s power and charge the HV batteries; mild hybrids cannot be driven on electric power alone.

A “full” hybrid, by contrast, can be driven under certain conditions on electric power alone. BMW’s first hybrid models were the 2010-11 ActiveHybrid X6, with a highly complex full-hybrid system; and the ActiveHybrid 7, with a less complex mild-hybrid system. Those contrasting models ran their course, giving BMW and customers extensive experience with hybrid technology in normal day-to-day use.

Full Hybrid 2.0 was introduced in the 2012 ActiveHybrid 5; for 2013 it also appears in the ActiveHybrid 3 and 7. In its layout of components, it is more similar to the previous 7’s mild system; yet it is a full-hybrid system that can operate under certain conditions on pure electric power. As such, it is an important step forward; and it incorporates innovations that go well beyond

the power system itself – innovations that help the driver obtain the most fuel-saving benefit from hybrid power.

Basic elements of the power system. Hybrid power systems take a variety of forms – Toyota’s full, Honda’s mild, Chevrolet Volt’s plug-in full hybrid with its stronger accent on electric power, etc. Full Hybrid 2.0 is BMW’s latest, most highly developed concept. Its basic elements are:

- **N55 6-cylinder TwinPower Turbo engine** – essentially as in other BMW models, but with hybrid-specific modifications.
- **Electric motor/generator**, integrated into automatic transmission. Powers the vehicle in electric-only driving, boosts the engine for acceleration, charges the high-voltage battery pack via a bidirectional inverter, and supplies the low-voltage vehicle electrical system via a DC/DC converter. It also applies torque to transmission gears for smooth shifting. Delivers up to 55 hp.
- **Special 8-speed automatic transmission** with no torque converter; adds wet clutch for decoupling engine during all-electric driving, utilizes existing elements for creep and vehicle startup from rest (this is also a clutch function).
- **High-voltage battery pack** – carried in a reinforced steel housing at the front of the trunk compartment. Powers the electric motor/generator via bidirectional inverter; is charged by the electric motor/generator, also via inverter.
- **Low-voltage power supply** – from the high-voltage battery pack via DC/DC converter

- **Low- and high-voltage power management**
- **Hybrid-specific Brake Energy Regeneration.** Via the electric motor/generator in the automatic transmission, charging of the high-voltage battery pack occurs during deceleration or braking.

In the ActiveHybrid 7, the total system output of 350 hp powers the luxurious sedan to performance essentially equal to that of the “regular” 740Li, and delivers fuel efficiency about 14% higher in European testing. Official EPA mileage ratings are not available at time of publication.

For full details on the Full Hybrid 2.0 system, see the 5 Series section of **Fast Facts 2012** or, once available, **BMW features** section of this 2013 edition.

Advanced suspension system: BMW’s leading technology gets even better
Improving both driving dynamics and riding comfort – traditionally conflicting attributes – is always the core goal of the transition to a new BMW generation.

Just as BMW’s turbocharged engines combine sporting performance with luxurious refinement, sophisticated suspension technology endows the 7 with uniquely agile handling for a substantial luxury automobile, yet also an exceptional level of riding comfort. Beyond these “basics,” these cars allow the driver to decide at any time what priority to assign to either of these attributes via the newly expanded Driving Dynamics Control. Multiple drivers can even program the vehicle to their various preferences.

Multi-link front suspension

Until recently, BMW front suspension systems have been of the **strut** type, in which a long, essentially vertical strut carries the shock absorber and spring and participates in the suspension geometry – that is, along with the lower arms it helps determine the angles wheels take as they move up and down. With the double-pivot lower arms of current BMWs, the strut concept has been taken to a high level of sophistication in handling, straight-ahead stability and riding comfort. This double-pivot strut-type front suspension continues on 1 and 3 Series, Z4, X1 and X3 vehicle lines.

In recent years, BMW has progressively introduced a type of front suspension that achieves even better results, particularly in larger, relatively heavy and very powerful vehicles. Logically, this system is found on the 5, 6 and 7 Series; their derivatives M5 and M6; and the X5 and X6.

In place of the strut, this system has an upper lateral A-arm. The double-pivot lower arms are retained, so that on each side there are three links or arms. Thus while the two lower arms preserve the double-pivot strut system’s advantages, the upper arm further optimizes the system’s handling and riding comfort by relieving the strut of its geometric duties.

Detailed descriptions of these two types of BMW front suspension are found in **BMW features**.

Aluminum components

In another BMW tradition – the use of aluminum suspension components to reduce unsprung

7 Series key features

Except as noted, all current 7 Series models offer the following features:

weight and thus improve road adhesion and riding comfort – most major elements are aluminum:

- Upper and lower lateral links (1 upper, 2 lower⁶ per side)
- Steering knuckle/vertical link (1 per side).

The front brake calipers, which are also unsprung weight, are of aluminum/steel construction. The suspension subframe, which is sprung weight but important in terms of front/rear weight distribution and total vehicle weight, is aluminum and there is also an aluminum thrust plate here for additional rigidity where suspension and braking forces feed into the body structure.

Further advantages are found in certain details:

- The trailing (forward) lower arm has a **rubber/hydraulic cushion**, which provides the most effective “compliance” for reducing road shock.
- The transverse (rearward) lower arm is cushioned by a **finely tuned rubber element** that fosters direct and precise response to the steering wheel in curves and corners.

In xDrive models, forged steel replaces the aluminum for extra strength.

Rear suspension: also state-of-the-art

Like the front, the rear suspension is a multi-link system; BMW calls it Integral for a small, essentially vertical Integral Link connecting the upper and lower lateral control planes.

The Integral concept has been in use for some years in BMW automobiles, appearing in 4-link form in the earlier 5, and 7 Series.

With an additional link per side, the Integral V system moves one step closer to perfection in terms of handling response, road adhesion and riding comfort. Here too, most major elements are aluminum:

- Upper and lower lateral links (2 upper, 1 lower per side)
- Integral (vertical) link (1 per side)
- Wheel carrier (1 per side).

The rear suspension subframe is also of aluminum.

For 2013, the 7 Series’ front and rear suspension systems have been refined in detail for an even better blend of handling precision and riding comfort. To this end, BMW engineers applied modified balljoints, firmer shock absorbers, new rubber bushings and a methodical review/update of the entire systems’ elastokinematics. Additionally, all models now have **self-leveling air springs** at the rear, automatically compensating for loads carried in the rear seat and/or trunk; previously, this feature was included only on long-wheelbase models.

Standard Series-wide, and further refined: Dynamic Damping Control

This system of electronically controlled shock absorbers is an evolution of BMW’s familiar Electronic Damping Control (EDC). DDC controls the shock absorbers to any level of firmness between their softest and firmest settings, precisely adapting to road conditions and the driver’s demands at any given moment. Ride firmness is always at the optimum level for current road conditions, vehicle speed and the load the vehicle is carrying (again, passengers and luggage). On smooth roads, the shocks

are kept at the softest appropriate setting; in corners, they are instantly adjusted to a firmer, just-right level. And when the vehicle encounters any irregular road surface, they adjust to the optimum firmness level to control ride motions, preserve riding comfort and maintain adhesion to the road.

In its primary refinement over EDC, DDC varies the shock absorbers’ bounce and rebound strokes (wheel moving upward and downward) steplessly and independently; this results in a unique combination of desirable firmness (for handling) and superior comfort on bumpy road surfaces. For 2013, DDC has been enhanced via a greater range of adjustment between its firmest and softest settings.

Dynamic Damping Control and other versions of this BMW technology are described in **BMW features**. At present, DDC is shared with the 5 and 6 Series plus, in specific BMW M form, the new M5 and M6.

Electric power steering (740/750 RWD models)

Generating steering assist electronically instead of hydraulically, electric power steering (EPS) has always been employed on the Z4; with phase-ins over 2011-13 it’s now in the 5, 6 and 7 Series as well as 3 Series Sedans, X1 and X3. Its fundamental advantage is that EPS draws engine power only when the steering wheel is being turned, rather than (via a hydraulic pump) anytime the engine is running. A secondary advantage is that the steering’s return action can be actively programmed into the system for optimum feel.

In the 5, 6 and 7 Series, the EPS retains the mildly variable steering ratio and variable power assist of predecessors’ hydraulic power steering. The electric servo motor that supplies the power assist is mounted parallel to the steering rack and thus provides excellent feel and great overall rigidity for the system as a whole.

In the xDrive models, a hydraulic power-steering system continues but gets special valving that reduces the pump’s power draw. Thus this system shares some of EPS’s energy savings.

Integral Active Steering: BMW advances revolution another notch

(Standard 760Li, optional RWD, non-hybrid 740/750 models) Expanding on the familiar concept of Active Steering (which electronically varies the steering ratio according to vehicle speed and is available on 1 and 3 Series models), this advanced option adds **rear-wheel steering** for further benefits. Available as listed above, Integral Active Steering is described in **BMW features**. Like the standard steering, for ‘13 the 740/750 models’ Integral system’s front steering is electrically assisted.

Generously dimensioned disc brakes with aluminum/cast-iron composite rotors

In this BMW-patented construction, the brake rotor (disc) consists of two pieces: the high-carbon cast-iron outer portion, which functions conventionally as the surface onto which the brake pads grip to slow or stop

6 – On xDrive models, these links are of forged steel.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

the vehicle; and an aluminum “hat” in the center, which mounts the rotor to the vehicle. Its main advantage is reduced unsprung weight, complementing the aluminum suspension in benefiting ride comfort and road adhesion. Employed for the 7 Series’ front brakes, this construction is described in more detail in **BMW features**.

Like other current BMW models, the 7 Series’ DSC system includes Start-off Assistant, which when the vehicle is stopped facing uphill, briefly holds the brakes to prevent rollback after the pedal is released. Automatic Hold, standard on the 7 Series since ‘01, adds the ability to hold the brakes for an indefinite time anytime the vehicle is stopped, preventing rollback or creep; it can be activated or de-activated by the driver with a console button.

Driving Dynamics Control: the driver chooses vehicle dynamics

(standard all models)

Adjacent to the E-shift lever is the Driving Dynamics Control selector, now providing four settings (up from the previous two) that tailor vehicle characteristics to different drivers, moods or driving conditions. For all models except 760Li, the settings are now ECO PRO, Comfort, Comfort+ and Sport, affecting these vehicle-dynamics parameters:

- Shock-absorber firmness (within the Dynamic Damping Control system)
- Engine throttle response
- Transmission shift characteristics
- Power-steering assist level.

An additional setting, Sport+, retains the Sport settings for these parameters but switches

Dynamic Stability Control to Dynamic Traction Control, in which DSC’s intervention threshold is raised; one effect of this setting is more surefooted starting off from rest on snow.

The ECO PRO mode, being phased in to other BMW lines since 2011, now joins the 7 Series DDC as well. Described in more detail in **BMW features**, this modifies vehicle behavior in many ways and encourages energy-conscious driver behavior as well:

Climate control. Optimizes system operation for energy conservation, at some sacrifice in comfort –

- In cooling, less dehumidification of interior air; a/c compressor runs less
- In heating, reduced operation of engine in modes that give off a lot of heat; heating of exterior mirrors and front seats reduced
- In cooling or heating, periods of stopped engine are maximized.

The user can manually revert the climate system to Comfort mode, in which case the vehicle captures this “mixed mode” operation for subsequent ECO PRO operation.

Powertrain. Pressing down on the accelerator, the driver encounters a “plateau” of resistance at the end of the high-efficiency range. (However, flooring the pedal does produce maximum acceleration.) Transmission upshifts and downshifts occur at lower speeds.

Rewards and encouragement.

Rewards: In the instrument cluster’s digital display, the increase in tank range (miles to

fillup) due to ECO PRO operation is shown. Encouragement: In the iDrive display, the driver is shown ECO PRO Tips on how to improve driving style with an eye to efficiency, such as “accelerate moderately.” These are based on the driver’s actual driving style as measured by the system.

Clearly the vehicle’s driving dynamics can be widely affected by these different calibrations of so many elements. In addition, via iDrive, drivers can program their preferences for all five parameters into the Normal setting for a personal, instantly recallable mode.

Another control in this area affects Dynamic Stability Control alone, allowing the driver the possibility of selecting DSC modes independently of the other parameters. A brief push on this button switches the system to Dynamic Traction Control. A long push on the same button de-activates DSC altogether, though one function (antilock braking) is always active.

xDrive: BMW’s “intelligent” all-wheel drive system (all xDrive models)

Increasingly, customers – especially those who live in, or drive to, snowy winter conditions – choose all-wheel drive. Current 3, 5, 6 and 7 Series xDrive and most Sports Activity models incorporate this advanced AWD and traction system; for ‘13 BMW extends it to the 6-cylinder 740Li. The concept and operation of xDrive are explained in **BMW features**.

Though the system is biased toward rear-wheel drive under most normal driving conditions,

BMW’s Integrated Chassis Management (ICM) identifies and limits understeer by shifting torque rearward while preserving the stability for which xDrive has been so widely recognized. As a second step, ICM can then apply a precise combination of throttle and individual rear-corner braking in order to maintain neutral handling in a variety of road-surface conditions.

Every xDrive model incorporates **Hill Descent Control**, which when activated allows the driver to descend slopes in slippery conditions while maintaining a preset speed.

Wheels and tires: 18- or 19-in. standard, 19- or 20-in. optional, run-flat across the board

The selection of standard and optional wheel designs available on the nine 7 Series models for ‘13 bespeaks these automobiles’ exclusivity and style: in all, BMW offers –

- Ten wheel designs (up from nine in ‘12), each carefully tailored to character of models and packages
- 18- and 19-in. equipment with performance all-season tires in equal front/rear sizes
- 19- and 20-in. equipment with performance tires in differentiated front/rear sizes.

The table on the next pages summarizes the 7 Series’ available wheel-and-tire combinations.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

Model	Wheel size & design / code	Run-flat tires ^{3,7}	Changes for '13
All 740i/Li, standard	18 x 8.5 V Spoke #425 2FR	245/50R-18 performance all-season	New wheel design
760Li standard, all 740i/Li optional	19 x 8.5 Multi-Spoke #235 2H1	245/45R-19 performance all-season	Wheels: new 760Li design Wheels & tires: 760Li performance all-season, vs. performance before
ActiveHybrid 7 optional	19 x 8.5 Streamline #357 2AR	245/45R-19 performance all-season	New model, new wheel design
All 750i/Li, standard	19 x 8.5 V Spoke #426 2FS	245/45R-19 performance all-season	New wheel design
750i/Li & 740Li xDrive M Sport Package	19 x 8.5 M V Spoke #302M 2NG	245/45R-19 performance all-season	No changes for 750i/Li; 740Li xDrive is new model
740i/Li & 750i/Li RWD M Sport Pkg.; 760Li M Sport Pkg. alternate	19 x 8.5 front/19 x 9.5 rear M V Spoke #302M 2NW	245/45R-19 front / 275/40R-19 rear performance	No changes; 740Li ActiveHybrid is new model; new offering for 760Li
All models BMW Individual Composition	19 x 8.5 front/19 x 9.5 rear BMW Ind. V Spoke #228I 2MB	245/45R-19 front / 275/40R-19 rear performance	New wheel design
760Li optional	20 x 8.5 front/20 x 10.0 rear Double Spoke #253 2BX	245/40R-20 front / 275/35R-20 rear performance	New wheel design, new option
760Li M Sport Pkg.; all 740i/Li & 750i/Li except ActiveHybrid, M Sport Pkg. upgrade	20 x 8.5 front/20 x 10.0 rear M Double Spoke #303M 2NX	245/40R-20 front / 275/35R-20 rear performance	No changes
All except 740Li Active Hybrid, BMW Individual Composition upgrade	20 x 8.5 front/20 x 10.0 rear Individual V Spoke #301 2NV	245/40R-20 front / 275/35R-20 rear performance	No changes

Comfort & convenience

Advanced, luxurious, inviting: the 7 Series interior

Every 7 Series model provides abundant knee, head and elbow room for front and rear occupants. Interior ambiance is exclusive, high in quality and advanced in its amenities and functions. Contours, color coordination and materials symbolize taste and harmony. With its center stack lightly angled toward the driver, the control center promotes the driver's intuitive mastery of the vehicle. Yet also typically BMW, this interior isn't just for the driver; its concept, layout, technology and design focus equally on passengers' well-being.

The generous space and harmonious design are enhanced

by horizontal color gradations pervading the entire cabin. High-quality materials and meticulous workmanship communicate the innate precision of these automobiles; details such as visible seams on the dash and door ledges, and double-framed central air outlets, are evidence of passionate devotion to details. Leatherette covering the upper instrument-panel surfaces and upper door surfaces/ledges of 740i/Li and 750i/Li models was developed to be as close to leather as can be imagined – and yet soft Nappa leather for these surfaces, with elegant stitching, is available optionally in the 740s (in combination with the optional Nappa upholstery) and 750s (as a stand-alone option). This is standard in the 760Li. As always in BMWs, harmony

of design and function is visible everywhere: for example, in the integration of door handles into the door panels' chrome trim lines, or the door pulls as part of their contrasting trim material. Speaking of which: each model offers at least two regular choices of wood trim and four Nappa-leather interior color schemes; in addition to these, all models offer –

- Lavish BMW Individual trims at extra cost
- The Full Merino leather of the BMW Individual Composition, now also available independently of the Composition; six color schemes
- Even a steering wheel with inlaid wood in its rim.

The 740i/Li standard interior is in Dakota leather with three color schemes.

All these refinements and choices provide the interior counterpoint to the 13 available exterior colors⁸, and enable customers to highlight classic elegance, sportiness or sheer luxury according to their personal tastes and preferences.

- 3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 7 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.
- 7 – With their W speed rating, all-season tires on the 7 Series can be classified as "performance all-season."
- 8 – Standard colors, including the Carbon Black that's available in combination with M Sport Package. In addition, four BMW Individual Xirallic colors are offered, now with or without the BMW Individual Composition; the ActiveHybrid also offers a signature color, Liquid Blue Metallic.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

Stepless door checks

Even with the excellent 2- or 3-position door checks of other BMWs, sometimes we wish there were another position in which to hold the door open. The 7 Series' door checks, unique in the BMW line, are hydraulic and stepless, holding the door open at any position to which the user opens it; they are effective with the vehicle pointing uphill up to 10°, or leaning to one side or the other up to 6°.

Soft-close doors are available as part of the Executive Package for 740i/Li models, otherwise standard; see **BMW features** for information on this amenity.

Effective and elegant interior lighting

Elegant light bars set accents on the door handles, door panels and storage pockets. Also standard is a special way of distributing ambient lighting, whose rays are "broken" by a prism structure to bathe certain interior surfaces in a subtle glow. This harmonious illumination not only helps occupants orient themselves in the cabin at night, but also enhances the interior's high-quality character.

7 Series lighting includes –

- Illuminated doorsill trims
- Exit/entry lighting in door panels (in addition to ground lighting/handle illumination at the exterior door handles)
- Ambient lighting: the familiar LEDs in the ceiling, bathing the front center console and rear seating area with their soft illumination at night; also on door panels to illuminate door handles and storage pockets, back sides of front backrests. New for '13: in B-pillars and a

color switch providing a choice of white or orange.

- Glovebox, center-console and trunk lighting
- Separately switched front and rear reading lamps
- Front/rear footwell illumination.

Multi-function tilt/telescopic steering wheel

BMW's multi-function steering wheel, described in **BMW features**, appears in its most elaborate form in the 7 Series. It is power-adjustable for tilt (height) and reach, included in the driver's memory settings, and equipped with auto tilt-away for convenience of entry and exit. (See **BMW features** for an explanation of tilt-away and other Series' differing tilt-up function.) All steering-wheel designs have three spokes:

- **Sport**, now standard in all models; extra-thick rim, galvanized trim at bottom of center pad; extensive multi-function controls on either side of center pad
- **M Sport**, included with M Sport Package of all models; extra-thick rim, M logo on bottom spoke; multi-function controls on either side of center pad, shift paddles
- **Sport with inlaid wood** in rim and BMW Individual logo on bottom spoke; offered as –
 - Stand-alone option in combination with BMW Individual Composition
 - Alternative to heated wheel with 740i/Li and 750i/Li Cold Weather Package.

This wheel is not available with heating or in combination with M Sport Package.

Auto-dimming interior and exterior mirrors

Standard, including power-folding exterior mirrors, useful for parking in tight spots or going through some car washes.

20-way front Multi-Contour seats

BMW's lavish 20-way Multi-Contour seats continue as standard equipment in all but 740i/Li models, and are available as part of the 740i/Li Luxury Seating Package. With new, slimmer and lighter construction for '13, their power adjustments remain the same and include –

- Fore-aft
- Head-restraint height
- Seat height
- Seat (cushion) angle
- Backrest angle
- Upper-backrest angle, separately from main backrest angle
- Adjustable backrest width
- Adjustable thigh support
- Lumbar-support firmness
- Lumbar-support height.

Additionally, the backrest automatically expands to its widest position for ease of exit and entry, then returns to its set position after re-entry. The widening action occurs when a door is opened (either side), or when the safety belt is unfastened (passenger's seat only).

Additional front seating features are optional in 740i/Li and 750i/Li models via the Executive Package or as stand-alones; and are standard in the 760Li:

- **Active Ventilation** via multiple internal fans and perforated seating leather.
- **Active Support**, an anti-fatigue function.

The following features are standard in all models:

Active head restraints provide safety benefits described in the **BMW features** section. The distance of these head restraints from the occupant's head may be varied via the upper-backrest adjustment; they also include adjustable side extensions that help support the occupant's head when used as headrests, as for example when sleeping.

2-position (per user) memory is provided for the driver (740i/Li standard front seats) or both front seats (Multi-Contour seats, optional 740i/Li and standard other models). The power controls are positioned on the door armrests, memory controls on the door panels. Also included with the Multi-Contour seats is a press-to-activate "gentleman" feature that enables the driver to adjust the front passenger's seat.

Further details on the Comfort seats are found in **BMW features**.

Heated front seats with special features (standard all models)

The 3-stage heating is controlled by switches in the center stack. Beyond the familiar 3-stage heating, the system incorporates two functional and sophisticated capabilities.

- **Rapid heating**. Each seat has four heating zones: center of cushion and backrest, edges of cushion and backrest. When the heating is first switched on, the center zones heat at full power almost to their regulated heat level; then the outer zones are brought up to the regulated level.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

- **Heating balance.** Relative cushion and backrest temperatures can be varied by as much as 5° from each other via the Climate menu selection in the main menu; the heating levels are depicted in a graphic of the seat as this is done. Included in Key Memory.

Clear, intuitive control concept for greater driving pleasure and comfort

Control of the many interior functions and amenities is via a carefully thought-out overall concept. To begin with the simplest aspect, ample storage is provided by a spacious glove compartment, bins in the door panels and pockets on the front-seat backrests. Two cupholders are provided on the front center console.

The basic concept for all controls rests upon a philosophy of a clear, functionally logical arrangement of the entire interior. Thus driving-related functions are all on the driver's side, comfort-related functions around the center. This principle goes for the placement of buttons, keys and levers around the cockpit as well as controls on the steering wheel, where those for cruise control are separated from those for the audio and phone systems.

Analogous to this "horizontal" division of functions is the arrangement of all displays in a more "vertical" separation. In the upper areas – and thus at about the driver's eye level – are the primary displays, such as the speedometer and tachometer. Below that are less frequently viewed instruments like the fuel and oil-temperature gauges.

At a still lower level are actual controls, optimally accessible and mostly operable without looking at them such as the turn-signal and low/high-beam/flasher stalks. Controls that need to be seen to be used are generally grouped together, for example those for the driver-assistance functions clustered around the main lighting control: this too is logical, as all these support the driver's need to perceive the vehicle's surroundings and situations.

Everything at a glance: instrument cluster in Black Panel technology

The 7 Series instrument cluster is a high-resolution Black Panel display, in which four classic circular instruments are most prominent. Other displays and readouts relevant to driving – GPS Navigation, vehicle-monitoring functions, upcoming service requirements and other information – also appear here in their various (and function-related) graphic forms.

In "dormant" state, this display is a mostly blank black form, defined by its chrome-toned periphery and including only pointer needles, scale markings and the tachometer's red warning zone within it (all in subdued illumination). The circular instruments' numerals, as well as the integrated displays for current fuel economy and range on remaining fuel, are entirely electronic, and not visible until a door is opened; then they illuminate.

So it is that the advantages of mechanical and electronic displays are ideally combined – with fascinating visual and graphic effects. As the user enters the

vehicle, the circular instruments' "chrome rings," until now open at the bottom, close and become brighter. Once the ignition is activated (upon pressing the start/stop button), the numerals plus all other displays and warnings illuminate. As the engine starts, functions that have been previously activated by the driver are then revealed as well.

The instrument cluster interacts in many ways with the iDrive control display and the Head-up Display (standard 760Li, otherwise optional). According to selected function, users can call up phone numbers or radio stations via the steering-wheel controls. The cluster also augments the iDrive GPS Navigation display (Navigation is standard) with a capability called High Guiding: Clear, realistic arrow symbols give the driver directions to change lanes or make a turn at an obscured intersection. If the Head-up Display is activated, the relevant directions appear primarily there; otherwise they appear in the instrument cluster.

For '13, iDrive's display graphics are newly enabled and enhanced by a 1.3-GB processor with 3D graphics card; Voice Command has been updated and enhanced.

Current climate-control settings are indicated in a second Black Panel display in the center stack, along with the system's controls – all of them, as users need not go into iDrive for any climate settings.

Special ActiveHybrid instrumentation

Specific displays are provided in the instrument cluster and iDrive control display of the new

ActiveHybrid 7:

- Tachometer – indications for readiness (to drive even if combustion engine is not running), electric-only driving, regeneration, engine running via tach needle, electric boost to engine.
- iDrive – in VEHICLE INFO section, HYBRID menu, which replaces non-hybrid models' EfficientDynamics menu: fuel consumption/hybrid utilization, energy flow combustion engine/electric power.

For full details on the Full Hybrid 2.0 system, see the 5 Series section of **Fast Facts 2012** or, once available, **BMW features** section of this 2013 edition.

Driving Dynamics Control

Adjacent to the E-shift lever are the Driving Dynamics Control selector (logically, on the driver's side) and the iDrive controller. As newly re-ordered and expanded for '13 on all 740/750 models, Driving Dynamics Control provides four settings that tailor vehicle characteristics to different drivers, one driver's different moods, driving conditions – or all of the above. The settings are ECO PRO (new), Comfort, Comfort+ (new), and Sport; as before, Sport+ retains the Sport settings but switches Dynamic Stability Control to its Dynamic Traction mode. The Driving Dynamics Control appears in a wide range of current models; see **BMW features** for details.

Hard drive for data storage: high capacity, fast retrieval

An 80-GB hard drive provides data storage for the iDrive system, GPS Navigation, entertainment systems, Voice Command

7 Series key features

Except as noted, all current 7 Series models offer the following features:

and phone system. As this also appears in all other models with iDrive, it is described in the **BMW features**.

iDrive with enhanced graphics

The 7 Series' iDrive system incorporates dramatic enhancements that will also appear in other Series as updates are introduced. Its user interface includes even more attractive graphics, with higher resolution, higher contrast and 3-dimensional effects throughout; individual menus, for example, are presented in virtual-3D spaces. A more powerful, 1.3-GHz processor and dedicated 3D graphics card enable new levels of animation and dynamic transitions between menus and options.

Along with this general iDrive evolution, GPS Navigation displays in particular have been revised and enhanced, with map displays and route guidance now sharper and more brilliance. Additional function bars, superimposed as an extension of the initial map that has been selected, open up additional navigation and driving options that allow –

- Advanced Real Time Traffic Information (ARTTI) and weather updates to be superimposed
- Points of interest to be displayed
- Maps to be switched quickly and simply from top to perspective view.

Similar menu-bar strategies appear in other iDrive menu areas, such as multimedia, where the control bars enable convenient selection of a wide range of audio sources. Additionally, special functions can be enjoyed directly from users' points-of-interest

entries. Depending on the information one has stored about a point of interest, users can call up the place, read any stored information, alter the map view and even call there if the phone number is part of the stored data.

The iDrive split-screen setup also adds new functions. Upon entering a destination by city and address, that destination can then be displayed in the map view on the split screen; then the zoom function can be used to verify that the destination is the intended one.

For the navigation process itself, the familiar arrow guidance in a split screen is augmented by a high-level guidance feature. This is automatically activated when the driver reaches a certain point ahead of the next navigation instruction, which varies according to the category of road. The arrow display turns into a schematic, perspective view of the surroundings, evolving as one continues toward the next intersection, junction or guidance change; a dynamic vehicle icon pinpoints the car's current position relative to it.

Voice-to-text and other new capabilities

Other enhancements include expanded speech recognition and voice control to complete the portfolio of office functions provided by BMW ConnectedDrive. Among the new capabilities is a dictation function, which lets drivers dictate text freely and compose short text-based messages simply by saying what they wish to write. Once a dictation is complete, the text appears in the display; drivers also have simple-to-use, speech-based

editing tools for putting final touches to e-mails and text messages easily and – most importantly – safely.

Further expansions of voice control include activating additional menu functions via simplified voice command. The system is able to recognize contact data irrespective of format; even independently of first name and surname order. Two phones can be paired at the same time and their data transferred to a shared list that's then available for phone calls and sending e-mails.

4-zone automatic climate control: optimum comfort for all occupants

All U.S. 7 Series models come standard with 4-zone climate control, which affords rear-seat passengers a degree of control over their climate comfort similar to that of front-seat occupants. Beyond the dual-zone system that's standard in most other current BMW models, the 7 Series system includes –

- Dash center air outlets with a choice of direct or draft-free air delivery
- Separate rear blower
- Additional air outlets in B-pillars
- Full rear control panel with left/right temperature and air-distribution settings
- Individual heating elements in the foot space
- Separate automatic programs front/rear.

All climate-control functions (except seat-heating balance, rear climate control on/off and automatic ventilation) are available from instrument-panel controls; thus it's unnecessary to use iDrive menus for frequently used adjustments.

Audio systems

Previously, there were two; for '13, three systems are offered. These are available as follows:

740i/Li standard 12-speaker system. Includes a center front fill speaker, two subwoofers, a DVD player and an auxiliary audio input.

Premium 16-speaker system, included in the Executive Package of 740i/Li and now standard in 750i/Li models. Continues as standard in 760Li. This outstanding system, option code 677 and also available in other Series, is described in **BMW features**.

Bang & Olufsen audiophile system, also 16-speaker but taking this Series' audio offerings to a higher-than-ever level. First seen in the '12 6 Series, now available in 5 and 7 Series, M5 and M6.

Other available audio/entertainment features include –

- **6-disc DVD changer,** included in the newly upgraded Rear Entertainment Package of all 740i/Li and 750i/Li models. Standard in 760Li.
- **Rear Entertainment Package,** upgraded via adoption of the new Rear Seat Entertainment system Professional, with iDrive control. A 6-disc DVD changer is also included in this Package. In the 760Li the DVD changer is standard, the Entertainment System a stand-alone.
- **iPod/USB Adapter,** standard in all models.
- **BMW Apps,** newly included in the Executive Package of all models except 760Li, where it is standard along with **Smart-phone Integration**.
- **Satellite Radio,** including 1-year subscription. Newly for '13, standard in all models.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

For details on these features and systems, see **BMW features**.

For specific availability in the 7 Series, see **packages & options** in this section.

Upholstery and interior trim

740i and 740Li (including ActiveHybrid) continue with Dakota leather upholstery. This is a fine leather grade, though somewhat less lavish than the Nappa that's standard in other models; it's also the regular 5 Series leather. Available in Oyster/Black, Light Saddle and Black, Dakota is applied to the seat facings, door panels and head restraints.

All other models come standard with an extended version of Nappa leather, a traditional premium grade, as the main upholstery material. In this interior, also optional for the 740s, Nappa appears on the seat facings, door armrests and areas above them, head restraints and center armrest; other leather grades are used for certain areas, such as the rear sides of front seats' backrests and steering wheel. Five color schemes – Oyster, Saddle/Black and Black, plus new Veneto Beige and Ivory White/Black – are available in all models.

In all 740/750 models, the standard upper dash section and door panels are trimmed in an amazingly leather-like synthetic material. Included with the 740i/Li Nappa option are Walknappa leather-trimmed upper dash and door panels; these leather elements are available in 750i/Li models as part of the Executive Package, and standard in the 760Li.

The standard wood trim in all 740i/Li and 750i/Li models, appearing on the dash, console

and doors, is dark and elegant Fine Line High-gloss; lighter Ash Grain and Fine Line Matte are optional at no extra cost. All wood trims can be combined with any interior color.

In the 760Li, the ambience is further enriched by standard Burl Walnut with contrasting wood inlays; the lighter Ash Grain is available at no extra cost here as in the 740s and 750s. Newly for '13, the Burl Walnut with inlays is also available in all 740/750 models at no extra cost.

Yet another 760Li distinction is standard ceramic trim on the shift knob, iDrive controller surround, and audio and climate controls; these touches are optional in all other models.

The BMW Individual Composition, now a P1 option for all models, includes a Full Merino leather interior – Merino being BMW's most special leather grade – plus many other special amenities and touches. Among these are three available special BMW Individual trim materials: Piano Black, Dark Red Sycamore and Walnut Honey. These are now also available as P1 stand-alone options in all models, independently of the Composition).

For further details and availability of these features, see **options & packages**.

Almost fanatical attention to detail: refined Contour moonroof design

A striking esthetic subtlety is delivered by a refined moonroof design. Its 60 x 92-cm (23.6 x 36.2-in.) glass area makes the interior feel brighter and roomier; its front edge is curved parallel

to the roof's front edge (i.e. the windshield's top edge) for an unusual and subtle design touch. Functional improvements figure in this concept too: a powered interior shade replaces the former manual one, obviating the need for a handgrip recess. The forward wind deflector rises to different heights on the basis of vehicle speed, more effectively taming potential low-speed air drumming or high-speed wind roar.

740Li, 750Li, 760Li: lavish space for rear-seat passengers

If the standard-wheelbase 740i and 750i already offer generous interior space, the long-wheelbase 740i/750i/760Li provide truly lavish accommodations for rear-seat passengers. "L" doesn't refer only to length: rather, this model also has its own, flatter roofline, providing 0.4 in. of additional rear head room as well as the extra 5.6 in. of rear leg room. Thus BMW's typical Joy of Driving is complemented by a greater enjoyment of Being Driven, for example by a chauffeur.

Even this extra space can be further enhanced, by features that are standard in the 760Li and optional in the 740i/750Li models. One is individual left and right Comfort seats with multiple adjustments, including fore-aft (70 mm/2.76-in. range), cushion and backrest angles, and head-restraint positions. Others are Active Ventilation, seat heating and "massaging" rear seats. The Comfort seats, whose center divider forms a more intimate 4-seat configuration for the interior, are standard in the

760Li; so are the ventilation and rear-seat heating. Optional availability of these amenities in other models, plus the option of deleting the rear Comfort seats in the 760Li, are detailed in **options & packages**.

A Rear Seat Entertainment system, newly upgraded, is available in all models; details and option strategy are in **packages & options**.

Integrated Owner's Manual

The 7 Series' amazing spectrum of features, technologies and capabilities is rounded out by the Integrated Owner's Manual (IOM) accessed through the iDrive system. This new-age amenity, an appropriate application of computer-generated text, graphics and animations, made its debut in the 7 Series in '09; it's now included in other Series. For details, see **BMW features**.

Safety & security

Generally, the 7 Series is equipped with the same range of safety features as other BMW Sedans; yet like any new-generation BMW platform, it incorporates the latest and best active- and passive-safety engineering and technology.

Active safety

The most significant safety news is on the active side, in that a number of new features and systems, seen first on the 7 Series and now offered on other Series as well, are available to enhance the driver's ability to avoid accidents. The following are standard in the 760Li, optional via the Driver Assistance or new Lighting

7 Series key features

Except as noted, all current 7 Series models offer the following features:

Package in all 740s and 750s:

- **Automatic High Beams** – effectively improves the driver's forward vision at night by making it more likely that the high beams will be used when it is safe and advantageous to do so.
- **Active Blind Spot Detection** – Via radar sensors, monitors traffic in adjacent lanes and displays warning in an exterior mirror if there is a vehicle in a critical area that may not be covered by the mirror itself. If driver activates turn signal, vibrates the steering wheel.
- **Lane Departure Warning** – Employing a camera near the interior rearview mirror, detects when vehicle begins to move across a lane marking without turn signals activated, and vibrates the steering wheel. Adds Collision Mitigation for '13; see **packages & options**.
- **Side- and Top-view cameras** – the side-view cameras provide views to sides at front of vehicle that driver couldn't necessarily see directly, such as when pulling out into a busy street. Top-view cameras, positioned in the exterior mirror housings, enable a "plan view" of the entire vehicle and its surroundings.

Further features that assist the driver are:

- **Rear-view camera** – adds a wide-angle view to rear of vehicle, plus lines depicting vehicle trajectory, to Park Distance Control. Both are now standard on all models.
- **Integral Active Steering** – makes for more agile low- to medium-speed maneuvering, and enhances the 7 Series'

inherent directional stability at higher speeds by slight, precise countersteering of the rear wheels. The front-wheel aspect of Integral Active Steering also contributes to stability at speed by progressively increasing the steering ratio up to approximately 75 mph. Optional on 740i/Li non-hybrid and non-xDrive 740/750 models; standard on 760Li.

Optional in all models is:

- **Night Vision with Pedestrian Detection** – Pedestrian Detection to help make driver aware of pedestrians or critters near the roadway. Stand-alone option on all models.

All these features are described in greater detail in **BMW features**.

New for 2013: Attention Assistant, Enhanced Active Cruise Control

As a new aspect of BMW's overall Active Protection system, this function continuously analyzes the driver's behavior on the basis of various input signals such as steering angle, road speed and engine parameters. If the system progressively detects telltale signs of driver fatigue, the iDrive display encourages the driver to take a break by displaying a coffee-cup symbol.

Optional on all 7 Series models, Active Cruise Control includes Collision Warning, plus Stop & Go functionality that enables it to brake the vehicle to a full stop if traffic conditions so dictate. For 2013, this option adds Collision Mitigation; this is explained in **packages & options**.

Passive safety

Additional passive-safety features standard in 7 Series

The 7 Series includes certain features that enhance crash safety beyond those standard in other models:

- **Active front head restraints** – standard in 1, 3, 5, 6 and 7 Series, X3, X5 and X6.
- **Automatic tensioners and force limiters on all safety belts** – along with the X3. All other Series have both on the front seats; 1 Series models have them at the outboard rear positions. 3 Series Sedans, 5 Series, X5 and X6 have force limiters in the rear.
- **Pre-tensioners on front safety belts** – upon emergency braking (determined by preset criteria), the front belts are pre-tensioned prior to a possible crash. The same electric tensioning system also "snugs up" the front belts on the occupants once they are fastened and the front doors closed.

Packages & options

Packages

Driver Assistance Package (all models except 760Li, code ZDA; content standard 760Li) This Package enhances the 7 Series' already outstanding active safety in three ways:

- **Lane Departure Warning with Collision Mitigation**, new code 5AS. Employing a camera near the interior rearview mirror, monitors road lane markings. If the vehicle begins to move across a lane without the turn signals activated, LDW vibrates the steering wheel. Collision

Mitigation, new for 2013, warns of potential collision with vehicle ahead and prepares brakes for quicker response to pedal. Details on familiar LDW (code 5AD) in **BMW features**; Collision Mitigation is exclusive to 7 Series and B7 for 2013.

- **Active Blind Spot Detection**, code 5AG. Radar sensors at the rear of the vehicle monitor traffic in adjacent lanes, taking in an area from the driver's blind spot rearward 60 meters/ almost 200 ft. An illuminated triangular warning LED appears in the exterior mirror if there is a vehicle in this critical area; if the driver activates the turn signal, the LED blinks and, as with Lane Departure Warning, the steering wheel vibrates to warn the driver not to make a lane change.
- **Side-view and Top-view cameras**, code 5DL
- **Speed Limit Info**, code 6TH. Captures current speed-limit and other signage, displays it in iDrive monitor.

Executive Package

(all models except 760Li, code ZEC; content standard 760Li) Now familiar in its 2nd generation; features full-color, 3D-effect displays. Described in detail in **BMW features**.

All 740/750 models:

- **Head-up Display**, code 610. Now familiar in its 2nd generation; features full-color, 3D-effect displays. Described in detail in **BMW features**.
- **Active Ventilation** on front seats, code 453
- **BMW Apps**, code 6NF
- **Smartphone Integration**, code 6NF

7 Series key features

Except as noted, all current 7 Series models offer the following features:

All 750i/Li models (standard 760Li):

- Leather-trimmed dash and upper door panels, code 4ND
- Ceramic-trimmed controls, code 4U1
- Power rear-window and rear door-window sunshades, codes 415-416

740i/Li models only (standard in all other models):

- Soft-close doors, code 323
- 20-way Multi-Contour front seats, code 456
- 16-speaker premium audio system, code 677
- Power trunklid, code 316

M Sport Package

(all models, code ZMP)

Available for the first time on a 7 Series ActiveHybrid model, this assertive sports group includes M-design wheels, an aerodynamic exterior treatment, and an M sport steering wheel and headliner in Anthracite color. Here are its contents, with specifics for each model where appropriate:

- Sportier exhaust sound for V-8 engine of 750i/Li models only. Part of the factory option group 7MP.
 - Special wheels and tires³. Extra-sporty wheel designs, upgraded and (for RWD models) in differentiated front/rear sizes.
 - 740i/Li and 750i/Li RWD including ActiveHybrid, 19-in. Code 2NW, 19 x 8.5/19 x 9.5 wheels in M V Spoke design #302M, with 7 pairs of slender, curved spokes; 245/45R-19 front / 275/40R-19 rear performance tires. These contrast to the standard 18 x 8.0 wheels with 245/50R-18 all-season tires; or to the 750s' standard
- 19 x 8.5 wheels with 245/45R-19 all-seasons.
 - 740Li and 750i/Li xDrive models, 19-in. Code 2NG specifies the same #302M design, but in 19 x 8.5 size all around with 245/45R-19 all-season tires.
 - All non-hybrid models, 20-in. Code 2NX, as upgrade to the 740/750 ZMP 19-in. equipment and the regular ZMP equipment for the 760Li. 20 x 8.5 front/20 x 10.0 rear wheels, M Double Spoke design #303M, yet more open with 5 pairs of slender spokes. 245/40R-20 front / 275/35R-20 rear performance tires. (760Li standard equipment is 19-in. all-season, but with its own wheel design.)
 - 760Li 19-in. alternate, code 2NW as described above, no extra cost.
 - Aerodynamic exterior treatment, code 715. Front and rear bumper/spoiler/apron assemblies; Shadowline accents in front, Dark Shadow in rear bumper.
 - Shadowline exterior trim, code 760. High-gloss black trim around side windows, on B-pillars and rear door-window dividers, and the exterior mirrors' bases and triangles.
 - M sport steering wheel, code 7XA. Compared to standard sport steering wheel, has extra-thick rim, M logo on its bottom spoke, and (new for '13) shift paddles.
 - M footrest for driver's left foot; part of 7MP.
 - Anthracite-color headliner, code 775. Alcantara material in Anthracite color (code 776) is standard in 760Li, available as an upgrade for other models.

Additionally, Alcantara in the upholstery colors is available as an upgrade for all models, at extra cost except for 760Li.

ZMP is available only with exterior colors Alpine White, Jet Black, Glacier Silver, Carbon Black, Black Sapphire, Imperial Blue or Dark Graphite; or the BMW Individual Xirallics Azurite Black, Citrin Black, Ruby Black or Moonstone. Carbon Black is available only in combination with ZMP.

Lighting Package

(all models except 760Li, code ZLP; content standard 760Li)

- Full LED Forward Lighting, code 552. Extends ultra-white LED lighting technology to the headlights and accent strips above them; also visible in the front view are new LED turn signals, set into the exterior mirrors.
- Automatic High Beams, code 5AC. Switches automatically between low and high beams, according to whether or not there are oncoming headlights. Details in BMW features.

Luxury Rear Seating Package

(all Li models except 760Li, code ZLU; all content except massaging rear seat standard 760Li) Adds three further features that are appropriate for the long-wheelbase models:

- 14-way rear Comfort seats, code 460. The adjustments include:
 - Fore-aft
 - Cushion angle
 - Backrest angle
 - Angle of upper backrest
 - Firmness of lumbar support
 - Height of lumbar support
 - Head-restraint height.

To preserve the driver's rearward view, each head restraint retracts when the seat is not occupied and automatically rises to its preset position when an occupant sits in the corresponding seat.

As a convenience bonus, the front passenger's seat can be adjusted from the right rear seat's power controls by pressing a switch for the purpose.

There is also a switch that returns the rear Comfort Seat to its "home" position. Finally, each seat includes a 2-position memory system.

These seats are separated by a storage compartment (plus the fold-down center armrest) and transform the 7 Series cabin into a 4-seater configuration.

- Active Ventilation, code 454. Functions like that in the front seats, and also has perforated Dakota leather for cushion and backrest center sections.
- Massaging rear seats, code 4UM. This 7 Series exclusive helps passengers unwind on longer journeys. Twelve massage units relax the back muscles by producing a wave motion from top to bottom in the backrest; six rotating elements, positioned around the outer shoulders, middle of thorax and lower back, add to the effect.

All content of this package is standard in the 760Li except the massaging seat, which is available as a stand-alone option there.

3 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 7 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

Cold Weather Package

(all models except 760Li, code ZCW; content standard 760Li)
Includes the following features:

All models:

- Heated steering wheel, code 248
 - Heated rear seats, code 496
- All 740/750 models except ActiveHybrid:
- Ski bag, code 464

For all 740/750 models, the following content can be added:

- Non-heated BMW Individual steering wheel with wood inlays (code XL1) can be substituted for the heated steering wheel at additional cost.

Rear Entertainment Package

(all except 760Li, code ZRP)

This Package has been upgraded for 2013 via a new Rear Seat Entertainment system:

All 740/750 models:

- Rear-seat Entertainment, code 6FR, consisting of –
- Two high-resolution, angle-adjustable 9.2-in. color monitors integrated into the front seats' backrests (up from 8.0-in. previously)
- iDrive controller in rear center armrest, new feature
- Separate ports for connecting MP3 players and game consoles
- Access to vehicle's entertainment functions (radio, DVD changer, online services, phone)
- Separate GPS Navigation
- Connectivity for wired and wireless headphones.
- 6-disc DVD changer in upper part of glove compartment, code 696. This is standard in 760Li; 6FR is a stand-alone option.

Wired and wireless earphones are available separately.

Priority 1 Package

Ultimate personal luxury: the BMW Individual Composition*

(all models)

BMW Individual has long signified the most personalized treatments BMW offers for its vehicles. The current 7 Series continues to offer an optional BMW Individual Composition – too extraordinary, too lavish to be called a “package” – that elevates these spectacular automobiles to an even higher level of luxury and esthetics. Now available for all models including ActiveHybrid, this Composition includes:

- 19-in. wheels in BMW Individual V Spoke design #228 I, with performance tires³, dimensioned like the ZMP 19-inchers. Code 2M8, all models.
- 20-in. wheels in the BMW Individual V Spoke design #301 I, fitted with performance tires, dimensions as for ZMP 20-inchers. Option code 2NV; upgrade on 740/750 models, standard 760Li.
- High-gloss Shadowline exterior trim around side windows, code 760.
- BMW Individual badge on trunklid, code XF1.
- BMW Individual doorsill trims, illuminated as are the standard trims, code 778.
- Full Merino leather upholstery. Notable for its gentle surface and natural grain; only hides without damage or irregularities are selected, no artificial surface treatment is done, and color is applied all the way through so that this leather retains its beauty and natural breathing ability over the years. The leather treatment

is as extensive as that of any BMW model – including head restraints, center console, armrests, and Nappa leather-trimmed upper dash and door surfaces (code 4ND). Available in six color schemes, up from three in '12; upholstery codes ZB.

- Choice of three BMW Individual interior trim materials: Walnut Honey (XE6), Piano Finish Black (XE8) or White Ash Grain (XD, new for '13). These trims are also available as P1 stand-alone options in all models, independently of the Composition.
- Alcantara headliner and sun visors in upholstery color, code XD5; or, at no incremental cost, in Anthracite color.

The Nappa-leather steering wheel with inlaid wood by BMW Individual (code XL1) is available separately. Four very special exterior paints are now available as P1 options – with or without the Composition: Azurite Black, Citrin Black, Ruby Black and Moonstone. These are Xirallic paints, applied in a 5-coat process, with fine pigments that delight the eye with great intensity and color-change effects under varying light conditions.

The Composition is not available in combination with interior trims –

- Light Poplar 437
 - Fine Line High-Gloss 4B7
 - Burl Walnut with inlays 4B8
 - Ash Grain 4CA
 - Fine Line Matte 4CB
- nor with the M Sport Package.

Limited-production special edition

V-12 25 Years Anniversary Edition of 760Li

BMW's tradition of V-12 engines began in 1987, when BMW engineers crafted the “most ultimate” Ultimate Driving Machine of its day with the ground-breaking 750Li, powered by BMW's first automotive V-12 engine. To commemorate the 25th anniversary of this significant point in BMW's evolution, the V-12 25 Years Anniversary Edition of today's 760Li was announced in September 2012.

Just 15 of these special versions of the V-12 BMW have been built, for customer delivery in early 2013. Distinctive features include the following, with those exclusive to this Edition denoted by an asterisk (*):

- BMW Individual V Spoke 20-in. wheels with performance tires
- High-gloss Shadowline exterior trim
- V-12 25 Years Edition badging on doorsills, head restraints and iDrive controllers*
- BMW Individual Full Merino leather upholstery with exclusive Black piping*
- Floor mats and rear footrests in Black with exclusive Champagne piping*

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 7 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

9 – Priority 1 options accurate at time of publication but subject to change. For current model-specific standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

- Piano-finish Black wood interior trim
- Piano Black wood inlays on steering wheel*
- Alcantara headliner in Champagne color with black side sections*
- Leather A-, B- and C-pillars in Black*
- Alcantara rear parcel shelf* in Anthracite color
- Rear Seat Entertainment

Stand-alone options

Integral Active Steering

(RWD 740i/Li non-hybrid & 750i/Li, code 2VH; standard 760Li)

Active Steering is offered in the 5, 6 and 7 Series in an enhanced version, adding rear-wheel steering to the variable-ratio front-wheel Active Steering. For details on this spectacular enhancement, see **BMW features**.

Active Roll Stabilization

(740i/Li non-hybrid & 750i/Li, code 229; standard 760Li)

Reduces body roll or “lean” in cornering. Improves handling by virtue of better suspension geometry (wheel angles relative to vertical), but there is a psychological aspect as well: Drivers and passengers alike marvel at the “flat cornering” that results from ARS. To learn how ARS works, see **BMW features**.

Enhanced Active Cruise Control with Stop-and-Go function, Collision Warning & Approach Control

(all models, code 5AT; adds Lane Departure Warning, code 5AS) Through 2012, the 7 Series offered ACC with Stop-and-Go and Collision Warning; this utilized its radar sensors to detect

critical closing-rate situations with standing and moving objects, even with ACC off:

- “Soft” warning (visual, in instrument cluster)
- “Acute” warning, visual and audible, for higher closing rate
- Brake Standby – brake pads snugged up to rotors
- Lower threshold for Dynamic Brake Control (panic application recognized earlier) to optimize braking force.
- Safety-belt tensioning (reversible)

For 2013, ACC adds Collision Mitigation capability by combining Lane Departure Warning’s forward-facing camera’s input with that of ACC’s front-mounted radar sensors; this improves the detection of other vehicles and their speeds and reducing the system’s reaction time. Should a vehicle ahead brake very sharply in otherwise free-flowing traffic, the driver is first prompted to take action by the 2-stage warning listed above. If the driver fails to react, ACC slows the BMW to a standstill at the strong (but not panic-level) rate of 5 meters/second per second (5 m/s/s), then locks the brakes altogether for a further 1.5 sec. This reduces the likelihood of a secondary collision.

Parking Assistant

(all RWD models, code 5DP)

Newly offered on 7 Series. Via ultrasound sensors in the front side flashers, recognizes spaces longer than 20 ft. (only 4 ft. longer than the vehicle!), measures their width and length as the vehicle drives by at speeds less than 22 mph, and indicates their suitability in the iDrive display. (This occurs whether or not the driver has activated the system.)

To park, the driver activates the system and the vehicle is maneuvered into the parking space.

More details are presented in **BMW features**.

Optional wheels and tires

(all models, codes 2FB & 2H9)

Certain wheel-and-tire equipment is available as stand-alone options:

- All 740i/Li – in place of the standard 18-in. equipment with all-season tires, this option specifies 19 x 8.5 wheels in Multi-Spoke design #235 (15 spokes), carrying 245/45R-19 all-season tires³. Code 2H1; these wheels are standard on the 760Li.
- ActiveHybrid only – 19-in. Steamline wheels (design #357) and all-season tires are in the same sizes as the above option. Code 2AR.
- 760Li only – with 19-in. all-season equipment now standard, this option specifies 20 x 8.5 front/20 x 10.0 rear Double Spoke wheels (#253, 6 spoke pairs) carrying 245/40R-20 front / 275/35R-20 rear tires.

BMW Individual sport steering wheel with inlaid-wood trim

(all models, code XL1; requires BMW Individual Composition)

This ultimate sport wheel features a Nappa-leather rim with inlaid wood, and the BMW Individual logo on its bottom spoke. It is offered at extra cost as follows:

- in combination with BMW Individual Composition (required, but priced separately)
- as an alternative to the heated wheel of the 740/750 Cold Weather Package.

Not available in combination with the M Sport Package, nor with heating.

20-way Multi-Contour front seats

(740i/Li models, code 456;

standard all other models)

Continuing as standard equipment in all but 740i/Li models, where they are available as part of the new Executive Package or this stand-alone option. Their construction is slimmer for '13, but no less abundantly accommodating.

Bang & Olufsen audio system

(all models, code 6F2; in 740/750 models, requires Executive Package)

After its debut in the 2012 6 Series, this ultra-audiophile system continues to become available in more models. See the 6 Series section of Fast Facts 2012 or **BMW features** in this edition.

Rear Seat Entertainment

(760Li only, code 6FR)

Only in the 760Li is this significantly upgraded system a stand-alone option; in other models it is part of the Rear Entertainment Package, described under **Rear Entertainment Package** on a previous page.

Alternate interior trim

(all models as described; codes 437, 4B8, 4CA & 4CB)

The selection of no-extra-cost interior trims has been expanded for '13, now including even the super-elegant Burl Walnut with

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 7 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

7 Series key features

Except as noted, all current 7 Series models offer the following features:

inlays that continues as standard in the 760Li:

All models except 760Li. Light Poplar (437), Ash Grain (4CA), Fine Line Matte (4CB) and Burl Walnut with inlays (4B8) are optional at no extra cost as an alternative to the standard Fine Line high-gloss interior trim.

760Li only. Ash Grain (4CA) as the alternative to the standard 4B8.

Ceramic-trimmed controls (all except 760Li, code 4U1; standard 760Li)

Ceramic-trimmed shift knob, iDrive controller surround, audio and climate controls lend an extra touch of elegance to the 7 Series interior.

Power rear-window and rear door-window sunshades (all except 760Li, codes 415-416; standard 760Li)

In addition to being part of the Executive Package of all 740/750 models, these glare-reducing, privacy-enhancing shades are offered as a stand-alone option in 750 models.

Massaging rear seat (760Li only, code 4UM)

Included in all other Li models' Luxury Rear Seating Package. All other features of that package are standard in the 760Li, and this feature is offered as a stand-alone option.

Delete rear Comfort seats (760Li only, no extra cost; code ZDR)

For 760Li customers who prefer 3-across rear seating; the 760Li is the only model where the 2-passenger Comfort rear seating is standard.

Night Vision with Pedestrian Detection

(all models, code 6UK)

Via an infrared camera, Night Vision scans up to 1600 ft. ahead of the vehicle over a 36-degree-wide range, and is varied according to the road's path and driver input. Includes recognition of the direction a pedestrian near the roadway is moving. If it's parallel to the road, the system senses and displays the presence on the iDrive display (or, if present, Head-up Display) but doesn't warn the driver; if the pedestrian is on a path to cross the road, it displays a warning¹⁰.

BMW Apps

(all except 760Li, code 6NR; standard 760Li; includes Smartphone Integration)

BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function is released, users can update and customize their vehicle's infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party App.

BMW center-installed accessories

Among the accessories offered for the 7 Series are:

- Complete wheel and tire sets, including 21-in. Cross Spoke wheels in Ferric Gray with performance tires. Other wheel designs and sizes available.
- Wheel locks
- Tire valve-stem caps with BMW lettering or logo
- Tire Mobility Kit and tire sealer kit
- Mud flaps
- License-plate frames
- Car covers, outdoor and indoor types
- UV sunshade
- Smoked sun/wind deflector for moonroof
- Roof carrier systems
- Bicycle lift
- Floor mats, carpet and all-weather

- E-shift lever in wood
- Snap-in adaptor with USB interface for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- Snap-in adaptor for BMW Apps and various media
- Connection and charging cables of various types
- BMW Bluetooth headset
- CD/DVD storage sleeve
- Cool bag
- BMW umbrella with LED light
- LED hand lamp
- Rear-seat protective cover
- Fitted luggage
- Trunk mats, various types
- Trunk tray, nets, hold-down straps
- BMW collapsible box

For details, see the latest Accessories listing for the 7 Series on bmwusa.com.

¹⁰ – Pedestrian Detection functions only at ambient temperatures of 82.4°F or below.

Standard & optional features

2013 7 Series

Bold indicates new feature for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

Exterior design & function	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Aluminum hood, front side panels (fenders), roof panel & doors	S	S	S	S	S	S
Xenon Adaptive headlights with LED luminous rings	S	S	S	S	S	S
Dynamic auto-leveling of headlights with topographical compensation	S	S	S	S	S	S
Daytime Running Lamps via LED luminous rings	S	S	S	S	S	S
LED front foglights	S	S	S	S	S	S
Cornering lights	S	S	S	S	S	S
Full LED Forward Lighting including Automatic High Beams	ZLP	ZLP	ZLP	ZLP	ZLP	S
Automatic headlight control	S	S	S	S	S	S
LED turn signals in exterior mirrors	S	S	S	S	S	S
Rain-sensing windshield wipers & heated washer jets	S	S	S	S	S	S
Power-folding exterior mirrors	S	S	S	S	S	S
Choice of standard or metallic paint colors	S	S	S	S	S	S
BMW Individual Xirallic paint colors	P1	P1	P1	P1	P1	P1
Park Distance Control front & rear with graphic display	S	S	S	S	S	S
Parking Assistant	OPT	NA	OPT	OPT	NA	OPT
Ground lighting at door handles	S	S	S	S	S	S
Adaptive brakelights	S	S	S	S	S	S
High-gloss Shadowline exterior trim around side windows & bases of exterior mirrors	Z11/ZMP	Z11/ZMP	Z11/ZMP	Z11/ZMP	Z11/ZMP	Z11/ZMP
M aerodynamic exterior treatment	ZMP	ZMP	ZMP	ZMP	ZMP	ZMP
Titanium-silver chrome exhaust outlets, rhomboid shape: Single left & right	S	S	S	S	S	-
Dual left & right	-	-	-	-	-	S

S – Standard
OPT – Optional

-- – Not applicable
P1 – Priority 1 option

Z11 – BMW Individual Composition (P1 option)

ZLP – Lighting Package
ZMP – M Sport Package

Standard & optional features

2013 7 Series

Bold indicates new feature for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

Performance & efficiency	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
3.0-liter TwinPower Turbo 6-cylinder engine	S	S	S	–	–	–
4.4-liter TwinPower Turbo (Twin Turbo) V-8 engine	–	–	–	S	S	–
6.0-liter Twin Turbo V-12 engine	–	–	–	–	–	S
Engine features:						
Aluminum construction	S	S	S	S	S	S
Cylinder technology	Iron liners, cast into block¹		Silicon-impregnated cylinder surfaces			
Dual overhead camshafts & 4 valves/cylinder (740i/Li 24 valves, 750i/Li 32 valves, 760Li 48 valves)	S	S	S	S	S	S
ActiveHybrid combustion/ electric powertrain system	–	–	S	–	–	–
High Precision direct fuel injection	S	S	S	S	S	S
Valvetronic variable intake-valve lift	S	S	S	S	S	–
Double VANOS ² steplessly variable valve timing	S	S	S	S	S	S
Single twin-scroll turbocharger	S	S	S	–	–	–
Twin single-scroll turbochargers	–	–	–	S	S	S
Variable engine response	S	S	S	S	S	S
Electronically controlled engine cooling	S	S	S	S	S	S
Electronic sensing of oil level & condition	S	S	S	S	S	S
Exhaust system	Partial dual¹		Dual ³			
Automatic engine start/stop with function display in tachometer	S	S	S	S	S	NA
Driving Dynamics Control – 3 settings for engine response, transmission shift characteristics, shock-absorber firmness & steering assist ⁴ ; additional setting switches DSC to DTC	S	S	S	S	S	S
Including ECO PRO mode	S	S	S	S	S	NA
8-speed STEPTRONIC automatic transmission with Adaptive Transmission Control, E-shift & selectable modes	S	S	S	S	S	S
8-speed automatic transmission with integrated electric motor/generator, electric oil pump, decoupling clutch & start-off clutch element (no torque converter)	–	–	S	–	–	–
Liquid-cooled alternator	–	–	–	S	S	S
Aluminum multi-link front suspension	S	Steel	S	S	Steel	S

1 – Applies to all 740i/Li models.

2 – VANOS = VAriable NOckenwellen

Steuerung = variable camshaft control, or variable valve timing.

3 – Applies to all 750i/Li models & 760Li.

4 – Also affects steering ratio if vehicle is equipped with integral Active Steering.

S – Standard
NA – Not available

– – Not applicable

Standard & optional features

2013 7 Series

Bold indicates new feature for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

	Performance & efficiency (cont.)		740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Aluminum 5-link Integral rear suspension	S	S	S	S	S	S	S	S
Self-leveling rear suspension with air springs	S [S]	S	S	S	S [S]	S	S	S
Dynamic Damping Control with Comfort, Comfort+ & Sport modes	S	S	S	S	S	S	S	S
Vehicle-speed-sensitive variable-assist, variable-ratio rack-&-pinion electric power steering	S	Hydraulic	S	S	S	Hydraulic	Hydraulic	Hydraulic
Integral Active Steering	OPT	NA	NA	NA	OPT	NA	S	S
4-wheel ventilated disc brakes with aluminum/cast-iron front rotors	S	S	S	S	S	S	S	S
Brake Energy Regeneration	S	S	S	S	S	S	S	S
Electromechanical parking brake	S	S	S	S	S	S	S	S
Automatic Hold	S	S	S	S	S	S	S	S
Dynamic Stability Control with Dynamic Traction Control, electronic limited-slip differential	S	S	S	S	S	S	S	S
xDrive fulltime all-wheel drive, electronically controlled with variable front/rear torque split & traction control	NA	S	NA	NA	NA	S	NA	NA
18 x 8.0 alloy wheels, V Spoke #425	S	S	S	S	-	-	-	-
19 x 8.5 alloy wheels: V Spoke #426	-	-	-	-	S	S	-	-
Multi-Spoke #235	OPT	OPT	OPT	OPT	-	-	S	S
M V Spoke #302M	-	ZMP	-	-	-	ZMP	-	-
Streamline #357	-	-	-	-	OPT	-	-	-
19 x 8.5 front/19 x 9.5 rear alloy wheels: BMW Individual V Spoke #228	Z11	Z11	Z11	Z11	Z11	Z11	Z11	Z11
M V Spoke #302M	ZMP	NA	ZMP	ZMP	ZMP	NA	ZMP+NC	ZMP+NC
20 x 8.5 front/20 x 9.5 rear alloy wheels: BMW Individual V Spoke #301	Z11+OPT	Z11+OPT	NA	NA	Z11+OPT	Z11+OPT	Z11+OPT	Z11+OPT
M Double Spoke #303M	ZMP+ OPT	ZMP+OPT	NA	NA	ZMP+OPT	ZMP+OPT	ZMP	ZMP
Double Spoke #253	NA	NA	NA	NA	NA	NA	NA	OPT
Performance all-season run-flat tires ⁵ : 245/60R-18	S	S	S	S	-	-	-	-
245/45R-19	OPT	OPT	OPT	OPT	S	S	S	S
Performance tires ⁵ : 245/45R-19 front / 275/40R-19 rear	Z11/ZMP	Z11	Z11/ZMP	Z11/ZMP	Z11	Z11	Z11/ZMP+NC	Z11/ZMP+NC
245/40R-20 front / 275/35R-20 rear	Z11+OPT/ ZMP+OPT	Z11+OPT/ ZMP+OPT	NA	NA	Z11+OPT/ ZMP+OPT	Z11+OPT/ ZMP+OPT	Z11+OPT/ ZMP	Z11+OPT/ ZMP

5 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 7 Series

models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

S – Standard
OPT – Optional
NC – No extra cost
NA – Not available

- - Not applicable
Z11 – BMW Individual Composition (P1 option)
ZMP – M Sport Package

Standard & optional features

2013 7 Series

Bold indicates new feature for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

Comfort & convenience	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Vehicle & Key Memory with Personal Profile user-specific settings	S	S	S	S	S	S
Comfort Access keyless entry with hands-free trunk opening	S	S	S	S	S	S
Multi-function remote control	S	S	S	S	S	S
Stepless door checks	S	S	S	S	S	S
BMW Individual doorsill trims	Z11	Z11	Z11	Z11	Z11	Z11
Soft-close doors	ZEC	ZEC	ZEC	S	S	S
Dual power/heated/auto-dimming/power-folding exterior mirrors	S	S	S	S	S	S
Climate Comfort laminated glass	NA	NA	NA	NA	NA	S
BMW Universal Transceiver (3-function garage-door opener)	S	S	S	S	S	S
Comprehensive lighting amenities: Welcome Light (automatic switch-on of ground lighting & interior lights upon unlocking vehicle)	S	S	S	S	S	S
Illuminated doorsill trims	S	S	S	S	S	S
Fade-in/fade-out of interior lights	S	S	S	S	S	S
BMW Ambiance Lighting, including front & rear center, door handles & storage pockets, back sides of front backrests, B-pillars, rear center armrest; choice of white or orange lighting	S	S	S	S	S	S
Front & rear left/right reading lamps	S	S	S	S	S	S
Illuminated visor vanity mirrors	S	S	S	S	S	S
Illuminated 2-section front console compartment	S	S	S	S	S	S
Front & rear footwell illumination	S	S	S	S	S	S
Leather-wrapped power tilt/telescopic sport steering wheel with fingertip cruise, audio & phone controls, auto tilt-away for entry & exit	S	S	S	S	S	S
M Sport steering wheel with shift paddles	ZMP	ZMP	ZMP	ZMP	ZMP	ZMP
Heated steering wheel	ZCW	ZCW	ZCW	ZCW	ZCW	S
Dynamic cruise control	S	S	S	S	S	S
Enhanced Active Cruise Control with Stop-&-Go function, Frontal Collision Warning & Collision Mitigation	OPT	OPT	OPT	OPT	OPT	OPT
Instrument cluster with Black Panel technology	S	S	S	S	S	S

S – Standard
OPT – Optional
NA – Not available

ZCW – Cold Weather Package
ZEC – Executive Package

Z11 – BMW Individual Composition (P1 option)

ZMP – M Sport Package

Standard & optional features

2013 7 Series

Bold indicates new feature for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

Comfort & convenience (cont.)	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Head-up Display with full color/3D-effect graphics, adjustable viewing height	ZEC	ZEC	ZEC	ZEC	ZEC	S
Condition-Based Service system	S	S	S	S	S	S
Integrated owner's manual via iDrive	S	S	S	S	S	S
14-way power front seats including 4-way power lumbar support, driver's-seat memory	S	S	S	–	–	–
20-way power front Multi-Contour seats, including articulated upper backrests, adjustable backrest width & thigh support, active head restraints with adjustable side support, easy-entry feature, memory for both seats	ZEC/OPT	ZEC/OPT	ZEC/OPT	S	S	S
Heated front seats with balance control	S	S	S	S	S	S
Active Support feature, both front seats	OPT ⁶	OPT ⁶	OPT ⁶	OPT	OPT	S
Active Ventilation feature, both front seats	ZEC	ZEC	ZEC	ZEC	ZEC	S
Heated rear seats	ZCW	ZCW	ZCW	ZCW	ZCW	S
14-way power rear Comfort seats, including articulated upper backrests, 4-way power lumbar support, head-restraint height & automatic retraction, Active Ventilation, massaging function	NA [ZLU]	ZLU	ZLU	NA [ZLU]	NA [ZLU]	S ⁷
Illuminated rear vanity mirrors	NA [S]	S	S	NA [S]	NA [S]	S
Check Control vehicle monitor system, with information displayed in main instrument cluster	S	S	S	S	S	S
Dakota leather upholstery	S	S	S	–	–	–
Nappa leather upholstery	OPT	OPT	OPT	S	S	S
Full Merino leather upholstery	Z11/P1	Z11/P1	Z11/P1	Z11/P1	Z11/P1	Z11/P1
Nappa leather-trimmed upper dash & door panels	Z11/OPT ⁸	Z11/OPT ⁸	Z11/OPT ⁸	ZEC	ZEC	S
Anthracite-color headliner	ZMP	ZMP	ZMP	ZMP	ZMP	–
Alcantara headliner: Anthracite color	ZMP+OPT/ Z11+NC	ZMP+OPT/ Z11+NC	ZMP+OPT/ Z11+NC	ZMP+OPT/ Z11+NC	ZMP+OPT/ Z11+NC	ZMP/ Z11+NC
Upholstery color (incl. sun visors)	Z11/ ZMP+OPT	Z11/ ZMP+OPT	Z11/ ZMP+OPT	Z11/ ZMP+OPT	Z11/ ZMP+OPT	Z11/ ZMP+NC

6 – Requires Multi-Contour seats or Executive Package. 8 – Included with optional Nappa leather.

7 – All ZLU features standard in 760Li except massaging function, which is a stand-alone option.

S – Standard
OPT – Optional
NC – No extra cost
NA – Not available
– – Not applicable
ZCW – Cold Weather Package

ZEC – Executive Package
Z11 – BMW Individual Composition (P1 option)
ZLU – Luxury Seating Package; requires Executive and Cold Weather Packages
ZMP – M Sport Package

Standard & optional features

2013 7 Series

Bold indicates new feature for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

Comfort & convenience (cont.)	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Interior trim:						
Fine Line high-gloss wood	S	S	S	S	S	–
Fine Line Matte wood	NC	NC	NC	NC	NC	NA
Burl Walnut wood with inlays	NC	NC	NC	NC	NC	S
Ash Grain wood	NC	NC	NC	NC	NC	NC
BMW Individual Walnut Honey, Piano Black or White Ash Grain	Z11/P1	Z11/P1	Z11/P1	Z11/P1	Z11/P1	Z11/P1
Ceramic-trimmed controls	OPT	OPT	OPT	OPT/ ZEC	OPT/ ZEC	S
Power windows with key-off operation, 1-touch open/close & anti-trapping feature	S	S	S	S	S	S
4-zone automatic climate control with full left/right temperature & air-distribution controls, automatic recirculation control, draft-free air delivery, misting control, bi-directional solar sensor, temperature-controlled rear air outlets, activated-charcoal ventilation & other features	S	S	S	S	S	S
Power 2-way Contour moonroof with 1-touch operation, power interior shade & vehicle-speed-sensitive wind deflector	S	S	S	S	S	S
iDrive system with 10.2-in. high-resolution control display, next-generation GPS Navigation ; direct-select radio, media, phone & Navigation menus; 8 Programmable Memory Keys, Voice Command, Real Time Traffic Information & other features	S	S	S	S	S	S
AM/FM/HD/CD audio system with 12 speakers, Radio Data System (RDS), in-dash single-disc CD player, auxiliary audio input & FM diversity antenna system; includes front center-fill speaker & 2 subwoofers	S	S	S	–	–	–
Logic7 audio system with 16 speakers, Digital Sound Processing, Surround Sound; includes upgraded audio power & components, all features of 12-speaker system	ZEC	ZEC	ZEC	S	S	S
Bang & Olufsen premium audio system with 16 speakers, Dirac Dimensions™ acoustic signal processing, Surround Sound, illuminated aluminum speaker bezels; front center-fill midrange & tweeter retract when system is off; includes upgraded audio power & componentry, all features of standard system	OPT⁹	OPT⁹	OPT⁹	OPT	OPT	OPT

9 – Requires Executive Package.

S – Standard
OPT – Optional
NC – No extra cost

NA – Not available
– – Not applicable
P1 – Priority 1 option

ZEC – Executive Package
Z11 – BMW Individual Composition (P1 option)

Standard & optional features

2013 7 Series

Bold indicates new feature for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

Comfort & convenience (cont.)	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
6-disc DVD changer	ZRP	ZRP	ZRP	ZRP	ZRP	S
80-GB hard drive providing data storage for Navigation, audio system, phonebook & Voice Command; ripping capability from CD & DVD players	S	S	S	S	S	S
iPod/USB Adapter	S	S	S	S	S	S
BMW Apps + Smartphone Integration	ZEC/OPT	ZEC/OPT	ZEC/OPT	ZEC/OPT	ZEC/OPT	S
New-generation Rear Seat Entertainment system	ZRP	ZRP	ZRP	ZRP	ZRP	OPT
Satellite Radio with 1-year subscription	S	S	S	S	S	S
Enhanced Bluetooth mobile-device interface with high-capacity phonebook download	S	S	S	S	S	S
Power outlets in front ashtray/storage tray, center console & front passenger footwell	S	S	S	S	S	S
Seatback storage compartments	S	S	S	S	S	S
Power rear-window & rear door-window sunshades	OPT	OPT	OPT	ZEC/OPT	ZEC/OPT	S
Trunk opening from remote or interior + hands-free opening from exterior	S	S	S	S	S	S
Soft Close trunklid	S	S	S	-	-	-
Automatic trunk opening & closing	ZEC	ZEC	ZEC	S	S	S
Fully finished trunk with inside trunk release	S	S	S	S	S	S
Ski bag	ZCW	ZCW	NA	ZCW	ZCW	S
Safety & security	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Dynamic Stability Control (DSC), including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, electronic limited-slip differential	S	S	S	S	S	S
Night Vision with pedestrian detection	OPT	OPT	OPT	OPT	OPT	OPT
Rear-view camera	S	S	S	S	S	S
Side- & top-view cameras (Surround View)	ZDA	ZDA	ZDA	ZDA	ZDA	S
Automatic High Beams	ZLP	ZLP	ZLP	ZLP	ZLP	S
Lane Departure Warning with Collision Mitigation	ZDA	ZDA	ZDA	ZDA	ZDA	S
Active Blind Spot Detection	ZDA	ZDA	ZDA	ZDA	ZDA	S
Speed Limit Info	ZDA	ZDA	ZDA	ZDA	ZDA	S

S – Standard
OPT – Optional

NA – Not available
– – Not applicable

ZCW – Cold Weather Package
ZDA – Driver Assistance Package

ZEC – Executive Package
ZLP – Lighting Package

Standard & optional features

2013 7 Series

Bold indicates new feature for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

Safety & security	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Active Protection system:						
Attention Assist	S	S	S	S	S	S
Pre-impact tensioning of safety belts, closing of windows & moonroof	S	S	S	S	S	S
Post-impact braking	S	S	S	S	S	S
Dual front-impact airbag Supplementary Restraint System (SRS) with dual threshold deployment, 2-stage Smart Airbags	S	S	S	S	S	S
LATCH attachments in rear seat for installation of child restraint seats	S	S	S	S	S	S
Interlocking door anchoring system for side impacts	S	S	S	S	S	S
Front- & rear-seat Head Protection System	S	S	S	S	S	S
Front-seat side-impact airbags	S	S	S	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S	S	S	S
Post-impact safety measures:						
Unlocking of central locking	S	S	S	S	S	S
Switch-on of hazard flashers	S	S	S	S	S	S
Switch-on of interior light	S	S	S	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S	S	S	S
BMW Assist, including Automatic Collision Notification, SOS button, Roadside Assistance, TeleService ¹⁰ , BMW Assist Safety Plan ¹⁰	S	S	S	S	S	S
Central locking system with selective unlocking	S	S	S	S	S	S
Coded Driveaway Protection	S	S	S	S	S	S
Pathway Lighting ¹¹	S	S	S	S	S	S
Alarm system with operation from remote, interior motion detector	S	S	S	S	S	S

10 – Requires BMW Assist annual fee after 4th year. 11 – Duration adjustable via iDrive.

S – Standard

Technical specifications

2013 7 Series

Bold indicates new specification for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

General	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Curb weight, lb.	4310 [4350]	4525	4680	4575 [4660]	4745 [4800]	5015
Weight distribution, front/rear, %	50.2/49.8	51.5/48.5	48.7/51.3	51.1/48.9 [51.3/48.7]	51.5/48.5 [52.4/47.6]	51.6/48.4
Wheelbase, in.	120.9 [126.4]	126.4	126.4	120.9 [126.4]	120.9 [126.4]	126.4
Track, front/rear	63.4/65.0 ^{1, 2}					
Length, in.	199.8 [205.3]	205.3	205.3	199.8 [205.3]	199.8 [205.3]	205.3
Width, in.	74.9 ¹					
Height, in.	57.9 [58.3]	58.3	58.3	57.9 [58.3]	57.9 [58.3]	58.3
Accommodations	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Seating capacity, persons	5 [4 or 5 ³]	4 or 5 ³	4 or 5 ³	5 [4 or 5 ³]	5 [4 or 5 ³]	4 or 5 ³
Shoulder room, front/rear, in.	59.2/57.4 [59.2/57.6]	59.2/57.6	59.2/57.6	59.2/57.4 [59.2/57.6]	59.2/57.4 [59.2/57.6]	59.4/57.6
Head room, front/rear, in.	39.3/38.3 [39.5/38.7]	39.5/38.7	39.5/38.7	39.3/38.3 [39.5/38.7]	39.3/38.3 [39.5/38.7]	39.5/38.7
Leg room, front/rear, in.	41.3/38.7 [41.3/44.3]	41.3/44.3	41.3/44.3	41.3/38.7 [41.3/44.3]	41.3/38.7 [41.3/44.3]	41.3/44.3
EPA passenger volume, cu ft.	106.4 [114.9]	114.9	114.9 (est.)	106.4 [114.9]	106.4 [114.9]	114.9
EPA cargo volume, cu ft.	14.0	14.0	10.0 (est.)	14.0	14.0	14.0
Body	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Type	4-door sedan ¹					
Aerodynamic drag coefficient	0.28	0.29	0.28	0.28	0.30	0.30
EPA size classification	Large ⁴		22/30/25			

1 – Specification applies to all models.

2 – With standard wheels.

3 – 5 with bench rear seats, 4 with rear

Comfort seats.

4 – Specification applies to all models

except ActiveHybrid.

Technical specifications

2013 7 Series

Bold indicates new specification for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (i) model. 740Li xDrive and ActiveHybrid 7 are new models for 2013.

Engine & electrical	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Engine type	DOHC 24-valve 6-cylinder, aluminum construction with cast-iron cylinder liners, direct fuel injection, twin-scroll turbocharger , Valvetronic variable intake-valve lift , Double VANOS ⁵ variable intake- & exhaust-valve timing ⁶			DOHC (4-cam) 32-valve V-8, aluminum construction with silicon-impregnated cylinders, direct fuel injection, twin single-scroll turbochargers, Valvetronic variable intake-valve lift , Double VANOS ⁵ variable intake- & exhaust-valve timing ⁷		DOHC (4-cam) 48-valve V-12, aluminum construction with silicon-impregnated cylinders, direct fuel injection, twin single-scroll turbochargers, Double VANOS ⁵ variable intake- & exhaust-valve timing
Bore x stroke, mm/in.	84.0 x 89.6/3.31 x 3.53 ⁶			89.0 x 88.3/3.50 x 3.48 ⁷		89.0 x 80.0/3.50 x 3.15
Displacement, cc/cu in.	2979/182 ⁶			4395/268 ⁷		5972/364
Compression ratio	10.2:1			10.0:1		10.0:1
Power @ rpm, hp	315 @ 5800 ⁶			445 @ 5500		535 @ 5250
Torque @ rpm, lb-ft.	330 @ 1300-4500 ⁶			480 @ 2000-4500 ⁷		550 @ 1500-5000
Engine-management system	Motronic MEVD 17.2.6 . Hybrid Intelligent Energy Management			Motronic MEVD 7.2.8 .		Motronic MSD 87-12
Combustion engine	Knock control, variable valve timing, direct fuel injection, engine cooling & other functions included in control strategy; 740/750i/Li models add Valvetronic & auto start/stop					
Fuel requirement	Premium unleaded ¹					
Electric motor	–	–	3-phase synchronous			
Power, hp maximum	–	–	55	–	–	–
Torque, lb-ft. (available from rest)	–	–	155	–	–	–
Maximum system power, hp	–	–	350	–	–	–
Maximum system torque, lb-ft.	–	–	360	–	–	–
Fuel capacity, U.S. gal.	21.1 ¹					
Vehicle battery type & capacity, amp-hr.	Lead-acid/105 ¹					
Starting battery, type/amp-hr.	–	–	Absorbent glass-mat (AGM)/50	–	–	–
Alternator output, amp./watt	210/2940	210/2940	200/2800⁸	210/2940	210/2940	220/3080

1 – Specification applies to all models.

5 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

6 – Specification applies to all 740i/Li models.

7 – Specification applies to all 750i/Li models.

8 – This is the starter/alternator unit that provides fast restarts in the hybrid auto start/stop function.

Technical specifications

2013 7 Series

Bold indicates new specification for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

Engine & electrical (cont.)	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
High-voltage hybrid electrical system: battery type/volts/amp-hr./kW-hr.	-	-	Lithium-ion 317/442/0.6	-	-	-
Drivetrain	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Drive system	Front engine/ RWD	Front engine/ AWD	Front engine/ RWD	Front engine/ RWD	Front engine/ AWD	Front engine/ RWD
Automatic transmission	8-speed¹, 8 HP 45	8 HP 45	8 HP 70H	8 HP 70	8 HP 70	8 HP 90
Ratios: 1st	4.71:1¹					
2nd	3.14:1¹					
3rd	2.11:1¹					
4th	1.67:1¹					
5th	1.28:1¹					
6th	1.00:1¹					
7th	0.84:1¹					
8th	0.67:1¹					
Reverse	3.30:1	3.30:1	3.32:1	3.32:1	3.32:1	3.32:1
Final drive ratio	3.08:1	3.08:1	2.93:1	2.81:1	2.81:1	2.81:1
Chassis	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Body/frame construction				Unitized all-steel structure with aluminum hood, front side panels (fenders), doors & roof ¹		
Front suspension				Multi-link system: aluminum upper & double-pivot lower lateral links ⁹ , wheel carriers; Dynamic Damping Control with adjustable twin-tube gas-pressure shock absorbers, anti-roll bar ¹ (Active Roll Stabilization optional on 740i/Li non-hybrid & 750i/Li models, standard 760Li)		
Rear suspension				5-link Integral V suspension with aluminum upper & lower links & wheel carriers; self-leveling air springs , Dynamic Damping Control with adjustable twin-tube gas-pressure shock absorbers, anti-roll bar ¹ (Active Roll Stabilization optional on 740i/Li non-hybrid & 750i/Li models, standard 760Li)		
Servotronic steering system (standard 740i/Li & 750i/Li models, NA 760Li)				Rack & pinion, vehicle-speed-sensitive power steering with variable assist level; electric assist on 740i/Li & 750i/Li models		
Overall ratio				Mechanically variable; mean ratio is 17.1:1		
Turns lock-to-lock				3.1		

1 – Specification applies to all models.

9 – These links are forged steel on xDrive models.

RWD – Rear-wheel drive

Technical specifications

2013 7 Series

Bold indicates new specification for 2013. [Bracketed] information is for Li model where it differs from regular-wheelbase (l) model. 740Li xDrive and ActiveHybrid are new models for 2013.

Chassis	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Integral Active Steering (optional 740i/Li RWD non-hybrid & 750i/Li RWD models, standard 760Li)	Rack & pinion front steering, vehicle-speed-sensitive ratio & assist; vehicle-speed-sensitive rear-wheel steering up to 3° via servo motor & spindles					
Overall ratio	Electronically variable over wide range					
Turns lock-to-lock, minimum	2.1					
Turning circle, ft.:						
Servotronic steering	40.0 [41.7]	41.0 [42.7]	41.7	40.0 [41.7]	41.0 [42.7]	41.7
Integral Active Steering, minimum	37.7 [39.4]	–	–	37.7 [39.4]	–	39.4
Brakes	4-wheel ventilated discs with composite aluminum/cast-iron front rotors, aluminum front/cast-iron rear calipers ¹					
Diameter x thickness:						
Front, mm/in.	348 x 36/13.7 x 1.42 ⁶			374 x 36/14.7 x 1.42 ¹⁰		
Rear, mm/in.	345 x 24/13.6 x 0.94 ⁶			370 x 24/14.6 x 0.94 ¹⁰		
Brake Energy Regeneration	S ¹					
Alloy wheels (standard)	18 x 8.0 ⁶			19 x 8.5 ¹⁰		
Alloy wheels (optional)	19 x 8.5, 19 x 8.5 front/ 19 x 9.5 rear or 20 x 8.5 front/20 x 9.5 rear ^{1, 11}					
Performance all-season run-flat tires (standard) ¹²	245/50R-18 ⁵			245/45R-19 ¹⁰		
Performance run-flat tires (optional) ¹²	245/45R-19 front / 275/40R-19 rear or 245/40R-20 front / 275/35R-10 rear ^{1, 11}					
Performance & efficiency data	740i [Li]	740Li xDrive	ActiveHybrid 7	750i [Li]	750i [Li] xDrive	760Li
Acceleration, 0-60 mph, sec. ¹³	5.5 [5.6]	5.4	5.6	4.7 [4.8]	4.8	4.5
Top speed, mph	155 ^{1, 14}					
EPA estimated MPG, city/highway/combined	19/28/22	19/28/22	22/30/25	17/25/19 [16/24/19]	16/24/19	13/20/15

1 – Specification applies to all models.

6 – Specification applies to all 740i/Li models.

10 – Specification applies to 750i/Li & 760Li models.

11 – See **standard & optional features** table for specific availability.

12 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 7 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

13 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle; road and environmental conditions; testing procedures and driving style. These results should be used for comparison

only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

14 – Electronically limited.

2013 BMW ALPINA B7

In southwestern Bavaria, master engineers and artisans create a quartet of ultra-exclusive, individualistic performance machines.

About 45 miles southwest of BMW's headquarters city of Munich lies the town of Buchloe, a transportation hub of Germany's extensive railway system. If that and its claim to being the "gateway to the Allgäu" (a picturesque part of Bavaria) were all the town had to offer, perhaps there wouldn't be a lot for which to remember Buchloe.

However, such is not the case. Buchloe is the home of ALPINA Burkard Bovensiepen GmbH + Co. KG, maker of the world-famous sporting automobiles that bear the BMW ALPINA name. Even that's not all, as ALPINA is also a prominent purveyor of premium wines.

But it is this automobile that we're concerned with here. (For more on the company and its history, see following pages.) Although ALPINA works its magic on a wide range of BMW models, just one – the B7, a transformation of BMW's 7 Series – is available in the U.S. Parallel to the 750i/Li on which it is based, the B7 comes in four models: B7 SWB, for Short Wheelbase, in standard and xDrive (all-wheel-drive) versions; and B7 LWB, for Long Wheelbase, also in standard and xDrive models.

This section of **Fast Facts 2013** describes the latest B7, which incorporates the Life Cycle Impulse (LCI) updates and refinements of the 2013 7 Series described elsewhere in this **Fast Facts** edition. The information presented here focuses on the features and attributes that distinguish the four B7 models from

their 7 Series counterparts; these are listed in the **key features summary**. The following summarizes the differences between 2013 and 2012 B7 models.

What's new for 2013

As of 7/12 production:

Performance & efficiency

- Special B7 engine receives same updates as 750i/Li's N63 TU V-8, including Valvetronic; these result in a performance increase of 40 hp (up from 500 to 540) and 22 lb-ft. of torque (up from 516 to 538). 0-60-mph acceleration quickens to 4.3-4.4 seconds for all B7 models (previously 4.7 sec.).
- 8-speed automatic transmission replaces previous 6-speed; retains ALPINA's distinctive SWITCH-TRONIC manual shift scheme, with touch buttons on steering wheel instead of BMW's customary shift paddles.
- Driving Dynamics Control adds ECO PRO mode
- Automatic engine start/stop

Exterior design & function

- New front bumper/spoiler ensemble with horizontal chrome elements in outboard air intakes; revised ducting for B7's unique cooling systems; new LED foglights
- Front light clusters newly shaped, include LED luminous rings
- Increased contrast between taillights' light and dark elements
- New evolution of classic 20-spoke wheel design, with a reworked deep-dish design

Comfort & convenience

- Enhanced iDrive display graphics, enabled by 1.3-GB processor with 3D graphics card
- Updated/enhanced Voice Command
- Ambiance lighting expanded to B-pillars; incorporates new choice of two colors
- Chrome highlights at central Control Display and cupholder cover

Safety & security

- Active Protection (code 5AL); encompasses range of new and continuing functions
 - Attention Assist – monitors driver's steering behavior; if not consistent, sounds warning
 - Pre-crash measures (continuing): safety belts tensioned, windows and moonroof closed, seat backrests positioned (front passenger, rear Comfort seats if present, LWB models only)
 - Automatic post-crash braking
 - Panic button with red symbol added to remote fob

Enhanced standard equipment

- Ceramic-trimmed controls newly standard

ALPINA: proud Bavarian tradition, honored collaboration with BMW

The ALPINA story began in 1949, when one Dr. Rudolf Bovensiepen founded a company of that name as a producer of typewriters and adding machines in the Bavarian (Southern Germany) town of Kaufbeuren. In those days, ALPINA became known for the quality and precision of its business machines.

By the early 1960s, Dr. Bovensiepen's son Burkard had discovered a passion of his own. Having become a successful investor in the stock market, he could now indulge that passion – fast cars, in particular fast BMWs – and he decided to make a business of it. Working in an outbuilding of the original typewriter factory, Burkard started a BMW "tuning" business, developing carburetors and cylinder heads that made BMW engines even more powerful. In 1965, Bovensiepen formalized the new business as Burkard Bovensiepen GmbH + Co. KG.

At the beginning, Bovensiepen concentrated on racing. His go-faster BMWs fared well, winning prominent European competitions like the European Touring Car and German Hillclimb Championships; various rally and track-racing championships; and even the prestigious 24 Hours of Spa in Belgium. All along the way, ALPINA worked closely with BMW – and vice versa. ALPINA's roadgoing models established traditions of their own: a classic 20-spoke

wheel design, a patented metallic blue exterior color known as ALPINA Blue, distinctively elegant interior materials, a blue-and-red-themed logo and related exterior striping among them. Their most important distinction, though, was always their enhanced performance, derived from modified engines, transmissions, suspension, brakes and related vehicular elements that were specifically crafted to ALPINA's own philosophy of sporting vehicles.

When ALPINA was founded, there was not yet a BMW M. BMW had been participating in racing since 1929, the first year the company made automobiles. In 1972, BMW's many-faceted racing activities were formalized as BMW Motorsport, whose innovations began to be applied to special versions of roadgoing BMWs soon thereafter. A succession of dedicated Motorsport models began with the mid-engine sports car M1 of 1978. BMW Motorsport was renamed BMW M in 1994, and today the BMW M Cars – M3, M5, M6 and various "Ms" including Z3 and Z4 M, 1 Series M and X5-X6 M – are an established element of BMW's production-vehicle offering. Over all these years, ALPINA continued to "do its thing" out in rural Bavaria, always in harmonious interaction with BMW. Compared to the high-revving, ultra-sporty M vehicles, ALPINA's interpretations have placed emphasis on a more luxurious form of performance: in recent years, super- or

turbocharged engines featuring abundant torque at low engine speeds, automatic transmissions with steering-wheel controls, ultra-luxurious interiors, and distinctive design details inside and out.

ALPINA through the years: some highlights

(Models offered in the U.S. are denoted by an asterisk *)

1962 – Burkard Bovensiepen modifies a BMW 1500 (BMW's all-new model, the sporty sedan that set the pattern for BMW's coming worldwide growth and success) and goes racing with it. Dual Weber carburetors increased power over the stock 1500.

1964 – BMW recognizes ALPINA warranties

1965 – ALPINA Burkard Bovensiepen KG established
1972 – BMW 3.0 CSL, a version of the 3.0 CS incorporating ALPINA modifications, includes first cross-drilled disc brakes in a production vehicle. BMW commissioned ALPINA to lead this project, which led to a great classic performance automobile.

1975 – A1, A2, A3, A4 – based on 1st-generation 3 Series

1978 – B7 Turbo Coupe – based on 1st-generation 6 Series

1978 – first computer-controlled ignition system

1983 – ALPINA officially registered as an automobile manufacturer in Germany

1984 – B9 3.5 – high-performance version of 2nd-generation (E28) 5 Series

1987 – B6 3.5S – 6-cylinder alternative to 1st-generation M3 (2nd-generation 3 Series)

1993 – ALPINA introduces Switch-Tronic system of steering-wheel-mounted controls for automatic transmission

1999 – D10, based on 5 Series Sedan; fastest production diesel sedan in the world

1999 – BMW commissions ALPINA to develop a high-performance X5. Leads to launch of X5 4.6is*, powered by ALPINA-developed high-output V-8 engine, in 2004.

2003 – ALPINA enters North American market for first time with BMW ALPINA Roadster V8*, based on BMW Z8; 450 units sold in the U.S., 555 worldwide

2003 – first B7, combining Valvetronic with radial supercharger

2004 – X5 4.6is* introduced
2007 – BMW ALPINA B7* introduced to U.S. market, based on E65 (2001-08) 7 Series generation. This is the B7 first introduced in Europe in '03. 746 units sold in North America through 2008.

2008 – B3 Bi-Turbo Allrad – all-wheel-drive (AWD) version of E9x 335xi as Sedan, Sport Wagon or Coupe

2008 – New engineering, testing and development center with five performance dynamometers + emission-analysis/certification dynamometer

2010 – New B7 models* introduced, based on F01 7 Series generation; 375 units sold in North America in '10, 424 in '11, target for '12 is 446 units

2011 – BMW ALPINA B6 GT3 race car wins German GT3 Championship

2013 – Current model, incorporating new Valvetronic engine and LCI refinements, introduced*

ALPINA today; the interaction with BMW

Approximately 190 employees create and market ALPINA automobiles, more than 30% of them working in engineering. ALPINA produces 1000-1500 automobiles per year, of which 400+ are destined for the U.S. and Canada. Today the company's managing director is Andreas Bovensiepen, son of Burkard and not only a successful racing driver (who won the 24 Hours of Nürburgring in 1988) but also experienced at working within corporate BMW. Joining Andreas in managing the company is his brother Florian.

How the B7 is created

The development process.

Typically, after project agreement with BMW, approximately 30 months of development precede production of a new model. In the early months, components, engines and prototype vehicles are built. Engine, drivetrain, chassis and aerodynamics are systematically developed and tested. Much of the vehicle testing takes place at BMW proving grounds, such as that at Miramas in the south of France, Nardo in southern Italy, or the famous Nürburgring in Germany. Cold-climate testing is done in the U.S., the Alps and in ALPINA's own climate chamber, which subjects

vehicles to temperatures as low as -13°F. Hot-climate testing takes prototypes to the Middle East and America's Death Valley. Braking and aerodynamic tests are conducted at BMW's proving grounds and wind tunnel north of Munich.

In the final three months before production start, pre-production vehicles are built, tested, evaluated; engineering is fine-tuned and refined before actual series production begins.

Development for production takes place in stages:

ALPINA components and systems. Engineered and developed by ALPINA itself, most of these are produced by ALPINA suppliers. They include aerodynamic components, wheels and tires; engine components including pistons, turbochargers, intercoolers and ancillaries; drivetrain and chassis components including automatic transmission, driveshaft, differential and exhaust system; diverse items such as airbags and doorsill trims.

Produced at BMW. The "raw" vehicle, incorporating extensive features, technical specifications and settings, and modifications. The engine, incorporating the ALPINA components so that as installed, it is the ALPINA version. The vehicle then goes to ALPINA for completion.

Vehicle production at ALPINA. Here everything comes together in to a completed BMW ALPINA B7. Cooling systems, suspension springs, wheels and tires, aerodynamic components and the finished interior. After completion, each production B7

is given a thorough test drive. Once this is done and any required corrections are made, the B7 is shipped.

Full coverage via BMW Ultimate Service™. Every B7 is covered by the standard BMW Limited Warranty and includes BMW Full Maintenance, TeleService and BMW Assist™. And naturally, every B7 can be serviced by any authorized BMW center.

The ALPINA credo

Every BMW ALPINA automobile expresses a consistent set of principles:

- An engine that combines abundant torque and power with moderate fuel consumption.
- An automatic transmission that can be switched instantly to manual shifting.
- Refined handling, thanks to exceptional suspension design and calibration: supple and relaxing in everyday driving, neutral at the limit.

- Distinctive exterior design, with striking esthetics, aerodynamic functionality and the iconic 20-spoke wheels.

- Luxurious and distinctive interior design and materials.

As an embodiment of this credo, the BMW ALPINA B7, in its variants of wheelbase, overall length and rear- or all-wheel-drive powertrain, presents North American customers with a true "gourmet" motoring and ownership experience. After testing a 2011 B7 in Germany, *Automobile* characterized it this way in its June '10 issue: "To the casual observer, it's the buttoned-down, boardroom-grade 7 Series with a few adornments. But when whipped into action, this sedan's pin-stripe Armani morphs into jogging shorts and its wingtips kick like Nike Frees."

ALPINA B7 key features summary

This information lists distinctions of B7 models from their 7 Series counterparts, and applies to all B7 models unless specifically noted.

Exterior design & function

- Modified vehicle aerodynamics that reduce front-end lift by 30%, rear-end lift by 57%:
 - ALPINA-specific front bumper/spoiler ensemble with dedicated intakes & ducting for engine, transmission and brake cooling
 - Trunklid spoiler
- Oval chrome exhaust outlets, dual left and right
- Exclusive availability of unique ALPINA Blue metallic paint, choice of gloss or special-order Frozen (matte) finish
- Revised coil springs for front / air springs for rear suspension, lower ride height
- Dynamic Damping Control with ALPINA-specific settings and software
- Standard Active Roll Stabilization
- Specific Dynamic Stability Control, including Dynamic Traction Control
- ALPINA-specific Driving Dynamics Control settings, which include variable engine sound
- Larger brake pads, increasing swept area of brakes
- ALPINA wheels in classic 20-spoke design, 21 x 8.5 front/21 x 10.0 rear; tires 245/35ZR-21 front / 285/30ZR-21 rear¹

Performance & efficiency

- Increased boost pressure via 2-mm greater diameter of turbochargers' turbines
- Reinforced Mahle pistons
- ALPINA engine-management system (software)
- Specific NGK sparkplugs
- Power output 540 hp, vs. 750i/Li's 445
- Torque output 538 lb-ft., vs. 750i/Li's 480
- 8-speed automatic transmission incorporates ALPINA software, torque converter and Switch-Tronic manual shift strategy
- Specific transmission output shaft and driveshaft to accommodate increased engine torque
- Completely revised cooling system consisting of:
 - Optimized indirect intercooler
 - Enlarged low-temperature intercooler
 - Enlarged auxiliary radiator
 - Revised air ducts for auxiliary radiator and brakes
- Additional main transmission oil cooler
- Enlarged engine oil cooler
- More powerful cooling fan
- ALPINA-calibrated suspension

Comfort & convenience

- Doorsill trims: illuminated as in 750i/Li, but with "B7" script illuminated
- Unique sport steering wheel, incorporating Switch-Tronic manual shift controls (up- and downshift buttons set into wheel's leather covering); ALPINA logo, contrast stitching
- ALPINA instrument cluster with blue dial faces, red pointers
- Standard Head-up Display
- Standard Active Support and Active Ventilation on front seats
- Standard Nappa leather-trimmed upper dash and door panels
- Standard DVD changer
- Standard heated rear seats

Packages & options

- Specific interior trims: Piano Black with rhomb accents or Myrtle wood
- BMW Individual Walnut Honey or White Ash Grain

ALPINA B7 key features

Except as noted, all current B7 models offer the following features:

Exterior design & function Performance & efficiency

Subtle, elegant, powerful – from front to rear, the BMW ALPINA B7 expresses the ALPINA credo:

At the front, the tastefully designed bumper/spoiler ensemble is functionally beautiful. Beauty derives from a harmonious juxtaposition of air intakes, bright-metal trim and elegant contours; function is attended to by new LED foglights (plus, optionally, Full LED Forward Lighting) and a systematic organization of air-intake functions: engine oil at upper right², engine coolant at upper left, transmission oil at lower center, and brakes at lower left and right.

In profile, ALPINA's signature 20-spoke wheels appear in a new interpretation, with concave contours and 21-in. dimensions that literally underscore these vehicles' mighty road capabilities. Standard high-gloss Shadowline trim around the side windows adds a note of elegant seriousness.

At the rear, expressive simplicity results from a unique trunklid spoiler, dual oval chrome exhaust outlets, discreet bright-work along the bumper and connecting the taillights, and an equally subtle center diffusor at the bottom.

Finally, adding a unique accent to the entire B7, ALPINA's traditional metallic blue is available on the B7 – and in North America, only on the B7. It is offered in a choice of conventional gloss, or on special order, in the new Frozen (matte) finish.

As always with ALPINA's creations, the B7 enjoys a combination of BMW and ALPINA engineering prowess. ALPINA's modifications enhance the already outstanding 750i/Li performance at all points along the powertrain: engine, cooling systems, transmission and final drive. Suspension is further calibrated and fine-tuned to meet ALPINA's specific goals for handling, roadability and riding comfort. Dynamic Stability Control is uniquely calibrated, as is the AWD system of xDrive models. And the settings of BMW's Driving Dynamics Control are attuned to ALPINA's own concepts of driving enjoyment.

4.4-liter ALPINA Bi-Turbo V-8 engine: making a great engine even greater

The B7 engine is a further development of the new N63 TU (Technically Updated) engine that powers 2013 750i/Li models. In another sense, it is also a further development of the engine that powered B7's in 2011-12, applying essentially the same ALPINA performance criteria and expertise to BMW's updated engine. In quantitative terms, the results come to 540 hp, vs. the previous 500 and the current 750i/Li's 445. Torque, a particular ALPINA priority, rises to 538 lb-ft. from the previous B7's 518 and current 750i's 480.

1 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. ALPINA B7 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

2 – As viewed in direction of travel.

ALPINA B7 key features

Except as noted, all current B7 models offer the following features:

How does ALPINA do it? At the core, by utilizing the capabilities and facilities of ALPINA's new Engineering, Testing and Development Center and the far-flung testing resources listed previously. Then, looking at the actual engineering and development work that took place here, we see:

Larger-dimensioned, higher-output turbochargers. BMW's V-8 employs twin turbos (ALPINA's term: Bi-Turbo), situated atop the engine between its two cylinder banks. ALPINA, working with the turbo manufacturer Honeywell Garrett's UK division, set out to achieve a higher level of turbo boost: much higher, to be sure, going from the stock 11.4 psi to 17.4 pounds/sq in. (psi). Primarily, this is accomplished via turbochargers whose turbines are 2 mm (0.079 in.) larger in diameter.

And when boost goes up, the resulting pressurized air is hotter and cooling systems must be beefed up. This requirement was met by optimizing one of the two intercoolers (which cool the pressurized air of forced-induction engines like this) and enlarging the other. The already-present auxiliary radiator for engine coolant was also enlarged, as was the engine's oil cooler. Ducting from the frontal air intakes was redesigned too.

New pistons were developed to accommodate the increased boost and a compression ratio up from the previous 9.2:1 to 10.0:1 now. These are supplied by famous German manufacturer of metal automotive components Mahle.

Evolved software. ALPINA routinely develops its own software for engine management systems. In this case, a new control module, called MEVD 17.2.8., was developed by ALPINA and (like the standard module) is made by Bosch. Such a module is part of every automotive engine today, and though it is packaged in a compact housing, it is a complex thing, taking readings from every imaginable aspect of vehicle operation and calculating the precise operation of the engine's electrical/electronic and fuel systems to achieve the desired power, torque, fuel efficiency, emission and running characteristics. Incorporation of the new ECO PRO Driving Dynamics mode adds to the module's duties.

Another electronics matter: whereas production BMWs generally include an electronic limiter on top speed – see the Technical Specifications for the various BMW Series in this **Fast Facts** edition for precise top speeds – B7s are defiantly not limited. As a result, the rear-wheel-drive models attain a top speed, limited only by their power, weight and aerodynamics, of 194 mph; the xDrive models make it to 193 mph³.

ALPINA engine cover provides distinguishing esthetics under the hood.

8-speed Switch-Tronic automatic transmission

Previous 750s and B7s ran an ALPINA-modified version of BMW's 6-speed automatic transmission. Now BMW's industry-leading 8-speed automatic teams with both model sets' new engines to optimize

performance and fuel efficiency alike. 7 Series models with the M Sport Package now include steering-wheel shift paddles that facilitate driver-controlled up- and downshifting. In 1993, ALPINA pioneered this capability with its unique Switch-Tronic system, which sets round shift switches into the steering wheel's leather cladding. ALPINA also pioneered the strategy of left button for downshifts, right button for upshifts; current BMW models' shift paddles employ this same logic.

ALPINA's version of the transmission incorporates detail operational differences from that of regular-production BMW models; it is recommended that BMW center personnel presenting the B7 to customers, and customers who have acquired a B7, study the supplementary ALPINA owner's manual provided with each B7 vehicle.

ALPINA-calibrated suspension, tires and traction + stability systems

To quote the authoritative BMW club magazine *Roundel*, "ALPINA's chassis work always treated an absorbent ride as a serious priority alongside sportier handling."

Fine-tuned suspension. ALPINA stiffens the suspension – coil springs in front, self-leveling air springs in rear – about 20% and lowers it 0.3 in. front/0.2 in. rear. The "secret" here is that these modifications can be done without loss of riding comfort because of the non-runflat tires and standard Active Roll Stabilization – both explained in subsequent paragraphs. Indeed, subjectively, published tests have commented that the B7's

Comfort mode is a bit more comfortable than that of the standard (not M Sport Package)-equipped 750i.

Non-runflat performance tires. The latest B7s continue this tradition, admittedly sacrificing the convenience of run-flats; in compensation, B7 driver and passengers enjoy the more supple level of riding comfort thanks to the reduction of sidewall stiffness compared to run-flats. To facilitate temporary tire repair in case of deflation, a Mobility Kit is carried beneath the B7 trunk's floor; its use is described in the supplementary owner's manual provided.

B7 tires are Z-rated Michelin Pilot Sports, developed by Michelin specifically for the B7. Their reduced weight compared to run-flats is an additional factor enhancing riding comfort. A continuing ALPINA feature is that their valves are not situated conventionally at the rims, but concealed behind the lockable ALPINA-logo center wheel caps. The wheels are 21 x 8.5 front/ 21 x 10.0 rear, in the latest evolution of ALPINA's classic 20-spoke design. Tires are sized 245/35ZR-21 front / 285/30ZR-21 rear¹; there are no factory wheel or tire options, though the same wheel design is available in black finish at BMW centers.

- 1 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. ALPINA B7 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.
- 3 – Driving at top speed on public roads is most definitely neither advisable nor recommended. In fact, even on a closed, trafficless roadway, such speeds require professional driving ability.

ALPINA B7 key features

Except as noted, all current B7 models offer the following features:

Active Roll Stabilization, standard. This remarkable system, optional on 740i/Li non-hybrid and 750i/Li models and standard on all B7s, is essential to the ALPINA concept of handling and comfort. Not only does ARS promote amazingly "flat cornering," it also enhances riding comfort by virtue of never adding any ride stiffness over bumps and ripples in straight-ahead driving. It's an elaborate concept and system, worthy of vehicles that aim to combine handling ability and riding comfort at the highest levels of sophistication.

Dynamic Stability Control, Dynamic Traction Control, Dynamic Damping Control. All three typical BMW functions – DSC as the overall stability-enhancing system, DTC as its reduced-intervention mode for sporty driving, DDC the system of electronically controlled shock absorbers – are calibrated for ALPINA's distinctive blend of handling and comfort. The settings of the **Driving Dynamics Control** on the console are likewise attuned to ALPINA's preferred stages of firmness or comfort; its settings are Comfort, Comfort+, Sport and Sport+ – plus, like 2013 7 Series models, the new ECO PRO mode to promote fuel-efficient driving.

Special programming of xDrive. For the B7 xDrive models, the Sport mode of the Driving Dynamics Control sends the driving torque increasingly to the rear wheels, enabling a super-sporty driving style that's unique among all-wheel-driven luxury performance sedans.

Comfort & convenience

ALPINA's treatment of the interior is elegantly subtle. The Nappa leather that's standard in B7s is the same as that of regular 750i/Li models, with a choice of five color schemes. Also as in the regular models, Full Merino leather is optional in a choice of six colors. The differences come in various details:

Standard Nappa-trimmed upper dash and door panels. This touch is optional in the 750i/Li models.

Unique ALPINA sport steering wheel, with Switch-Tronic manual shift buttons. This signature feature, pioneered by ALPINA in 1993, mounts leather-finished buttons on the back side of the wheel's cross-spokes within natural reach of the driver's thumbs. Analogously to BMW's shift paddles, the left one is for downshifts, the right for upshifts. If the driver initiates a downshift and the transmission is in Drive, the Manual mode is immediately engaged; but then if the driver initiates no further shifts for 15 seconds, the transmission returns to Drive. If the transmission is in Sport mode (via moving the shift lever leftward), it holds the manually selected gear until the driver makes another selection.

Other distinctions of this beautiful steering wheel include Lavalina leather covering in ALPINA's subtly bluish gray, the ALPINA logo, and unique parallel (vs. cross) hand-stitching.

ALPINA instrumentation. While retaining the 7 Series' dramatic Black Panel instrument cluster, ALPINA again applies its

characteristic blue to the dial faces for speedometer (reading to 200 mph), tachometer (to 7500 rpm), fuel gauge and oil-temperature readout. Set into the tachometer face, the fuel-economy readout tracks Brake Energy Regeneration plus the (new for '13) ECO PRO driving mode and automatic engine start/stop. BMW's elegantly informative, full-color/3D-effect Head-up Display is standard (vs. optional on standard models).

Distinctive interior trim. The standard Fine Line high-gloss and no-extra-cost matte-finish woods are shared with the 7 Series. ALPINA adds two unique choices, also at no extra cost: a burl grain of Myrtle wood, found only in the north of America's Pacific coast and seldom seen in motor vehicles; and ALPINA Piano Black with rhomb accents and ALPINA logo set into it.

Two BMW Individual trims – Walnut Honey and White Ash Grain – are available at extra cost.

Additional B7 standard equipment. Further features that are standard in B7s include Active Support and Active Ventilation on the front seats, heated rear seats, and a 6-disc DVD changer.

Safety & security

B7 models' safety and security features are identical to those of their standard-production counterparts, including the new-for-'13 Attention Assistant and (as part of the Driver Assistance Package), the new Enhanced Active Cruise Control with Collision Warning and Collision

Mitigation. See the 7 Series' **safety & security** section, as well as **BMW features**, for detailed information.

Packages & options

Because of the especially high level of standard equipment on B7 models, their list of packages and options is relatively short.

Packages

Driver Assistance Package (all models, code ZDA)

Enhances the B7s' already outstanding active safety in three ways:

- **Lane Departure Warning with Approach Control, new code 5AS.** Employing a camera near the interior rearview mirror, monitors road lane markings. If the vehicle begins to move across a lane without the turn signals activated, LDW vibrates the steering wheel. Approach Control, new for 2013, warns of potential collision with vehicle ahead and prepares brakes for quicker response to pedal. Details on familiar LDW (code 5AD) in **BMW features**; Approach Control is exclusive to 7 Series and B7 for 2013.
- **Active Blind Spot Detection, code 5AG.** Radar sensors at the rear of the vehicle monitor traffic in adjacent lanes, taking in an area from the driver's blind spot rearward 60 meters/ almost 200 ft. An illuminated triangular warning LED appears in the exterior mirror if there is a vehicle in this critical area; if the driver activates the turn signal, the LED blinks and, as with Lane Departure

ALPINA B7 key features

Except as noted, all current B7 models offer the following features:

Warning, the steering wheel vibrates to warn the driver not to make a lane change.

- **Side-view and Top-view cameras**, code 5DL
- **Speed Limit Info**, code 6TH. Captures current speed-limit and other signage, displays it in iDrive monitor.

Available at extra cost as an upgrade to this package is:

- **Enhanced Active Cruise Control with Stop-and-Go function, Collision Warning and Mitigation**. Through 2012, the 7 Series offered ACC with Stop-and-Go and Collision Warning; this utilized its radar sensors to detect critical closing-rate situations with standing and moving objects, even with ACC off:
- “Soft” warning (visual, in instrument cluster)
- “Acute” warning, visual and audible, for higher closing rate
- Brake Standby – brake pads snugged up to rotors
- Lower threshold for Dynamic Brake Control (panic application recognized earlier) to optimize braking force.
- Safety-belt tensioning (reversible)

For 2013, ACC as offered on the 7 Series and B7 adds Collision Mitigation capability by combining Lane Departure Warning’s forward-facing camera’s input with that of ACC’s front-mounted radar sensors; this improves the detection of other vehicles and their speeds, and reduces the system’s reaction time.

Should a vehicle ahead brake very sharply in otherwise free-flowing traffic, the driver is first prompted to take action by the 2-stage warning listed above.

If the driver fails to react, ACC slows the BMW to a standstill at the strong (but not panic-level) rate of 5 meters/second per second (5 m/s/s), then locks the brakes altogether for a further 1.5 sec. This reduces the likelihood of a secondary collision.

Luxury Rear Seating Package (LWB models, code ZLU)

Adds three further features to the long-wheelbase models:

- **14-way rear Comfort seats**, code 460. The adjustments include:
 - Fore-aft
 - Cushion angle
 - Backrest angle
 - Angle of upper backrest
 - Firmness of lumbar support
 - Height of lumbar support
 - Head-restraint height.

To preserve the driver’s rearward view, each head restraint retracts when the seat is not occupied and automatically rises to its preset position when an occupant sits in the corresponding seat.

As a convenience bonus, the front passenger’s seat can be adjusted from the right rear seat’s power controls by pressing a switch for the purpose.

There is also a switch that returns the rear Comfort Seat to its “home” position. Finally, each seat includes a 2-position memory system.

These seats are separated by a storage compartment (plus the center armrest) and transform the B7 LWB cabin into a 4-seat-er configuration.

- **Active Ventilation**, code 454. Functions like that in the front seats, and also has perforated Dakota leather for cushion and backrest center sections.

- **Massaging rear seats**, code 4UM. This 7 Series exclusive helps passengers unwind on longer journeys. Twelve massage units relax the back muscles by producing a wave motion from top to bottom in the backrest; six rotating elements, positioned around the outer shoulders, middle of thorax and lower back, add to the effect.

Stand-alone options

Full LED Forward Lighting (all models, code 552)

Although offered here under the code number of Full LED Forward Lighting, this option actually includes two features:

- **Full LED Forward Lighting**, code 552. Extends ultra-white LED lighting technology to the headlights and accent strips above them; also visible in the front view are new LED turn signals, set into the exterior mirrors.
- **Automatic High Beams**, code 5AC. Switches automatically between low and high beams, according to whether or not there are oncoming headlights. Details in BMW features.

Bang & Olufsen audio system (all models, code 6F2)

After its debut in the 2012 6 Series, this ultra-audiophile system becomes available in more models. See the 6 Series section of Fast Facts 2012 or BMW features in this edition.

Rear Seat Entertainment (all models, code 6FR)

This is the new-generation system also offered in some other Series, consisting of –

- Two high-resolution, angle-adjustable 9.2-in. color monitors integrated into the front seats’ backrests (up from 8.0-in. previously)
- **iDrive controller** in rear center armrest, new feature.
- **Separate ports** for connecting MP3 players and game consoles
- **Access to vehicle’s entertainment functions** (radio, DVD changer, online services, phone)
- **Separate GPS navigation**: rear passengers can “suggest” a navigation destination and transmit it to the front iDrive; the driver can then accept the destination and program it into GPS.
- **Connectivity for wired and wireless headphones**.

Wired and wireless earphones are available separately.

Alternate interior trim

(all models as described; codes 4CA, 4CB, XEY & XEZ)

The selection of alternate interior trim materials is specific to the B7 line:

- **Ash Grain (4CA)** and **Fine Line Matte (4CB)** are optional at no extra cost as an alternative to the standard Fine Line high-gloss interior trim. These trims are also available in the 7 Series.
- **ALPINA Myrtle wood (XEY)** and **ALPINA Piano Black (XEZ)**, both exclusive to B7s, are also available at no extra cost. Myrtle is a rich, medium-tone wood seldom offered in motor vehicles; ALPINA’s version of Piano Black is distinguished by its unique rhomb accents.

ALPINA B7 key features

Except as noted, all current B7 models offer the following features:

Additionally, two BMW Individual trims are available; see **Priority 1 stand-alone options** at right.

Night Vision with Pedestrian Detection

(all models, code 6UK)

Via an infrared camera, Night Vision scans a range up to 1600 ft. ahead of the vehicle over a 36-degree-wide range, and is varied according to the road's path and driver input. Includes recognition of the direction a pedestrian near the roadway is moving. If it's parallel to the road, the system senses and displays the presence on the iDrive display (or, if activated, Head-up Display) but doesn't warn the driver; if the pedestrian is on a path to cross the road, it displays a warning⁴.

BMW Apps

(all models, code 6NR; includes Smartphone Integration)

BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function is released, users can update and customize their vehicle's infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party App.

Priority 1 stand-alone options

BMW Individual Xirallic paints

(all models, paint codes)

Four of these dramatic, special-effects colors are available at extra cost: Azurite Black S34, Citrin Black X02, Ruby Black X03 and Moonstone Metallic X04.

Full Merino leather upholstery

(all models, upholstery codes)

Notable for its gentle surface and natural grain; only hides without damage or irregularities are selected, no artificial surface treatment is done, and color is applied all the way through so that this leather retains its beauty and natural breathing ability over the years. The leather treatment is very extensive – including head restraints, center console and armrests. Nappa leather-trimmed upper dash and door surfaces (code 4ND) are standard. Available in six color schemes, upholstery codes ZB.

BMW Individual interior trim

(all models, codes XE6 & XEX)

Two especially elegant trims, familiar from BMW Individual Compositions, are available at extra cost:

- Walnut Honey, code XE6
- White Ash Grain, code XEX.

Special-order option

ALPINA Blue metallic paint, Frozen

As a special-order option (see note on Contents page 2), the unique and elegant ALPINA Blue exterior color can be executed in the new Frozen (matte) finish.

BMW center-installed accessories

Among the accessories offered for B7 models are:

- ALPINA 21-in. wheels (same design as standard) in black finish
- Wheel locks
- Mud flaps
- License-plate frames
- Car covers, outdoor and indoor types
- UV sunshade
- Smoked sun/wind deflector for moonroof
- Roof carrier systems

- Bicycle lift
- Floor mats, all-weather
- Snap-in adaptor with USB interface for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- Snap-in adaptor for BMW Apps and various media
- Connection and charging cables of various types
- BMW Bluetooth headset
- CD/DVD storage sleeve
- Cool bag
- BMW umbrella with LED light
- LED hand lamp
- Rear-seat protective cover
- Fitted luggage
- Trunk mats, various types
- Trunk tray, nets, hold-down straps
- BMW collapsible box

For details, see the latest Accessories listing for the 7 Series on bmwusa.com.

⁴ – Pedestrian Detection functions only at ambient temperatures of 82.4°F or below.

Standard & optional features

2013 BMW ALPINA B7

Bold within table indicates distinctions of B7 from corresponding 7 Series model (B7 SWB vs. 750i, B7 LWB vs. 750Li, B7 SWB xDrive vs. 750i xDrive, B7 LWB xDrive vs. 750Li xDrive). [Bracketed] information is for LWB model where it differs from SWB model.

Exterior design & function	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Unique ALPINA front spoiler/bumper/air-intake ensemble with logo & pinstripes	S	S
Aluminum hood, front side panels (fenders), roof panel & doors	S	S
Xenon Adaptive headlights with LED luminous rings	S	S
Dynamic auto-leveling of headlights with topographical compensation	S	S
Daytime Running Lamps via LED luminous rings	S	S
LED front foglights	S	S
Cornering lights	S	S
Full LED Forward Lighting + Automatic High Beams	OPT	OPT
Automatic headlight control	S	S
LED turn signals in exterior mirrors	S	S
Rain-sensing windshield wipers & heated washer jets	S	S
Power-folding exterior mirrors	S	S
Choice of standard or metallic paint colors, including unique ALPINA Blue	S	S
Frozen ALPINA Blue	S-OPT	S-OPT
BMW Individual Xirallic paint colors	P1	P1
Park Distance Control front & rear with graphic display	S	S
Ground lighting at door handles	S	S
Adaptive brakelights	S	S
High-gloss Shadowline exterior trim around side windows & bases of exterior mirrors	S	S
Unique ALPINA trunklid spoiler	S	S
Chrome exhaust outlets, dual left & right, oval	S	S

Performance & efficiency	B7 SWB [LWB]	B7 SWB [LWB] xDrive
4.4-liter Bi-Turbo V-8 engine	S	S
Engine features:		
Aluminum construction	S	S
Cylinder technology	Silicon-impregnated cylinder surfaces	
Dual overhead camshafts & 4 valves/cylinder (32 valves)	S	S
High Precision direct fuel injection	S	S
Valvetronic variable intake-valve lift	S	S
Double VANOS ¹ steplessly variable valve timing	S	S
Special reinforced Mahle pistons	S	S
Twin single-scroll turbochargers, increased dimensions & boost output	S	S
ALPINA dual intercoolers	S	S
Variable engine response	S	S
Electronically controlled engine cooling	S	S
Electronic sensing of oil level & condition	S	S
Exhaust system	Dual ALPINA	Dual ALPINA
Automatic engine start/stop with function display in tachometer	S	S
Driving Dynamics Control – 4 settings for engine response, transmission shift characteristics, shock-absorber firmness & steering assist; additional setting switches DSC to DTC	S	S
8-speed Switch-Tronic automatic transmission with Adaptive Transmission Control, E-shift & selectable modes	S	S
Liquid-cooled alternator	S	S
ALPINA-calibrated suspension system:		
Aluminum multi-link front	S	See note ²
Aluminum 5-link Integral	S	S
Lower ride height	S	S
Self-leveling rear suspension with air springs	S	S

1 – VANOS = Variable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

2 – Lower lateral links are of forged steel on xDrive models.

S – Standard

OPT – Optional

S-OPT – Special-order option

P1 – Priority 1 option

Standard & optional features

2013 BMW ALPINA B7

Bold within table indicates distinctions of B7 from corresponding 7 Series model (B7 SWB vs. 750i, B7 LWB vs. 750Li, B7 SWB xDrive vs. 750i xDrive, B7 LWB xDrive vs. 750Li xDrive). [Bracketed] information is for LWB model where it differs from SWB model.

Performance & efficiency (cont.)	B7 SWB [LWB]	B7 SWB [LWB] xDrive
ALPINA-programmed Dynamic Damping Control with Comfort, Comfort+, Sport & Sport+ modes	S	S
Active Roll Stabilization	S	S
Vehicle-speed-sensitive variable-assist, variable-ratio rack-&-pinion power steering	S	S
4-wheel ventilated disc brakes with aluminum/cast-iron front rotors, enlarged pads front & rear	S	S
Brake Energy Regeneration with function indication in tachometer	S	S
Electromechanical parking brake	S	S
Automatic Hold	S	S
ALPINA-programmed Dynamic Stability Control with Dynamic Traction Control, electronic limited-slip differential	S	S
xDrive fulltime all-wheel drive, electronically controlled with variable front/rear torque split & traction control	NA	S
ALPINA wheels in classic 20-spoke design, 21 x 8.5 front/21 x 10.0 rear	S	S
Performance tires, non-runflat 245/35ZR-21 front / 285/30ZR-21 rear³	S	S
Comfort & convenience	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Vehicle & Key Memory with Personal Profile user-specific settings	S	S
Comfort Access keyless entry with hands-free trunk opening	S	S
Multi-function remote control	S	S
Stepless door checks	S	S
Soft-close doors	S	S
Dual power/heated/auto-dimming/power-folding exterior mirrors	S	S
BMW Universal Transceiver	S	S
Comprehensive lighting amenities: Welcome Light (automatic switch-on of ground lighting & interior lights upon unlocking vehicle)	S	S
Illuminated B7 doorsill trims	S	S
Fade-in/fade-out of interior lights	S	S

Comfort & convenience (cont.)	B7 SWB [LWB]	B7 SWB [LWB] xDrive
BMW Ambiance Lighting, including front & rear center, door handles & storage pockets, back sides of front backrests, B-pillars, rear center armrest; choice of white or orange lighting	S	S
Front & rear left/right reading lamps	S	S
Illuminated visor vanity mirrors	S	S
Illuminated 2-section front console compartment	S	S
Front & rear footwell illumination	S	S
Leather-wrapped power/heated tilt/telescopic ALPINA sport steering wheel with fingertip cruise, audio & phone controls, auto tilt-away for entry & exit; unique ALPINA Switch-Tronic shift controls	S	S
Dynamic cruise control	S	S
Enhanced Active Cruise Control with Stop-&-Go function, Frontal Collision Warning & Collision Mitigation	ZDA+OPT	ZDA+OPT
Instrument cluster with Black Panel technology & ALPINA Blue instrument faces & red pointers	S	S
Head-up Display with full color/3D-effect graphics, adjustable viewing height	S	S
Condition-Based Service system	S	S
Integrated owner's manual via iDrive	S	S
Supplemental printed owner's manual covering ALPINA-specific subjects	S	S
20-way power/heated front Multi-Contour seats, including articulated upper backrests, adjustable backrest width & thigh support, active head restraints with adjustable side support, easy-entry feature, memory for both seats	S	S
Active Support & Active Ventilation, both front seats	S	S
Heated rear seats	S	S

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. B7 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

S – Standard
OPT – Optional
NA – Not available
ZDA – Driver Assistance Package

Standard & optional features

2013 BMW ALPINA B7

Bold within table indicates distinctions of B7 from corresponding 7 Series model (B7 SWB vs. 750i, B7 LWB vs. 750Li, B7 SWB xDrive vs. 750i xDrive, B7 LWB xDrive vs. 750Li xDrive). [Bracketed] information is for LWB model where it differs from SWB model.

Comfort & convenience (cont.)	B7 SWB [LWB]	B7 SWB [LWB] xDrive
14-way power rear Comfort seats, power-adjustable upper backrests, 4-way power lumbar support, power head-restraint height & automatic retraction, Active Ventilation, massaging function	NA [ZLU]	NA [ZLU]
Illuminated rear vanity mirrors	NA [S]	NA [S]
Check Control vehicle monitor system, with information displayed in main instrument cluster	S	S
Nappa leather upholstery	S	S
Full Merino leather upholstery	P1	P1
Nappa leather-trimmed upper dash & door panels	S	S
Anthracite-color headliner	S	S
Interior trim:		
Fine Line high-gloss wood	S	S
Fine Line Matte wood	NC	NC
ALPINA Myrtle wood	NC	NC
ALPINA Piano Black with rhomb accents	NC	NC
BMW Individual Walnut Honey or White Ash Grain	P1	P1
Ceramic-trimmed controls	S	S
Power windows with key-off operation, 1-touch open/close & anti-trapping feature	S	S
4-zone automatic climate control with full left/right temperature & air-distribution controls, automatic recirculation control, draft-free air delivery, misting control, bi-directional solar sensor, temperature-controlled rear air outlets, activated-charcoal ventilation & other features	S	S
Power 2-way Contour moonroof with 1-touch operation, power interior shade & vehicle-speed- sensitive wind deflector	S	S
Next-generation iDrive system with 10.2-in. high-resolution control display, GPS Navigation; direct-select radio, media, phone & Navigation menus; 8 Programmable Memory Keys, Voice Command, Real Time Traffic Information & other features	S	S

Comfort & convenience (cont.)	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Logic7 premium audio system with 16 speakers, Digital Sound Processing, Surround Sound, Radio Data System (RDS), in-dash single-disc CD player, auxiliary audio input & FM diversity antenna system; includes front center-fill speaker & 2 subwoofers	S	S
Bang & Olufsen premium audio system with 16 speakers, Dirac Dimensions™ acoustic signal processing, Surround Sound, illuminated aluminum speaker bezels; front center-fill midrange & tweeter retract when system is off; includes upgraded audio power & componentry, all features of standard system	OPT	OPT
6-disc DVD changer	S	S
80-GB hard drive providing data storage for Navigation, audio system, phonebook & Voice Command; ripping capability from CD & DVD players	S	S
iPod/USB Adapter	S	S
BMW Apps + Smartphone Integration	OPT	OPT
New-generation Rear Seat Entertainment system	OPT	OPT
Satellite Radio with 1-year subscription	S	S
Enhanced Bluetooth mobile-device interface with high-capacity phonebook download	S	S
Power outlets in front ashtray/storage tray, center console & front passenger footwell	S	S
Seatback storage compartments	S	S
Power rear-window & rear door-window sunshades	S	S
Floor mats, front & rear	S	S
Trunk opening from remote or interior + hands-free opening from exterior	S	S
Automatic trunk opening & closing	S	S
Fully finished trunk with inside trunk release	S	S
Ski bag	S	S

S – Standard
OPT – Optional
P1 – Priority 1 option

NC – No extra cost
NA – Not available
ZLU – Luxury Seating Package

Standard & optional features

2013 BMW ALPINA B7

Bold within table indicates distinctions of B7 from corresponding 7 Series model (B7 SWB vs. 750i, B7 LWB vs. 750Li, B7 SWB xDrive vs. 750i xDrive, B7 LWB xDrive vs. 750Li xDrive). [Bracketed] information is for LWB model where it differs from SWB model.

Safety & security	B7 SWB [LWB]	B7 SWB [LWB] xDrive
ALPINA-calibrated Dynamic Stability Control (DSC), including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, electronic limited-slip differential	S	S
Night Vision with pedestrian detection	OPT	OPT
Rear-view camera	S	S
Side- & top-view cameras (Surround View)	ZDA	ZDA
Automatic High Beams	OPT⁴	OPT⁴
Lane Departure Warning with Collision Mitigation	ZDA	ZDA
Active Blind Spot Detection	ZDA	ZDA
Speed Limit Info	ZDA	ZDA
Active Protection system:		
Attention Assist	S	S
Pre-impact tensioning of safety belts, closing of windows & moonroof	S	S
Post-impact braking	S	S
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S
LATCH attachments in rear seat for installation of child restraint seats	S	S
Interlocking door anchoring system for side impacts	S	S
Front- & rear-seat Head Protection System	S	S
Front-seat side-impact airbags	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S
Post-impact safety measures:		
Unlocking of central locking	S	S
Switch-on of hazard flashers	S	S
Switch-on of interior light	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S
BMW Assist, including Automatic Collision Notification, SOS button, Roadside Assistance, TeleService ⁵ , BMW Assist Safety Plan ⁵	S	S

Safety & security (cont.)	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Mobility kit for temporary re-inflation of flat tire	S	S
Central locking system with selective unlocking	S	S
Coded Driveaway Protection	S	S
Pathway Lighting ⁶	S	S
Alarm system with operation from remote, interior motion detector	S	S

4 – Included with optional Full LED Forward Lighting.

5 – Requires BMW Assist annual fee after 4th year.

6 – Duration adjustable via iDrive.

S – Standard
OPT – Optional

ZDA – Driver Assistance Package

Technical specifications

2013 BMW ALPINA B7

Bold within table indicates distinctions of B7 from corresponding 7 Series model (B7 SWB vs. 750i, B7 LWB vs. 750Li, B7 SWB xDrive vs. 750i xDrive, B7 LWB xDrive vs. 750Li xDrive). [Bracketed] information is for LWB model where it differs from SWB model.

General	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Curb weight, lb.	4655 [4810]	4860 [5050]
Weight distribution, front/rear, %	51.7/48.3 [51.0/49.0]	53.0/47.0 [52.2/47.8]
Wheelbase, in.	120.9 [126.4] ¹	
Track, front/rear	63.8/64.1 ²	
Length, in.	200.5 [206.0] ¹	
Width, in.	74.9 ²	
Height, in.	58.4	58.7 [58.4]

Accommodations	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Seating capacity, persons	5 [4 or 5] ^{1,3}	
Shoulder room, front/rear, in.	59.2/57.4 [59.2/57.6] ¹	
Head room, front/rear, in.	39.3/38.3 [39.5/38.7] ¹	
Leg room, front/rear, in.	41.3/38.7 [41.3/44.3] ¹	
EPA passenger volume, cu ft.	106.4 [114.9] ¹	
EPA cargo volume, cu ft.	14.0 ²	

Body	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Type	4-door sedan ²	
Aerodynamic drag coefficient	0.33 ²	
EPA size classification	Large ²	

Engine & electrical	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Engine type	DOHC (4-cam) 32-valve V-8, aluminum construction with silicon-impregnated cylinders, direct fuel injection, twin single-scroll turbochargers (ALPINA design, increased dimensions & boost), Valvetronic variable intake-valve lift, Double VANOS ⁴ variable intake- & exhaust-valve timing ²	
Bore x stroke, mm/in.	89.0 x 88.3/3.50 x 3.48 ²	
Displacement, cc/cu in.	4395/268 ²	
Compression ratio	10:0:1 ²	
Power @ rpm, hp	540 @ 5200-6250 ²	
Torque @ rpm, lb-ft.	538 @ 2800-5000 ²	
Engine-management system	Motronic MEVD 17.2.8, with ALPINA software ; knock control, variable valve timing & lift, engine cooling, auto start/stop & other functions included in control strategy ²	
Fuel requirement	Premium unleaded; 93-octane AKI-rated, 91-octane if not available ²	
Fuel capacity, U.S. gal.	21.1 ²	
Vehicle battery type & capacity, amp-hr.	Lead-acid/105 ²	
Alternator output, amp./watt	210/2940 ²	

- 1 – Specifications apply to both SWB [LWB] model sets.
- 2 – Specification applies to all models.
- 3 – 5 with full-width rear seat, 4 with Comfort rear seats (LWB models only).
- 4 – VANOS = **V**ariable **N**Ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

Technical specifications

2013 BMW ALPINA B7

Bold within table indicates distinctions of B7 from corresponding 7 Series model (B7 SWB vs. 750i, B7 LWB vs. 750Li, B7 SWB xDrive vs. 750i xDrive, B7 LWB xDrive vs. 750Li xDrive). [Bracketed] information is for LWB model where it differs from SWB model.

Drivetrain	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Drive system	Front engine/ RWD	Front engine/ AWD
Automatic transmission	8-speed Switch-Tronic , 8 HP 70 ²	
Ratios: 1st	4.71:1 ²	
2nd	3.14:1 ²	
3rd	2.11:1 ²	
4th	1.67:1 ²	
5th	1.29:1 ²	
6th	1.00:1 ²	
7th	0.84:1 ²	
8th	0.67:1 ²	
Reverse	3.32:1 ²	
Final drive ratio	2.81:1 ²	

Chassis	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Body/frame construction	Unitized all-steel structure with aluminum hood, front side panels, doors & roof ²	
Front suspension	Multi-link system: aluminum upper & double-pivot lower ² lateral links, wheel carriers; Dynamic Damping Control with adjustable twin-tube gas-pressure shock absorbers, Active Roll Stabilization ²	
Rear suspension	5-link Integral V suspension with aluminum upper & lower links & wheel carriers; self-leveling air springs, Dynamic Damping Control with adjustable twin-tube gas-pressure shock absorbers, Active Roll Stabilization ²	
Total suspension system	Specific ALPINA setup & calibration	
Servotronic steering system	Rack & pinion, vehicle-speed-sensitive power steering with variable assist level	
Type of assist	Electric	Hydraulic
Overall ratio	Mechanically variable; mean ratio is 17.1:1 [19.1:1] ¹	
Turns lock-to-lock	3.1	

Chassis (cont.)	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Brakes	4-wheel ventilated discs with composite aluminum/cast-iron front rotors, aluminum front/cast-iron rear callipers, larger-area ALPINA pads ²	
Diameter x thickness:		
Front, mm/in.	374 x 36/14.7 x 1.42 ²	
Rear, mm/in.	370 x 24/14.6 x 0.94 ²	
Brake Energy Regeneration	S ²	
Alloy wheels (standard)	21 x 8.5 front/21 x 10.0 rear ²	
Performance tires (non-runflat) ^{2,6}	245/35ZR-21 front / 285/30ZR-21 rear	
Performance & efficiency	B7 SWB [LWB]	B7 SWB [LWB] xDrive
Acceleration, 0-60 mph, sec. ⁷	4.4 [4.5]	4.3 [4.4]
Top speed, mph	194	193
EPA estimated MPG, city/highway/combined	16/24/19 ^{2,8}	

1 – Specifications apply to both SWB [LWB] model sets.

2 – Specification applies to all models.

5 – These links are forged steel on xDrive models.

6 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. B7 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

7 – **ALPINA** test results. Actual acceleration results may vary depending on specification of vehicle, road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

8 – Preliminary data for xDrive models.

2013 6 Series:

Just a year after the new generation's debut, an elegant new 4-door Gran Coupe expands and enriches the Series. And there's an evolved, more powerful engine for all 650i models.

Through two generations – first in the 1970-80s as Coupes, then with a 2nd generation launched in 2005 as Coupes and Convertibles – the 6 Series has brought together the best of BMW performance, style and luxury in exclusive sports automobiles.

In 2012, a bold new 3rd generation took the 6 Series concept to greater heights in all its established attributes while adding new technologies and extending its market reach. The highlights:

- **Fresh style** for its sports-luxury concept, incorporating such new-generation design elements as forward-thrusting grilles, LED lighting features and sweeping, harmonious sides. The Convertible retained a distinctive “finned” softtop like that of its predecessor.
- **A higher performance level** via BMW's mighty twin-turbo V-8.
- **A new performance choice** via new 640i models with the acclaimed N55 TwinPower Turbo 6-cylinder engine. This results in more accessible price points, yet maintains a performance level completely appropriate to these sporting vehicles.
- **Available all-wheel drive** for the first time in this Series, BMW's rave-reviewed xDrive system.
- **New technology**, mostly shared with other Series: electric power steering, Brake Energy Regeneration, Driving Dynamics Control, Dynamic Damping Control, rear-view camera, 8-speed automatic transmission; available Integral

Active Steering, Lane Departure Warning, Active Blind Spot Detection, Night Vision with Pedestrian Detection, side- and top-view cameras, Parking Assistant, new-generation Head-Up Display, Active and Ventilated front seats, a spectacular Bang & Olufsen audio system...and more.

For 2013, another exciting, elegant body style joins the Series' Coupes and Convertibles: the new Gran Coupe, introducing a 4-door Coupe to BMW's automobile line. (There's already one in the X6 line.)

What's new for 2013

As of 3/12 production (640i Gran Coupe only):

General

- New body type, 4-door Coupe with 4.4-in. longer wheelbase and overall length, about 1-in. greater height than 2-door Coupe (but lower than conventional Sedan).

Comfort & convenience

- New front seats have integrated safety belts, similar to those of Convertibles; also new weight-saving seat structure
- Long center console, reaching to rear seats; basic 4-seat configuration, but center of rear seat provides “+1” seating.
- iPod/USB Adapter becomes standard, deleted from Premium Sound Package

Safety & security

- Red warning icon added to horn button on remote (panic function)

Packages & options

- New BMW Individual exterior colors: Tanzanite Blue Metallic and Frozen Bronze Metallic
- With available BMW Individual Composition, additional interior color scheme combines Opal White and Amaro Brown; available only in Gran Coupes
- Cold Weather Package adds heated rear seats
- Luxury Seating Package adds 4-zone climate control, power rear door-window sunshades

As of 7/12 production:

Models added

- Gran Coupe models: 650i (rear-wheel drive), 650i xDrive (all-wheel drive), 640i, 650i and 650i xDrive 2-door Coupe and Convertible models continue, with 2013 changes listed here.

Exterior design & function

- xDrive badging moves from body side to trunklid (Coupes and Convertibles)

Performance & efficiency

- All 650i models get new version of N63 V-8 engine, called N63 TU (Technically Updated):
 - Valvetronic variable intake-valve lift, first appearance on a turbocharged BMW V-8 engine
 - Power output up from 400 to 445 hp, torque up from 450 to 480 lb-ft.
 - Dual single-scroll turbochargers continue
 - Many new engineering details
- All 650i models add ECO PRO mode to Driving Dynamics Control; previously only on 640i models
- All 650i models add automatic engine start/stop function; previously only on 640i models

- All models offered only with automatic transmission (650i Coupe and Convertible formerly offered manual transmission also)

Comfort & convenience

- BMW Assist with Enhanced Bluetooth/USB connectivity replaces previous BMW Assist (standard) and iPod/USB Adapter (was optional); new code 6NL vs. previous 639 and 6FL (all models).
- Heated front seats now standard in all Coupes and Convertibles
- Arrow added to central info display's fuel-tank icon
- Climate controls get new icons: “M” indicating manual operation of air recirculation; “A/C” replaces snowflake as a/c-on symbol; “OFF” added to blower-speed control (standard dual-zone and new optional 4-zone systems)
- “Media” replaces “CD” on iDrive menu button (this change occurring throughout vehicle lines)

Safety & security

- Red warning icon added to horn button on remote (panic function), all 2-door Coupe and Convertible models)

Packages & options

- New Executive Package (ZEC) offered for Coupes and Convertibles: extensive comfort, convenience, luxury, instrumentation and communications features. Includes soft-close doors, not previously available in this Series.
- Simplified wheel/tire option program: elimination of ZF2 and ZF9 full LED lighting & performance wheel/tire combination

- Coupe and Convertible Premium Sound Package discontinued; premium audio system now standard in 650i Coupes and Convertibles, in Executive Package for 640i Coupes and Convertibles; Satellite Radio now standard in all Coupes and Convertibles
- Bang & Olufsen audiophile system now a stand-alone option for all Coupes and Convertibles
- 20-in. wheels/tires eliminated from BMW Individual Composition on all models, now offered as upgrade to 19-in. Composition price reduced accordingly.
- Parking Assistant and Head-up Display deleted from Coupes' and Convertibles' Driver Assistance Package; Parking Assistant now stand-alone option on RWD Coupes and Convertibles, Head-up Display now in Executive Package for all Coupes and Convertibles
- Full LED forward lighting now available on –
 - Coupes and Convertibles via Lighting Package
 - Gran Coupes as stand-alone option
 - Gran Coupes as part of BMW Individual Composition Automatic High Beams always included with Full LED forward lighting.
- Performance wheels/tires now available as stand-alone options: 19-in. on 640i models, 20-in. on 650i models
- Additional BMW Individual metallics Tanzanite Blue (all models) and Frozen Bronze (Gran Coupes only)
- BMW Individual exterior paints, Full Merino Leather upholstery and interior trim now available as Priority 1 options for all models, with no combination requirements
- Speed Limit Info added to Driver Assistance Package, all models; package code changes to ZD2 for 640i Gran Coupe only
- Soft-close doors offered as stand-alone option on Coupes and Convertibles

6 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 248-265.

640i Coupe

Continuing as the 6 Series "basic" model; powered by the acclaimed TwinPower Turbo 6-cylinder engine and available only with 8-speed automatic transmission; the rationale here is that customers who want to shift for themselves also tend to prioritize dramatically high performance, and would thus gravitate to 650i models. Here are its key features.

Exterior design & function

- Xenon Adaptive headlights with LED luminous rings as position/parking lights and Daytime Running Lamps
- Retractable high-intensity headlight cleaning system
- Automatic headlight control
- LED foglights
- Cornering lights
- Park Distance Control (front and rear) with graphic display
- Rain-sensing windshield wipers
- Dual power/heated exterior mirrors
- Ground lighting and Welcome Light
- Choice of standard or metallic paints at no extra cost
- Adaptive brakelights
- Aluminum hood, front spring towers and doors for weight savings and optimized front/rear weight distribution
- Rear-view camera
- Dual matte-chrome round exhaust outlets

Performance & efficiency

- TwinPower Turbo 6-cylinder engine with direct fuel injection and Valvetronic variable intake-valve lift, 315 hp/330 lb.-ft.; combined EPA mileage 26 mpg

- Automatic engine start/stop function
- 8-speed STEPTRONIC Sport automatic transmission with E-shift control lever
- Aluminum multi-link double-wishbone front suspension
- Aluminum 5-link Integral rear suspension (Integral V)
- Sport suspension calibration
- Dynamic Damping Control (electronically controlled shock absorbers)
- Vehicle-speed-sensitive variable-assist, variable-ratio rack-and-pinion electric power steering
- Driving Dynamics Control with ECO PRO mode
- 4-wheel ventilated disc brakes with aluminum/cast-iron rotors
- Brake Energy Regeneration
- Automatic Hold
- 18 x 8.0 alloy wheels, Star Spoke design #365
- 245/45R-18 run-flat performance all-season tires¹
- Dynamic Stability Control with electronic limited-slip differential
- Tire Pressure Monitor

Comfort & convenience

- Comfort Access keyless entry, multi-function remote control
- Vehicle & Key Memory with Personal Profile user-specific settings
- Keyless engine start/stop
- Dual power/heated/auto-dimming/power-folding exterior mirrors

1 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 6 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

6 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 248-265.

- Power tilt/telescopic leather-wrapped steering wheel with auto tilt-up
- Dynamic cruise control
- 12-way power front seats including power head restraints, 4-way power lumbar support
- Memory system for driver's seat, steering wheel and exterior mirrors
- "Gentleman function" allows driver to adjust front passenger's seat
- iDrive control system with 10.2-in. control display, direct-select menu keys, GPS Navigation, Voice Command, 8 Programmable Memory Keys and other features
- Dakota leather upholstery
- Gray Poplar wood interior trim
- Power windows with 1-touch open/close, anti-trapping function
- Dual-zone automatic climate control with intensity settings
- Power tilting glass Contour moonroof with power shade
- 80-GB hard drive providing data storage for iDrive system, GPS Navigation, entertainment systems, enhanced Voice Command and phone system
- AM/FM/HD/CD/MP3 audio system with Radio Data System, 9 speakers
- iPod/USB Adapter
- Bluetooth cellphone interface
- Multiple power outlets for users' electronic devices
- Floor mats front and rear
- Front-seat side-impact airbags
- Active Knee Protection
- Active front head restraints
- Pathway Lighting
- Coded Driveaway Protection
- Anti-theft alarm system
- BMW Assist Safety Plan with 4-year subscription

Packages & options

- Available packages:
 - M Sport Package (dark-chrome exhaust outlets, painted brake calipers, 19 x 8.5 front/19 x 9.0 rear wheels in M Double Spoke design #351M, 245/40R-19 front / 275/35R-19 rear performance tires¹, increased top-speed limiter, aerodynamic exterior treatment, M doorsill trims, M sport steering wheel, M driver's footrest, Multi-Contour front seats, Alcantara headliner in Anthracite color; specific exterior color selection; 20 x 8.5 front/20 x 9.0 rear wheels in M Double Spoke design #373M with 245/35R-20 front / 275/30R-20 rear performance tires¹ at additional cost)
 - Driver Assistance Package (Lane Departure Warning, Active Blind Spot Detection, Parking Assistant, side- and top-view cameras, Head-up Display, Speed Limit Info)
 - Luxury Seating Package (Multi-Contour front seats with Active Support and Active Ventilation, power rear-window sunshade)
 - Executive Package (soft-close doors, Multi-Contour front seats with Active Ventilation, 16-speaker premium audio system, BMW Apps + Smartphone Integration)

Safety & security

- Dual-airbag Supplemental Restraint System
- Front safety belts with automatic tensioners, force limiters and belt stoppers
- Front- and rear-seat Head Protection System

- Cold Weather Package (heated steering wheel, heated front seats, ski bag; steering wheel with inlaid-wood trim at additional cost)
- BMW Individual Composition (19 x 8.5 front/19 x 9.0 rear Individual V Spoke wheels #349I with 245/40R-19 front / 275/35R-19 rear performance tires¹, increased top-speed limiter, Full LED lighting, Automatic High Beams, Shadowline exterior trim, Individual doorsill trims, Alcantara headliner in Anthracite or upholstery color, Full Merino Leather upholstery, choice of three Individual interior trims; 20 x 8.5 front/20 x 9.0 rear wheels in BMW Individual V Spoke design #374I with 245/35R-20 front / 275/30R-20 rear performance tires¹ at additional cost)
- Stand-alone options:
 - Active Roll Stabilization
 - Integral Active Steering
 - 19 x 8.5 front/19x 9.0 rear wheels in V Spoke design #366 with 245/40R-19 front / 275/35R-19 rear performance tires¹ (include increased top-speed limiter)
 - Full LED front lighting system + Automatic High Beams
 - Head-up Display
 - Heated front seats
 - Nappa leather upholstery, leather-trimmed instrument panel and contrast stitching
 - Fine Line Oak wood or aluminum interior trim
 - BMW Apps + Smartphone Integration
 - Power rear-window sunshade
 - Night Vision with Pedestrian Detection

- Active Cruise Control with stop/start capability
- Steering wheel with inlaid-wood trim

Priority 1 stand-alone options²:

- All BMW Individual exterior colors, upholstery and interior trim

650i Coupe

The V-8 Coupe in RWD³ form, offering even higher performance and more extensive standard equipment. It differs from its 6-cylinder 640i counterpart in these ways:

- Newly evolved Valvetronic TwinPower Turbo V-8 engine, 445 hp/480 lb-ft., EPA combined mileage 19 mpg
- 19-in. wheels and all-season tires¹ standard (640i: 19-in. wheels and performance tires available via M Sport Package, BMW Individual Composition or stand-alone option). Standard wheel design is Star Spoke #367.
- 20-in. wheels and performance tires¹ available via M Sport Package upgrade, BMW Individual Composition upgrade or stand-alone option (640i: via M Sport Package or BMW Individual Composition upgrade only). M Sport Package or BMW Individual Composition

1 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 6 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

2 - Priority 1 options accurate at time of publication but subject to change. For current model-specific Priority 1 standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guide.

3 - Rear-wheel drive.

6 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 248-265.

wheel designs, 19- or 20-in., same for both models but stand-alone option design is different, non-M V Spoke #356.

- 20-way Multi-Contour front seats standard (640i: Luxury Seating Package)
- Nappa leather upholstery standard (640i: optional)
- Leather-trimmed dash with contrast stitching is stand-alone option

650i xDrive Coupe

All-wheel-drive model, powered by same evolved Valvetronic TwinPower Turbo V-8 engine as 650i Coupe. Distinctions from RWD model include:

- xDrive system of all-wheel drive
- DSC system adds Hill Descent Control
- Upper and lower lateral front-suspension links of forged steel, vs. aluminum
- Fuel efficiency somewhat affected by additional weight and mechanism of AWD⁴ system, steel suspension components; 0-60-mph acceleration differs
- Packages and options as 650i Coupe, except M Sport Package and BMW Individual Composition wheels and tires are same size front/rear, tires all-season. 20-in. wheel/tire equipment with performance tires available on same basis as on RWD model.

640i Convertible

6-cylinder Convertible model, available like its Coupe counterpart only with RWD and automatic transmission. Differentiation from 640i Coupe consists of the following:

- Fully automatic softtop of distinctive “finned” design; lowers in 19 sec., raises in 24 sec., can be lowered or raised at speeds up to 25 mph.
- Separately power-operated rear window; can be opened with top up for ventilation and open-air effect, or raised with top down as wind deflector for rear-seat passengers.
- Standard softtop color is black; beige top available at no extra cost
- Seat-integrated front safety belts with power height adjustment
- Additional climate-control features for driving with top down
- Variable trunk capacity top up/top down, via variable softtop storage compartment

650i Convertible

V-8 RWD Convertible. Differences from 650i Coupe parallel those between 640i Convertible and Coupe.

650i xDrive Convertible

V-8 AWD⁴ Convertible. Differences from 650i Convertible parallel those between xDrive and RWD Coupe models.

640i Gran Coupe

New 4-door Coupe model, BMW's first automobile (i.e. non-Sports Activity) model in this highly contemporary format.

As an expression of sporty elegance, the Gran Coupe is available in three versions: this 6-cylinder model, the V-8 650i, and the V-8/AWD 650i xDrive.

- 4.4-in. longer wheelbase and overall length than 6 Series Coupe
- Approximately 1-in. greater height than 2-door Coupe, yet almost 3 in. lower than 5 Series Sedan
- Curb weight 189 lb. greater than that of 2-door Coupe
- “Gran Coupe” inscription at rear side windows
- 0.6 more front, 1.3 in. more rear head room than Coupe
- 4.9 in. more rear shoulder room than Coupe
- “4+1” seating configuration, with 4 full seats plus “occasional” or child seating at center rear
- Front seats have seat-integrated safety belts, similar in concept to those of 6 Series Convertibles
- Split folding rear seats standard
- Cargo capacity essentially identical to that of Coupe, but can be expanded to nearly triple capacity via folding rear seats (on basis of European measurement standards)
- Essentially same packages and options as 640i Coupe, except –
 - Additional interior color scheme for BMW Individual Full Merino leather, Opal White/Amaro Brown
 - Cold Weather Package includes heated rear seats
 - Offers 4-zone climate control, power rear door-window sunshades (Luxury Seating Package)
 - Offers Premium Sound Package

- Bang & Olufsen audio system available as upgrade to Premium Sound Package, vs. 2-door Coupe's stand-alone
- Does not offer Executive Package

650i Gran Coupe

RWD V-8 model, like the other 650i models powered by the new 445-hp N63 TU engine; now available only with automatic transmission. Incremental standard equipment over the 640i Gran Coupe is similar to that of 650i vs. 640i Coupes; differences in packages and options also parallel those models.

650i xDrive Gran Coupe

All-wheel-drive model, powered by same evolved Valvetronic TwinPower Turbo V-8 engine as all other '13 650i models. Distinctions from RWD model include:

- xDrive system of all-wheel drive
- DSC system adds Hill Descent Control
- Upper and lower lateral front-suspension links of forged steel, vs. aluminum
- Fuel efficiency somewhat affected by additional weight and mechanism of AWD⁴ system, steel suspension components; 0-60-mph acceleration differs
- Packages and options as 650i Gran Coupe, except M Sport Package and BMW Individual Composition 19-in. wheels and tires are same size front/rear, tires all-season. 20-in. wheel/tire equipment available on same basis as on RWD model.

4 – All-wheel drive.

6 Series key features

Except as noted, all current 6 Series models offer the following features:

Exterior & aerodynamics

Again the Bavarian auto-maker shows with this line of performance-luxury vehicles how “sporting” and “elegant” can become a unique esthetic persona. Especially notable is how the 6 Series identity and character have been evolved to reflect the subtle, harmonious, yet exciting look that defines BMW’s latest creations. And by extending the wheelbase, overall length, side-window sweep and (subtly) road-to-roof height, the new Gran Coupe imparts a new dimension, literally and figuratively: an exciting new vehicle that’s as spacious as it’s sporty and elegant.

The look: esthetics and function

Powerful proportions and masterful surface development provide optimum packaging and expression of these automobiles’ all-around capabilities.

At the front, the traditional BMW “kidney” grilles are wide, slightly forward-slanting and subtly curved via chrome-faced vertical slats. A full-width lower supplementary air intake is segmented according to function; LED foglights are set into its outer extremities.

Above this, main lighting units house BMW’s signature 4-headlight configuration while incorporating advanced technology. Standard Xenon Adaptive headlights provide white, daylight-like forward illumination that tracks the vehicle’s path as the road curves and twists; around their peripheries are LED rings that function as parking lights and Daytime Running Lamps; below them are LED turn signals.

Yet further innovation is available via the optional Full LED forward lighting: these provide even whiter, more powerful forward illumination, and incorporate an additional lateral light source for low-speed cornering and maneuvering. For ‘13 these are offered on all models as part of the BMW Individual Composition, via a new Lighting Package for Coupes and Convertibles, or as a stand-alone option on Gran Coupes. All forward lighting functions, including turn signals and Daytime Running Lamps, are LED-sourced and the standard Adaptive feature is retained. For the first time, low and high beams both employ all four lights.

As the most recently introduced 6 Series variant, the Gran Coupe is different in two ways:

- Twin stylized, chrome L-shaped inserts forming outer air intakes; these carry the triple LED foglights in the same position as those of the Coupe and Convertible.
- Lateral bars in the center air intake, vs. screen for the Coupe and Convertible.

In profile, all the classic hallmarks of BMW sports-luxury design are in evidence: long hood, short front overhang, a passenger compartment set well to the rear, and a low, dynamic silhouette. The main character lines flow from front to rear, contributing to a sense of stylistic unity among the various parts of the vehicle. Frameless door windows – expected on a Convertible, always present on BMW’s 2-door Coupes, and now on front and rear doors of the Gran Coupe – maximize glass

area and thus provide an excellent outward view for all aboard. These incorporate BMW’s power window-sealing system, which seats the windows firmly in their upper seals when the doors are closed. On the rearward quarter window’s frame, which is fixed, “Gran Coupe” appears in chrome lettering on a grained diamond background.

More than ever, the 6 Series profile exudes power, motion and grace.

At the rear, once again design continuity is maintained although the design itself was all-new in ‘12. Dominant horizontal lines emphasize a wider rear track; 2-part rear lighting clusters express BMW’s familiar L-shape and, like the front lighting, incorporate LED technology in the taillights themselves (light strips), turn signals and brakelights. As always on BMWs, the brakelights are Adaptive, stepping up their illumination under hard braking to alert following drivers.

The Gran Coupe positions the center rear brakelight in a new way for BMW: at the roof’s rear edge, spanning almost the full vehicle width with 66 LEDs. Framed in body color for a subtly integrated look, this contrasts to the spoiler-mounted brakelight (also LEDs) of the Coupes and Convertibles.

Open to the heavens

In the 2-door and Gran Coupes, occupants can enjoy light from above through a glass roof panel that power-tilts open and also includes a power interior sunshade; this incorporates BMW’s subtle Contour design, in which the moonroof’s front

edge curves parallel to the windshield’s top edge.

Convertibles continue with their distinctively shaped, fully automatic, fully lined power softtop, which comes standard in Black and is available at no extra cost in Beige.

The softtop is –

- Unique in design, with retractable vertical rear window and “fins” extended rearward
- Elegant, imparting an unusually sleek profile with the top raised.

Yet beauty and elegance aren’t all this design has to offer, for it also excels functionally; lowering it now takes just 19 sec., raising 24 sec. For details, see **comfort & convenience**.

Technology of the body: strong, weight-efficient structure

The previous 6 Series was notable for innovative, weight-saving materials in its structure and skin; the new one is no less so, though the distribution of these throughout the vehicle has changed.

Indeed, carefully researched advances in materials and design of the vehicle’s load-bearing structure have enhanced the body’s contribution to handling and ride comfort. Comparing 2-door Coupes, its static torsional rigidity is about 50% greater than that of the already rigid, solid predecessor, and overall body strength is increased by 29%. Gains like this result from the overall engineering process; in developing the new structure, BMW engineers applied new technologies, techniques and materials – the latter not necessarily

6 Series key features

Except as noted, all current 6 Series models offer the following features:

exotic, but evolutionary such as new high-strength steels. These helped the engineers achieve such gains – and accommodate the greater power, expanded luxury features, and enhanced safety performance of the new platform without unduly increasing weight. Here are some notable materials applications:

- Hood, front spring towers and doors of aluminum – four doors on Gran Coupes.
- Front side panels (fenders), the Convertibles' softtop cover and the trunklid are of reinforced composite material. On the previous Series, these components were of similar, though not identical, materials.

Standard headlight cleaning system

Standard on all 6 Series models is a high-intensity headlight cleaning system with retractable nozzles.

Standard Park Distance Control and rear-view camera

Park Distance Control (front and rear) is also standard, including a plan-view graphic display in the free-standing iDrive monitor.

Side- and top-view cameras, already familiar from other Series, are available via the Driver Assistance Package; the latter provides an even more complete view of the vehicle and its surroundings than the standard PDC graphic display.

The Parking Assistant adds a further measure of convenience to parallel-parking the new 6 Series. It is part of the Driver Assistance Package on RWD Gran Coupes and a stand-alone option on RWD Coupes and Convertibles.

Performance & efficiency

All three 640i models are powered by the acclaimed N55 TwinPower Turbo 6-cylinder engine in a higher-performance version than that in most other Series. The six 650i models – up from four in '12 via the Gran Coupe – are powered by the extensively evolved N63 TU that also makes its debut in the 5 Series GT and 7 Series for '13.

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (640i models)

BMW has staked much of its current performance strategy on this engine, which was new for 2011 and now, with its appearance in the 6 Series, powers models in 10 BMW Series.

While maintaining BMW's traditional and distinctive inline 6-cylinder configuration, this award-winning powerplant distinguishes itself via several primary attributes:

- **A single Twin Scroll turbocharger** that achieves turbo boost comparable to two of the conventional single-scroll type
- **Valvetronic variable intake-valve lift**, which until '11 appeared only in BMW's non-turbocharged engines
- **High Pressure direct fuel injection** instead of the High Precision type with piezo injectors used in BMW's previously developed turbo engines.

In keeping with the 6 Series' premium, performance-oriented character, the 640i version takes a significant step in power and torque compared with the first N55 version:

- **315 hp @ 5800-6000 rpm**, vs. the original 300 @ 5800.
- **330 lb-ft. torque @ 1300 rpm**, vs. the original 300 @ 1200-5000.

Besides offering 6 Series customers lower price points, the N55 also delivers higher EPA mileage than the 650i models' V-8: 23 mpg city/33 mpg highway/26 mpg combined vs. the 650i Coupe's 17/25/19.

In addition to the main features listed above, the N55 incorporates many other engineering distinctions. These and further N55 specifics are described in detail in **BMW features**.

N63 TU 4.4-liter DOHC 32-valve Twin Turbo V-8 engine (650i models)

Although the TwinPower Turbo designation appears on its handsome engine cover, the Twin Turbo designation usefully clarifies its technology.

For 2013, N63 technology advances with the new TU (Technically Updated) version of this strong, refined V-8 engine. Its highlights are:

- **Valvetronic variable intake-valve lift**. The N63 TU thus becomes BMW's second engine, and first V-8, to combine Valvetronic with turbocharging.
- **High Pressure direct fuel injection**. This replaces the previous High Precision injection and brings the N63 into line with the N55 6-cylinder; it utilizes multiple, inward-directed openings, positioned centrally in the combustion chambers similar to those of the N55.
- **Two single-scroll turbochargers** as before; thus not single twin-scroll type of N55.

Other changes, mainly directed toward reduced fuel consumption, include:

- **3-pump cooling system** with switchable mechanical main pump; 50-watt electric pump for intercooler and engine controls; 20-watt electric pump that continues running to cool turbocharger bearings after engine shutoff.
- **Volume-controlled oil pump**
- **Automatic engine start/stop** – already present in 640i models but new to the 650s.

The effect of all these new internal and ancillary changes on fuel efficiency is major: 650i models' EPA mileage rises from 15 city/23 highway/18 combined (rear-wheel drive) or 15/20/27 (xDrive) in 2012 to 17/25/19 (RWD) or 16/24/19 (xDrive) in 2013. These new EPA ratings apply to all three body types: Coupes, Convertibles and Gran Coupes.

The N63 TU continues with its ultra-robust aluminum block and silicon-impregnated, soft-honed cylinder surfaces; like all other current BMW engines it also retains Double VANOS⁵ variable intake- and exhaust-valve timing. This wide-ranging upgrade also benefits performance:

- **Power output** rises from 400 to 445 hp.
- **Torque output** rises from 450 to 480 lb-ft.
- **Vehicle performance** naturally reflects these increased outputs. Again comparing parallel models, 0-60 times for the 2013 650i Coupes are 4.5 sec. (RWD) or 4.3 sec. (xDrive), against 2012 models' 4.9 (RWD) or 4.7 (xDrive).

5 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

6 Series key features

Except as noted, all current 6 Series models offer the following features:

Thus: Once again, BMW achieves higher performance in combination with higher fuel efficiency. These great automobiles become even greater!

8-speed STEPTRONIC automatic transmission (standard all models)

With either of the Series' engines, this ultimate automatic transmission brings smooth shifting, sportiness and efficiency to an ultimate level of perfection. The 8-speed's "taller" cruising gears help temper fuel consumption and carbon-dioxide emissions, and enhance quietness. And its wider spread of ratios from lowest to highest gear enhances acceleration and response across the range of driving speeds. This aspect of the 6 Series, too, belongs to the BMW EfficientDynamics concept.

Two versions are employed: 8 HP 45 in 640i, higher-capacity 8 HP 70 in 650i models. Both have the same ratios and essentially the same operational characteristics, including such a high level of smoothness that drivers have to "try" to tell when the transmission shifts.

For further details on this ultimate powertrain achievement, see the BMW features section.

Aluminum rear differential housing (all models)

A minor detail, worth mentioning because it saves about 15% of the weight of this substantial component. Replacing the usual cast-iron housing, this was developed using sophisticated Finite Element techniques; to achieve the same quietness as the heavier cast iron, a new

bearing concept and mounting system to the body structure were developed. Newly developed gear profiles and lubrication system enhance quietness and efficiency as well.

xDrive: BMW's "intelligent" all-wheel drive system (650i xDrive models)

Increasingly, our customers – especially those who live in snowy winter conditions – are attracted to all-wheel drive. All current xDrive models incorporate BMW's advanced xDrive AWD and traction system, the concept and operation of which are explained in BMW features.

Front suspension: the multi-link system

BMW front suspension systems have usually been of the strut type, in which a long, essentially vertical strut carries the shock absorber and spring and participates in the suspension geometry – that is, along with the lower arms it co-determines the angles wheels take as they move up and down.

Yet BMW conceptualists and engineers continually seek better solutions. So it is that in most of the newly introduced Series since '07 have adopted a multi-link front suspension system. Now found in all 5, 6 and 7 Series, X5 and X6 models, this system adds an upper lateral link to each side, relieving the strut of its wheel-location duties and thus reducing friction. As good as the strut system is, this advances both handling and riding comfort.

An overview of BMW suspension systems appears in BMW features under unique 4-wheel independent suspension system.

Rear suspension: also evolved

The rear suspension, too, is a significant evolution. As at the front, it is a multi-link type; BMW calls it the Integral system for a small, essentially vertical Integral Link connecting the upper and lower lateral control planes.

The Integral concept is familiar in BMW automobiles, appearing through 2010 in the 5 and 6 Series in 4-link form (Integral IV). With one additional link per side, the Integral V system – now employed in all 5 and 7 Series models as well as 6 Series Coupes and Convertibles – moves yet closer to the perfect combination of handling response, road adhesion and riding comfort. A further evolution, Integral X, appears on the Gran Coupe and is so-named for the shape of its lower links. For details on Integral rear suspension, see BMW features.

Aluminum suspension systems

In the RWD models, most links of both the front and rear suspension systems are aluminum, reducing unsprung weight and thus contributing to the 6 Series' prowess in handling and ride comfort. Via forged-steel upper and lower lateral links and wheel carriers, additional strength is engineered into the front suspension of the 650i xDrive models to accommodate the greater loads imposed by their all-wheel drive system.

Active Roll Stabilization (stand-alone option, all models)

This remarkable feature enables the 6 Series to corner amazingly "flat" with minimal body roll. Described in detail in BMW features.

Standard on all models: Dynamic Damping Control

Dynamic Damping Control, or the earlier version called Electronic Damping Control, is familiar on the 7 Series and became available on the 5 Series and X3 in 2011. There are also other versions of this concept, all described in BMW features.

In all cases, it is a system of electronically controlled variable shock absorbers.

Exclusively, the Dynamic Damping Control version (5, 6 and 7 Series, X3) varies the shock absorbers' jounce and rebound strokes (wheels moving upward and downward, not just upward) both steplessly and independently. This capability results in a unique combination of desirable firmness (for handling) and superior comfort on bumpy road surfaces; the balance between these sometimes conflicting characteristics is selectable via the Driving Dynamics Control.

Electric power steering (all RWD models)

With its assist generated electrically instead of the usual hydraulic way, electric power steering (EPS) has always been employed on the Z4; it was also found in the X6 ActiveHybrid. EPS's fundamental advantage is that it draws engine power only when the steering wheel is being turned, rather than (via a hydraulic pump) anytime the engine is running. A secondary advantage is that the steering's return action can be actively programmed by the engineers for optimum feel.

In '11, the new 5 Series marked the first appearance of EPS in a U.S.-market BMW Sedan, and

6 Series key features

Except as noted, all current 6 Series models offer the following features:

the new X3 followed it. Model year '12 further extends the innovation to the 3 and 6 Series; it will be seen in other Series as their new generations are introduced. This is a new system, retaining the mildly variable steering ratio and variable power assist of the previous 6 Series' hydraulic system.

In models with xDrive, a refined conventional power-steering system includes special valving that reduces the hydraulic pump's power draw.

Driving Dynamics Control (standard all models)

As Dynamic Damping Control is standard on all the new 6 Series models, this control provides the driver all BMW's available choices of vehicle dynamics. The settings and their effects are:

Comfort – normal settings for engine response, automatic-transmission shift characteristics, steering assist, suspension (Dynamic Damping Control) and Dynamic Stability Control (DSC).

Sport – here there are three “sub-choices,” programmable within iDrive's Settings menu:

- Sporty driving with optimized suspension
- Optimized suspension
- Sporty driving

(Once this choice is made, it is the one activated when Sport is selected with the DDC.)

Sport+ – engine, transmission, steering and suspension settings as in Sport, plus reduced DSC intervention (Dynamic Traction Control setting)

Comfort+ – normal engine, transmission, steering and DSC, comfortable suspension setting.

ECO PRO – newly standard on 650i models; thus now all 6 Series.

Driving Dynamics Control, including ECO PRO, is described in detail in **BMW features**.

Generously dimensioned disc brakes with aluminum/cast-iron composite rotors

In this BMW-patented construction, the brake rotor (disc) consists of two pieces: the high-carbon cast-iron outer portion, which functions conventionally as the surface onto which the brake pads grip to slow or stop the vehicle; and an aluminum “hat” in the center, which mounts the rotor to the vehicle. This reduces unsprung weight, complementing the aluminum suspension in benefiting ride comfort and road adhesion.

Reduced rotor deformation under hard braking is the other benefit. This means less tendency of the brakes to vibrate when hot, and reduced likelihood of rotors cracking under extreme heat conditions. Shared with 5 and 7 Series as well as the ActiveHybrid X6, this construction is described in more detail in the **BMW features** section.

Automatic Hold, standard on all 6 Series models with automatic transmission, holds the brakes for an indefinite time anytime the vehicle is stopped, preventing rollback or creep; it can be activated or de-activated by the driver with a console button.

Model & version	Wheel size & design/code ⁶	Run-flat tires ^{1,6}
All 640i standard	18-in. Star Spoke #365 (10 slender spokes) 2DZ	18-in. performance all-season
All 650i ⁷ standard	19-in. Star Spoke #367 (5 pairs of curved spokes) 2FG	19-in. performance all-season
650i xDrive M Sport Package	19-in. M Double Spoke #351M (5 pairs curved spokes) 2NB	19-in. performance all-season
640i stand-alone option	19-in. V Spoke #366 (5 pairs slender, curved spokes) 2FB	19-in. performance
All 640i & RWD 650i M Sport Package	19-in. M Double Spoke #351M 2ND	19-in. performance
650i ⁷ stand-alone option	20-in. V Spoke #356 (5 slender, curved V spokes) 2H9	20-in. performance
All models ZMP upgrade	M Double Spoke #373M (5 pairs complex double spokes) 2NM	20-in. performance
All xDrive models BMW Individual Composition	19-in. Individual V Spoke #349I (7 pairs curved V spokes) 2M3	19-in. performance all-season
All RWD models BMW Individual Composition	19-in. Individual V Spoke #349I 2MZ	19-in. performance
All models BMW Individual Composition upgrade	20-in. V Spoke #374I (7 pairs slender V spokes) 2NL	20-in. performance

Wheels and run-flat tires: 18- or 19-in. standard, 19- or 20-in. available

BMW systematically tailors wheel-and-tire equipment to the character and performance of each model; as with every new-generation BMW, the 6 Series features new wheel designs and run-flat tires on every model and with every equipment configuration. The nearby table summarizes all the available combinations.

Comfort & convenience

As befits a high-end BMW performance-luxury line, the 6 Series presents luxurious, ergonomically engineered 2+2 (Coupe, Convertible) or 4+1 (Gran Coupe) accommodations for its fortunate driver and passengers. In an atmosphere of tasteful design and high-caliber materials, typical BMW attention to instrumentation, controls and seating supports attentive, yet relaxed driving and pleasant, comfortable riding: The cabin is intimate, roomy for the two front occupants; and roomier than before for occasional rear passengers in the Coupe and Convertible. The new

1 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 6 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

6 – Wheel/tire dimensions: 18-in. performance all-season 18 x 8.0 with 245/45R-18; 19-in. performance all-season 19 x 8.5 with 245/40R-19; 19-in. performance 245/40R-19 front / 275/35R-19 rear; 20-in. performance 20 x 8.5 front/20 x 9.0 rear with 245/35R-20 front / 275/30R-20 rear.
7 – Including xDrive models.

6 Series key features

Except as noted, all current 6 Series models offer the following features:

Gran Coupe takes the 6 Series to a higher level of space with an extra 4.8 in. of leg room, 0.8 in. of head room and 4.9 in. of shoulder room for the two (or occasional three) rear passengers.

Such an elegant space for enjoying the 6 Series' road capabilities is part of the reward for discerning buyers that these magnificent automobiles represent.

Control center: the newest in contemporary BMW design and ergonomics

Ever a hallmark of BMW interior design is a driver-oriented instrumentation-and-controls layout. Here, tradition and new technology are optimally combined: four round gauges represent tradition, while Black Panel is BMW's most advanced display technology. For a description of Black Panel displays, see **BMW features**.

iDrive control display and Head-up Display

The iDrive system is BMW's newest generation, with 8 Programmable Memory Keys. As in 7 Series and 550i models, iDrive includes standard GPS Navigation and its attendant functions, all managed from a 10.2-in. control display, the console controller and its surrounding direct-select menu buttons. High resolution and trans-reflective display technology help ensure legibility in bright sunlight.

The 6 Series iDrive control display appears in a free-standing form at dash center, with an elegant/technical galvanized chrome surround. The Head-up Display, included in the optional Driver Assistance Package, is the 2nd-generation version, with full color, 3-dimensional

effect, higher resolution and an expanded range of displayed information. See **BMW features** for details on this exciting new version of a unique BMW feature.

Premium lighting features

In addition to the familiar left/right front reading lights and BMW Ambiance Lighting that emanates from above the windshield to illuminate the console area softly at night, the 6 Series incorporates additional premium lighting features befitting its elevated position in the BMW line:

- Illuminated doorsill trim plates
- Front footwell lighting
- Left/right front reading lights
- Illuminated visor vanity mirrors
- Ambiance lighting of front center console
- Lighted door storage compartments
- Ambiance lighting at tops of door panels and rear side panels
- Light in trunklid.

Auto-dimming interior and exterior rearview mirrors

Providing maximum protection from the glare of following vehicles' headlights and foglights, these are standard on all 6 Series models, as are power-folding exterior mirrors.

Power-window features

Power windows are standard on all BMWs, but the 6 Series' power windows include specific refinements for the new generation. All models have –

- 1-touch open/close door and rear side windows with anti-trapping feature
- Power door-window sealing system for door windows (Gran Coupes: all 4 doors)
- Windows may be opened from the outside by pressing and

holding the remote's "unlock" button.

Convertibles add –

- Retractable rear window with 1-touch opening.

Convertibles' power-window control panel adds two switches: for all windows (including the rear one) and one for the rear window only. The rear window opens when the convertible top is being lowered, and closes when it is being raised.

3-spoke sport steering wheel

All models come standard with a 3-spoke sport steering wheel, with multi-function controls conveniently arrayed on the wide horizontal spokes. The wheel is power-adjustable for reach and height, and rises to its highest position for ease of exit and entry. There are two optional wheels: M sport, included in all M Sport Packages, and the version with inlaid wood trim that's available with the BMW Individual Composition.

Full-featured automatic climate control, special features in Convertibles

Nearly all climate-control functions are served by the control panel in the center stack. The standard dual-zone system allows the driver and front passenger to set their preferred temperatures separately and override the automatic blower and air-distribution controls when desired, also separately. Its features include:

- 5 stages of intensity, adjusted in the Drive system
- Windshield fogging sensor
- Solar sensor
- Heat at Rest
- Activated-charcoal microfilter ventilation

- Automatic ventilation of standing vehicle
- ALL function for transferring driver's settings to passenger.

Convertibles include special features for top-down driving.

These affect:

- Air delivery in relation to vehicle speed
- Air temperature in relation to ambient temperature.

Current climate-control settings are indicated in a second Black Panel display in the center stack, along with the system's controls.

4-zone climate control (Gran Coupes only, Luxury Seating Package)

New to the 6 Series and exclusive to Gran Coupe models, this option provides separate controls and displays for front and rear occupants. See **BMW features** for details on the 4-zone system, which is also available in 5 and 7 Series, X5 and X6 models.

Audio systems

Three audio configurations are offered:

- An upgraded standard system with 9 speakers
- A more powerful premium system with 16 (Coupe and Gran Coupe) or 12 (Convertible) speakers. This is included in the Gran Coupes' Premium Sound Package, is now a stand-alone option in 640i Coupes and Convertibles, and is newly standard in 650i Coupes and Convertibles.
- An audiophile Bang & Olufsen system offered as an upgrade to the Gran Coupes' Premium Sound Package, and as a stand-alone in 650i Coupes and Convertibles. This has the

6 Series key features

Except as noted, all current 6 Series models offer the following features:

same speaker count as the premium system, but more audio power and numerous ultra-premium features.

The standard AM/FM/HD/CD system includes 9 speakers. In all models, these are:

- 1 center-fill midrange in instrument panel
- 2 midrange in front doors
- 2 tweeters in front doors
- 2 midrange in rear side panels (Coupes, Convertibles) or rear doors (Gran Coupes)
- 2 subwoofers under front seats.

Amplification is 205 watts.

For details on the Premium and Bang & Olufsen systems, see **Premium Sound Package** in **packages & options**.

Upholstery and trim

In all 640i models, Dakota leather upholstery is standard, and available in three colors: Ivory White, Cinnamon Brown, Black. Premium Nappa leather is optional in 640i models, standard in 650i models; this more luxurious leather grade comes in a choice of three colors: Ivory White, Cinnamon Brown, Black and (new for '13) Vermilion Red.

A leather-trimmed instrument panel is available:

- Included with the optional Nappa interior in 640i models
- As a stand-alone option in combination with the standard Nappa interior, 650i models.

In all cases, the leather-trimmed dash includes contrast stitching in the primary upholstery color; see **packages & options** for details on this, plus a description of the lavish interior treatment of the optional BMW Individual Composition.

The standard interior trim material in all models is Gray Poplar; Fine Line Oak and Brushed Aluminum are available at no extra cost.

Available for all models, the BMW Individual Composition includes Full Merino leather upholstery in a choice of five color schemes for Coupes and Convertibles, six for Gran Coupes; and a choice of three very special Individual interior trims. For details, see **packages & options**.

Front seats: 12-way power or 20-way Multi-Contour

Standard in all 640i models are 12-way power front seats, incorporating the following modes of adjustment:

- Fore-aft position
- Cushion height
- Backrest angle
- Position of lumbar support
- Firmness of lumbar support
- Head-restraint height.

Memory, with 2 settings per user, is provided for both front seats plus the steering wheel and exterior mirrors.

20-way power Multi-Contour front seats are standard in all 650i models; included in the 640i Gran Coupe's M Sport and Luxury Seating Packages; available in the 640i Gran Coupe via the Luxury Seating Package; available in the 640i Coupe and Convertible via the Executive Package or stand-alone; and standard in all 650i models.

Acclaimed for their sumptuous comfort and abundant modes of adjustment, these add power adjustment of –

- Cushion tilt
- Thigh support

- Backrest width
- Upper backrest section.

With the Multi-Contour seats, the head restraints are adjustable in two additional ways, both manual:

- Fore-aft, to suit occupants' preferences as to how close they want the restraint to their heads
- Their sides can be adjusted laterally to provide support, for example, when a passenger is resting or sleeping.

The 2-door Coupes and Convertibles add easy-entry, which powers the front seat forward when its backrest is folded over, and returns the seat to its set position when the backrest is again upright.

With either type of seat, the head restraints incorporate Active protection in case of a rear impact; this feature is standard in most current BMW models and is described in **BMW features**.

Generous storage provisions

In addition to the glove compartment, numerous storage places are provided around the cabin:

- Console compartment behind the iDrive controller. This compartment is secured by the central locking system.
- Under the front center armrest's dual lids; this is the largest concealed interior storage space and can be locked separately with a key provided for the purpose. Ideal for storing valuables when leaving the vehicle with a valet.
- In the doors
- Pockets on the front backrests' rear sides
- A net in the front passenger's footwell.

There are an additional compartment under the cargo floor, a net under the trunklid opening, and lashing eyes to secure items in the trunk.

Power-tilting Panoramic Contour moonroof (Coupes and Gran Coupes)

All closed-body models come standard with a power tilt-up moonroof whose front edge is elegantly curved, parallel to the windshield top – a subtle detail that reflects BMW's attention to the "little things that count." Made of tinted safety glass and double-sealed when closed, it keeps out wind noise almost as well as a fixed roof; thanks to folding side seals, wind noise is low even in the tilt-up position. All functions, including the interior sunshade, are electrically powered, with 1-touch operation and anti-trapping protection. A double-click of its control forward or rearward causes the glass panel and interior shade to close or open synchronically.

Fully automatic, fully lined power softtop (Convertibles)

A work of art and science in its own right, the softtop comes standard in Black, but is available in Beige at no extra cost.

Its multi-layer construction offers outstanding weather protection and noise control. Side buttresses project rearward to accent the vehicle's silhouette and give it an unmistakable look; the transition of the buttresses into the rear end is as smooth as that of the Coupe.

It's elegant on the inside too, with its full lining concealing the framework and folding mechanism.

6 Series key features

Except as noted, all current 6 Series models offer the following features:

Yet beauty and elegance aren't all this design has to offer, for it also excels functionally:

- A quiet, fully automatic electro-hydraulic power mechanism lowers it in just 19 sec. and closes it in 24 sec.. These times are quicker than before, and a new advantage is that it can be lowered or raised at speeds up to 25 mph.
- Minimal wind noise inside the vehicle with the top up.
- Lowered with the top up, the retractable glass rear window enhances openness and ventilation.
- Raised with the top down, the rear window can function as a wind deflector for rear-seat passengers.
- Because the rigid rear window reduces the volume of the folded softtop, its stowage compartment can be relatively small; luggage capacity is thus relatively large when the top is down.
- As with other BMW Convertibles, the top stowage compartment is easily adjustable to maximize usable space with the top up or down; even with it down, two 45-in. golfbags and a sizable attaché can be accommodated.

Rear seats: intimacy and luxury

Coups and Convertibles. Though the rear seats don't provide stretch-out adult accommodations for long journeys, they do provide luxury for the occasional "+2" adults on shorter trips, and for children anytime. In character, they continue a tradition set by BMW Coupes and Convertibles, with deeply cradled seat contours, quality fittings

and well designed safety belts. Compared to the predecessor models, there's now more head room.

Gran Coupes. Here the rear seats are also configured basically for 2 passengers, but more generously dimensioned: fully 5.0 in. more shoulder room, 1.3 in. more head room and 4.8 in. more leg room. They are divided and foldable 60:40, and include a fold-down center armrest. With this armrest up, the elevated center section can serve as occasional ("+1") seating; with it down, there's a standard through-load opening. The Cold Weather Package includes a newly configured fitted bag for two pairs of skis; see **packages & options.**

Safety & security

The 6 Series' range of safety and security features is similar to that of other models, namely state-of-the-art. Standard safety equipment includes front-impact airbags with highly sophisticated deployment control. Front safety belts incorporate automatic tensioners and force limiters; in Convertibles and Gran Coupes, they are entirely anchored to the seats themselves, making for optimum fit and (in Convertibles) unimpeded access to the rear seats. Side-impact airbags, also standard in all current BMWs, are deployed from the front seats' backrests, and the Head Protection System evolves from the previous Series' tubular type to a curtain-type extending from front to rear.

Another specific Convertible safety feature is the Rollover

Protection System, consisting of two high-strength aluminum rollbars concealed behind the rear head restraints. This system, also found in 1 and 3 Series and M3 Convertibles, is described in detail in **BMW features** as are other safety features and attributes of BMW vehicles generally.

Great body rigidity and strength

New-generation BMWs always exhibit progress in many areas, especially body rigidity and strength. The 6 Series is no exception; carefully researched advances in materials and structural engineering have significantly enhanced the body – Coupe, Convertible and Gran Coupe – in terms of the crash safety it affords. Handling agility, thus active safety, is likewise enhanced by torsional rigidity about 50% greater than that of its predecessor. Comparing previous and current 2-door Coupes, overall body strength is up by 29%, thanks to increased use of high-strength, multi-phase steels, high-strength molded steels, and aluminum.

Packages & options

Factory-installed options

M Sport Package

(all models, code ZMP)
Having been introduced progressively since 7/11 production, the M Sport Package is now available on all models, including the Gran Coupes. Here is its content:

All models:

- BMW M wheel/tire equipment¹ –

- **640i & RWD 650i models** – 19 x 8.5 front/19 x 9.0 rear M Double Spoke wheels (design #351M) with 245/40R-19 front / 275/35R-19 rear performance tires. Code 2ND. Include increased top-speed limiter, code 840.
- **650i xDrive models** – same #351M wheel design, but 19 x 8.5 all around; 245/40R-19 performance all-season tires. Code 2NB.
- **All models, upgrade** – 20 x 8.5 front / 20 x 9.0 rear M Double Spoke (design #373M) and 245/35R-20 front / 275/30R-20 rear performance tires. Code 2NM. Include increased top-speed limiter, code 840.
- **Painted brake calipers** (gloss black), part of factory M Sport Package, code 337.
- **M aerodynamic exterior treatment**, code 715. Body-color front spoiler, rear apron and side sills; rear bumper insert in Dark Shadow Metallic.
- **Dark Chrome exhaust tips**, part of code 337
- **LED foglights**, code 5A1. Though these are standard on all models, production logistics dictate that they be included in the package.
- **M doorsill trims**, part of code 337
- **M sport steering wheel**, code 710
- **Alcantara headliner** in Anthracite color

1 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 6 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

6 Series key features

Except as noted, all current 6 Series models offer the following features:

640i models:

- Multi-Contour front seats, code 456, which are not standard in these models.

650i models only:

- Sport exhaust system with distinctive sound, part of code 337.

This Package is available only with specific exterior colors:

- Standard Alpine White, Titanium Silver, Black Sapphire, Space Gray, Deep Sea Blue
- BMW M Carbon Black metallic, Imola Red
- BMW Individual metallics Citrin Black, Ruby Black, Moonstone, Tanzanite Blue
- BMW Individual Frozen Bronze metallic (Gran Coupes only).

BMW Individual Composition (all models, code Z11)

BMW offers this lavish treatment on all 6 Series models, differing only in the wheel/tire equipment and the inclusion of Alcantara headliner in Coupes and Gran Coupes but not Convertibles.

The extensive contents include:

- Individual wheel designs¹ –
 - All RWD models – 19-in. V Spoke wheels, design #349I, with performance tires in differentiated front/rear sizes. Code 2MZ.
 - xDrive models – same V Spoke wheel design but performance all-season tires, same size all around. Code 2M3.
- All models, upgrade – 20-in. forged wheels in Individual V Spoke design #374I with performance tires in differentiated front/rear sizes. Code 2NL. Dimensions and performance ratings correspond to those of other 19-in. performance all-season and 19- and 20-in. performance equipment.

- Shadowline exterior trim, code 760
- Choice of BMW Individual exterior paints at additional cost, same as with M Sport Package; codes X02, X03, X04, X10 and (Gran Coupes only) X11
- Individual doorsill trims, code 778
- Full Merino leather upholstery and trim in a choice of five colors for all models: Platinum ZBC8, Opal White ZBOW, Amaro Brown ZBP5, Champagne ZBP6 and Canyon Brown ZBP6. All include contrasting Black elements.
- Choice of Individual interior trims: Dark Red Sycamore, code XE5; Piano Finish Black, code XE7; or White Ash Grain, code XEX
- Alcantara headliner in upholstery color, code XD5; or Anthracite color, code 776 (Coupes, Gran Coupes)
- An additional interior choice for Gran Coupes only is the spectacular Opal White/ Amaro Brown combination, code ZBOB. Here, the leather-covered instrument panel and Alcantara headliner are also presented in Amaro Brown. White contrast stitching for the instrument panel, armrest and door trim reflects the Opal White seats and door panels, while Amaro Brown seat stitching and piping complement the effect on the seats and door panels. Although all BMW Individual trims are available with ZBOB, Ash Grain White fine wood trim (code XEX) especially complements the overall color concept.

Driver Assistance Package (all models, code ZDA; 640i Gran Coupe as of 7/12, code ZD2)

This Package enhances active safety in multiple ways and, on RWD Gran Coupe models, includes Parking Assistant. New for '13 is Speed Limit Info. Details on the content are in BMW features.

All models:

- Active Blind Spot Detection, code 5AG. Radar sensors at the rear of the vehicle monitor traffic in adjacent lanes, taking in an area from the driver's blind spot rearward 60 meters/ almost 200 ft. An illuminated triangular warning LED appears in the exterior mirror if there is a vehicle in this critical area; if the driver activates the turn signal, the LED blinks and, as with Lane Departure Warning, the steering wheel vibrates to warn the driver not to make a lane change.
- Side- and top-view cameras, code 5DL. The side-view cameras, one at each side of the front bumper, provide an early view of approaching traffic for pulling away from building exits or crossing intersections with limited visibility to one or both sides. Top-view consists of two video cameras, one in each exterior mirror housing; activated when the selector lever is moved to the "R" position, or manually by pushbutton. The combination of these four cameras' views is shown in the iDrive control display as a plan view, i.e. as if the vehicle were being viewed from above.

- Speed Limit Info, code 8TH. Via the same camera used by Lane Departure Warning, this useful function captures current speed-limit and other signage such as "no passing," and shows it on the iDrive display.
 - Lane Departure Warning, code 5AD. Employing a camera near the interior rearview mirror, monitors road lane markings. If the vehicle begins to move across a lane without the turn signals activated, LDW vibrates the steering wheel.
- Gran Coupes only:
- Head-up Display, code 610. 2nd generation of this unique BMW system with full-color, 3D-effect projection of relevant driving information on the windshield in front of the driver.

RWD Gran Coupes only:

- Parking Assistant, code 5DP. Assists in parallel parking. Via ultrasound sensors in the front side flashers, recognizes spaces longer than 20 ft. (only 4 ft. longer than the vehicle), measures their width and length as the vehicle drives by at speeds less than 22 mph, and indicates their suitability in the iDrive display. This occurs whether or not the driver has activated the system.

¹ – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 6 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

6 Series key features

Except as noted, all current 6 Series models offer the following features:

Executive Package

(Coupes & Convertibles, code ZEC)

This new Package consists of:

All Coupes and Convertibles:

- **Soft-close doors**, code 323. Familiar from other high-end BMW models but offered on 6 Series for first time. The user closes the door gently; an electric mechanism draws it fully in. More details in **BMW features**.
- **Active Ventilation** on both front seats, code 453. Described in **BMW features**.
- **Head-up Display**, code 610. 2nd generation of this unique BMW system with full-color, 3D-effect projection of relevant driving information on the windshield in front of the driver.
- **BMW Apps**, code 6NR, plus Smartphone Integration, code 6NF. As described in **BMW features**.

640i models:

- **20-way Multi-Contour front seats**, code 456. These are standard in 650i models.
- **Premium audio system**, code 677. Formerly included in a Premium Sound Package; now standard in 650i models.

650i models:

- **Leather-trimmed instrument panel and other areas with contrast stitching**, codes 4ND and 4KS. (See upholstery and trim for details.)
 - **Ceramic controls**, code 4U1.
- 650i Coupes only:
- **Power rear-window sunshade**, code 415.

Lighting Package

(Coupes & Convertibles, code ZLP)

On these models, the full LED forward lighting is paired with Automatic High Beams in this

package. For Gran Coupes, the same two features are available as a stand-alone option with code 552.

Luxury Seating Package

(all Gran Coupes, code ZLS; requires Cold Weather Package or heated front seats)

This Package brings together an array of features that live up to its name.

All models:

- **Active Support** on both front seats, code 455. Employs two stretchable hollow cavities, filled and emptied alternately with a freeze-proof liquid. The slow, gentle process (about once a minute) creates a cyclical raising and lowering of the cushion's left and right halves by about half an inch, helping relieve fatigue during extended driving.
- **Active Ventilation** on both front seats, code 453. Described in **BMW features**.
- **4-zone climate control**, as described in **BMW features**.
- **Power rear sunshade**, Code 415.
- **Rear door-window sunshades**, also power-operated; combined with power rear shade in code 416.

640i only:

- **20-way power Multi-Contour front seats**, code 456; standard in 650i models.

Premium Sound Package

(all Gran Coupes, code ZPS)

This Package offers a choice of two upscale audio systems:

A premium system of BMW's familiar Logic 7 type (Code 677). In addition to higher (600-watt) audio power and vehicle-specific equalizing, it features higher-caliber and more numerous speakers: 16

in Gran Coupes, 12 in Convertibles. Additional speakers over the standard system are denoted with an asterisk:

- 1 center-fill midrange in instrument panel
- 1 center-fill tweeter in instrument panel*
- 2 midrange in front doors
- 2 tweeters in front doors
- 2 midrange in panel behind rear seats*
- 2 tweeters behind rear seats*
- 2 midrange in rear doors
- 2 tweeters in rear doors (Gran Coupes)
- 2 subwoofers under front seats.

Upgrade system. Coded 6F2, this audiophile system has the same number and placement of speakers as 677, but provides double the wattage (1200) and other spectacular attributes.

Designed for the 6 Series by the renowned Danish purveyor of high-end audio products **Bang & Olufsen**, this system features sound technology never before employed in an automobile. It is fully **active**: each speaker, including the under-seat subwoofers, has its own amplifier. Electrical signals are converted into precisely defined sound waves using neodymium magnet drivers that combine very high performance with low weight – an ideal solution for a car hi-fi system. The midrange speakers also feature extremely rigid, yet lightweight Hexacone diaphragms.

The exceptional sound quality is due not only to vehicle-specific placement of high-quality speakers, but also to innovative amplifier technology. Digital signal processing allows the signals to

each speaker to be individually controlled, which compensates for any sound reflections inside the vehicle via appropriate signal modifications.

Bang & Olufsen's Surround Sound strategy uses Dirac Dimensions™ technology to recreate the acoustics of a given "reference" listening environment in the passenger compartment. This prevents the inevitable closeness of vehicle passengers to the speakers from affecting the sound experience, and lets occupants enjoy identical sound quality wherever they are sitting. The signals are precisely tuned to give the impression that the speakers are outside the vehicle.

All this technological excellence is accompanied by exclusive styling elements: high-quality all-aluminum speaker grilles and, most notably, the center-fill speakers in the instrument panel. When the audio system is activated, the midrange speaker grille rises and the tweeter lens is extended to distribute sound evenly throughout the car.

Also included in this package is **Satellite Radio with 1-year subscription**, code 655. The iPod/USB Adapter, formerly part of this package, is now standard.

For the Coupes and Convertibles, the premium system (677) is now standard in 650i models and included in 640i models' Executive Package. The Bang & Olufsen system (6F2) is now a stand-alone option in all Coupes and Convertibles.

6 Series key features

Except as noted, all current 6 Series models offer the following features:

Cold Weather Package

(all models, code ZCW)

Following a familiar BMW approach to accommodating winter needs, this Package combines –

• All models:

- Heated steering wheel, code 248
- Heated front seats with the refinement of a heating balance control in iDrive; code 494
- Ski bag, code 464. In Coupes and Convertibles, extends into the trunk for transporting two pairs of skis “indoors” and folds away neatly behind the rear center armrest when not in use. In Gran Coupes, stores as a cassette insert in the rear center armrest.

Gran Coupes:

- Heated rear seats, code 496.

The ultra-elegant BMW Individual steering wheel with inlaid-wood trim, code XL1, is available in all models as an upgrade to the heated steering wheel. It is not heated.

Stand-alone options

8-speed STEPTRONIC Sport automatic transmission with shift paddles

(optional 650i RWD models, code 2TB; standard 640i, Gran Coupe & 650i xDrive models) Basic features of BMW's Sport automatics, offered in 6- or 8-speed form in current models, include steering-wheel shift paddles, sporty programming and 3 driver-selected settings for shift characteristics as described in BMW features.

Adaptive Drive

(all models, code 2VA)

Nominally, Adaptive Drive is the combination of Active Roll

Stabilization (code 229) and Electronic or Dynamic Damping Control (code 223). In the 6 Series, Dynamic Damping Control is standard; thus 2VA adds Active Roll Stabilization. Delivering amazingly flat cornering and enhancing handling agility, ARS is described in detail in BMW features.

Integral Active Steering

(all RWD models, code 2VH)

Further enhancing BMW's legendary handling prowess, this 4-wheel version of Active Steering varies the front steering ratio and subtly steers the rear wheels to achieve greater maneuverability and agility at lower speeds, and enhanced stability at higher speeds. Described in detail in BMW features.

Special wheels and performance tires

(all models, codes 2FB & 2H9)

In addition to the special wheel/tire equipment that's included, or available as upgrades of the M Sport Package and BMW Individual Composition, these stand-alone options are for customers who want sportier appearance and handling without the full ZMP or ZI1 treatment. They come in two versions:

- 640i models – 19 x 8.5 front/19 x 9.0 rear V Spoke wheels (design #366, 5 pairs of curved V spokes) with 245/40R-19 front / 275/35R-19 rear performance tires¹. Code 2FB.
- 650i models including xDrive – 20 x 8.5 front/20 x 9.0 rear V Spoke wheels (design #356, 5 pairs of widely spread V spokes) with 245/35R-20 front / 275/30R-20 rear performance tires¹. Code 2H9.

Full LED forward lighting

(Gran Coupes, code 552; includes Automatic High Beams) Described in exterior design & function, this cutting-edge lighting technology made its debut in the new 6 Series in '12; by '13 a growing number of BMW models offer LED forward lighting.

Parking Assistant

(RWD Coupes & Convertibles, code 5DP)

Now included in RWD Gran Coupes' Driver Assistance Package, this remarkable system is available on RWD Coupes and Convertibles as a stand-alone option. Described under Driver Assistance Package and in BMW features.

Bang & Olufsen audio system

(Coupes & Convertibles, code 6F2)

In Gran Coupes, this audiophile system is available as an upgrade to the Premium Sound Package. In Coupes and Convertibles, it is a stand-alone option.

Head-up Display

(Gran Coupes, code 610)

In addition to being available as part of the Executive Package for Coupes and Convertibles and the Driver Assistance Package for Gran Coupes, the 2nd generation of this highly appealing BMW option can be ordered separately. See BMW features for its fascinating details.

Nappa leather upholstery + leather-trimmed instrument panel

(640i models, upholstery codes NA & option code 4ND; 650i models, code 4ND)

Included with the optional Nappa upholstery in 640i models,

available separately in all 650i models. As part of the instrument-panel option lavish Nappa leather appears on the –

- Upper dash
- Upper portion of door panels
- Upper portion of rear side panels
- Front center armrest
- Passenger side of center console.

Gran Coupes add:

- B-pillars at shoulder level
- Upper portion of rear door panels
- Rear of center console.

These Nappa sections include contrast stitching as a double-lapped seam in the main upholstery color, option code 4KS.

Alternate interior trim

(all models, codes 4B9 & 4CV)

As in most other BMW models, alternates to the standard interior trim are offered at no extra cost. For the 6 Series, which has Gray Poplar as its standard trim, there are two of these:

- Brushed aluminum, code 4B9
- Fine Line Oak wood, code 4CV.

Ceramic-trimmed controls

(all models, code 4U1)

Also offered in the 5 and 7 Series, this special touch consists of richly ceramic-trimmed –

- Shift lever
- iDrive controller
- Audio controls
- Climate controls.

¹ – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 6 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

6 Series key features

Except as noted, all current 6 Series models offer the following features:

20-way power Multi-Contour front seats

(640i Coupe & Convertible, code 456)

Described under **comfort & convenience**, these ultimate seats are available as a stand-alone for these models only. Otherwise they are standard in all 650i models, and included in the Executive Package of 640i Coupes and Convertibles and Luxury Seating Package of the 640i Gran Coupe.

Heated front seats

(Gran Coupes, code 494)

As in the Cold Weather Package, but on a stand-alone basis. Now standard in Coupes and Convertibles.

Power rear-window and rear door-window sunshades

(640i Coupe, code 415; all Gran Coupes, code 416)

Rear-window shade only (415) is available stand-alone in 640i Coupe, via Executive Package in other Coupes. In Gran Coupes, rear-window + rear door-window shades (416) are available stand-alone or as part of their Luxury Seating Package.

BMW Apps

(all models, code 6NR; includes Smartphone Integration)

As another advance in BMW's ConnectedDrive strategy, BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function is released, users can update and customize their vehicle's infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party app. Further details are presented in **BMW features**.

Active Cruise Control with Stop-and-Go function, Collision Warning System

(all models, code 5DF; on 650i models, requires automatic transmission)

This advanced version of ACC utilizes its radar sensors to detect critical closing-rate situations with standing and moving objects, even with ACC off. A detailed description is found in **BMW features**.

Night Vision with Pedestrian Detection

(all models, code 6UK)

Via an infrared camera, Night Vision scans a range up to 1600 ft. ahead of the vehicle over a 36-degree-wide range, variable according to the road's path and driver input. As offered on all current 5, 6 and 7 Series models, Night Vision incorporates recognition of the direction a pedestrian near the roadway is moving. For details, see **BMW features**.

Steering wheel with inlaid-wood trim

(all models, code XL1; requires BMW Individual Composition) Offered as an upgrade to the Cold Weather Package (but only in combination with Z11), this distinctive non-heated steering wheel is not available in combination with the M Sport Package.

Priority 1 stand-alone options²

BMW Individual exterior colors, upholstery and interior trim

(all models; paint, upholstery & interior trim codes)

Expanding the ways 6 Series customers can personalize their vehicles, any of these exclusive esthetics- and luxury-oriented features may now be ordered as P1 options without any combination requirement:

- **Exterior colors** – metallics Citrin Black X02, Ruby Black X03, Moonstone X04 and Tanzanite Blue on all models, Frozen Bronze X11 on Gran Coupes only.
- **Upholsteries** – Full Merino Leather in Platinum/Black ZBC8, Opal White ZBOW, Amaro Brown ZBP5, Champagne ZBP6 and Canyon Brown ZBWT in all models; the spectacular Opal White/Amaro Brown ZBOB in Gran Coupes only.
- **Interior trim** – Dark Red Sycamore XE5, Piano Finish Black XE7 and White Ash Grain XE8 in all models.

BMW center-installed accessories

Among the many accessories available for the 2013 6 Series are:

- **Complete wheel and tire sets**, including 20-in. Bi-Color wheels with performance tires. Many other wheel designs and sizes available.
- **Wheel locks**
- **Tire valve-stem caps** with BMW lettering or logo
- **Tire Mobility Kit** and tire sealer kit
- **Mud flaps**
- **Exterior-mirror caps**
- **Carbon-fiber rear spoiler**, mounts on trunklid for an integrated, harmonious look
- **License-plate frames**
- **Car covers**, outdoor and indoor types
- **UV sunshade**
- **Floor mats**, carpet and all-weather
- **Snap-in adaptor with USB interface** for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- **Snap-in adaptor for BMW Apps** and various media
- **Connection and charging cables** of various types
- **BMW Bluetooth headset**
- **CD/DVD storage sleeve**
- **Cool bag**
- **BMW umbrella with LED light**
- **LED hand lamp**
- **Multi-function luggage mat + storage box** and other trunk accessories

For details, see the latest **Accessories** listing for the 6 Series on bmwusa.com.

² – Priority 1 options accurate at time of publication but subject to change. For current model-specific Priority 1 standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guide.

Standard & optional features

2013 6 Series

Bold within table indicates new feature for 2013 or as of 7/12 production. Gran Coupe models are new for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Exterior design & function	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Aluminum hood, front spring towers & doors	S	S	S	S	S	S
Chrome-faced black vertical grille slats	S	S	S	S	S	S
Xenon Adaptive headlights with LED luminous rings as position/parking lights & Daytime Running Lamps	S	S	S	S	S	S
Full LED forward lighting (high & low beams, 3-segment turn signals & Daytime Running Lamps; LED accent strips at top)	ZLP	ZLP	Z11/OPT	ZLP	ZLP	Z11/OPT
Dynamic auto-leveling of headlights	S	S	S	S	S	S
Cornering lights	S	S	S	S	S	S
Automatic headlight control	S	S	S	S	S	S
Automatic High Beams	ZLP	ZLP	Z11/OPT ¹	ZLP	ZLP	Z11/OPT ¹
Retractable high-intensity headlight cleaning system	S	S	S	S	S	S
LED front foglights	S	S	S	S	S	S
Rain-sensing windshield wipers & heated washer jets	S	S	S	S	S	S
Power-folding exterior mirrors, finished in body color/matte black	S	S	S	S	S	S
Choice of standard or metallic paint	S	S	S	S	S	S
BMW Individual paint, metallic	ZMP/Z11+ OPT/P1	ZMP/Z11+ OPT/P1	ZMP/Z11+ OPT/P1	ZMP/Z11+ OPT/P1	ZMP/Z11+ OPT/P1	ZMP/Z11+ OPT/P1
BMW Individual paint, Frozen metallic	NA	NA	ZMP/Z11+ OPT/P1	NA	NA	ZMP/Z11+ OPT/P1
Park Distance Control, front & rear with graphic display	S	S	S	S	S	S
Parking Assistant	OPT	OPT	ZD2	OPT [NA]	OPT [NA]	ZD2 [NA]
Rear-view camera	S	S	S	S	S	S
Side- & top-view cameras	ZDA	ZDA	ZDA	ZDA	ZDA	ZDA
Ground lighting at door handles	S	S	S	S	S	S
Welcome Light ²	S	S	S	S	S	S
Adaptive brakelights	S	S	S	S	S	S
M aerodynamic exterior treatment: front & rear bumper/spoiler ensembles & side sills, Dark Shadow Metallic insert in rear bumper	ZMP	ZMP	ZMP	ZMP	ZMP	ZMP
Shadowline exterior trim	ZMP/Z11	ZMP/Z11	Z11	ZMP/Z11	ZMP/Z11	Z11
Dual exhaust outlets, left & right:						
Matte chrome, round	S	S	S	–	–	–
Rhomboid	–	–	–	S	S	S
Dark chrome, round or rhomboid	ZMP	ZMP	ZMP	ZMP	ZMP	ZMP

1 – Included with Full LED forward lighting.
2 – Upon unlocking of vehicle, activation for 20 sec. of ground lighting and interior lights; all turn signals flash twice.

S – Standard
OPT – Optional
P1 – Priority 1 option
NA – Not available
– – Not applicable

ZDA – Driver Assistance Package (for Gran Coupes as of 7/12 production, ZD2)
Z11 – BMW Individual Composition

Z11/ZMP+OPT – Optional in combination with M Sport Package or BMW Individual Composition
ZLP – Lighting Package
ZMP – M Sport Package

Standard & optional features

2013 6 Series

Bold within table indicates new feature for 2013 or as of 7/12 production. Gran Coupe models are new for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Performance & efficiency	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
3.0-liter DOHC 24-valve TwinPower Turbo 6-cylinder engine	S	S	S	–	–	–
4.4-liter DOHC 32-valve TwinPower Turbo (twin-turbo) V-8 engine	–	–	–	S	S	S
Engine features:						
Aluminum construction with cast-iron cylinders	S	S	S	–	–	–
Aluminum construction with silicon-impregnated cylinders	–	–	–	S	S	S
Dual overhead camshafts & 4 valves/cylinder	S	S	S	S	S	S
High Pressure direct fuel injection	S	S	S	S	S	S
Valvetronic variable intake-valve lift	S	S	S	S	S	S
Double VANOS ³ steplessly variable valve timing	S	S	S	S	S	S
Single twin-scroll turbocharger	S	S	S	–	–	–
Twin single-scroll turbochargers	–	–	–	S	S	S
Electronically controlled engine cooling	S	S	S	S	S	S
Electric coolant pump	S	S	S	–	–	–
Triple cooling system	–	–	–	S	S	S
Volume-controlled oil pump	S	S	S	S	S	S
Electronic sensing of oil level and condition	S	S	S	S	S	S
Exhaust system	Partial dual	Partial dual	Partial dual	Dual	Dual	Dual
Automatic engine start/stop	S	S	S	S	S	S
8-speed Sport automatic transmission with Adaptive Transmission Control, E-shift, selectable modes, rpm matching on downshifts & steering-wheel shift paddles	S	S	S	S	S	S
Aluminum front & rear subframes	S	S	S	S	S	S
Aluminum multi-link double-wishbone front suspension	S	S	S	[–]	[–]	[–]
Aluminum 5-link Integral rear suspension	S	S	S	S	S	S
Active Roll Stabilization (Adaptive Drive)	OPT	OPT	OPT	OPT	OPT	OPT
Sport suspension calibration	S	S	S	S	S	S
Dynamic Damping Control with Comfort, Comfort+ & Sport modes	S	S	S	S	S	S
Vehicle-speed-sensitive variable-assist, variable-ratio rack-and-pinion electric power steering	S	S	S	S	S	S
Integral Active Steering (also electric)	OPT	OPT	OPT	OPT [NA]	OPT [NA]	OPT [NA]

3 – VANOS = **V**Arable **N**ockenwellen
Steuerung = variable camshaft control,
or variable valve timing.

S – Standard
OPT – Optional
NC – No extra cost

NA – Not available
– – Not applicable

Standard & optional features

2013 6 Series

Bold within table indicates new feature for 2013 or as of 7/12 production. Gran Coupe models are new for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Performance & efficiency (cont.)	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
4-wheel ventilated disc brakes with aluminum/cast-iron rotors	S	S	S	S	S	S
Black painted brake calipers	ZMP	ZMP	ZMP	ZMP	ZMP	ZMP
Brake Energy Regeneration with function indication in fuel-economy readout	S	S	S	S	S	S
Driving Dynamics Control – provides Comfort, Comfort+, Sport, Sport+ & ECO PRO modes variously affecting engine response, transmission shift characteristics, steering effort ⁴ , Dynamic Damping Control, Active Roll Stabilization ⁵ ; Sport+ mode switches DSC to DTC	S	S	S	S	S	S
Electromechanical parking brake + Automatic Hold	S	S	S	S	S	S
Start-up Assistant	S	S	S	S	S	S
Dynamic Stability Control with Dynamic Traction Control, electronic limited-slip differential	S	S	S	S	S	S
xDrive fulltime all-wheel drive system, electronically controlled with variable front/rear torque split & traction control	–	–	–	– [S]	– [S]	– [S]
18 x 8.0 alloy wheels, Star Spoke design #365	S	S	S	–	–	–
19 x 8.5 alloy wheels: Star Spoke design #367	NA	NA	NA	S	S	S
M Double Spoke design #351	–	–	–	–	– [ZMP]	– [ZMP]
Individual V Spoke design #349I	–	–	–	–	– [Z11]	– [Z11]
19 x 8.5 front/19 x 9.0 alloy wheels: V Spoke design #366	OPT	OPT	OPT	–	–	–
M Double Spoke design #351M	ZMP	ZMP	ZMP	ZMP [NA]	ZMP [NA]	ZMP [NA]
Individual V Spoke #349I	Z11	Z11	Z11	Z11 [NA]	Z11 [NA]	Z11 [NA]
20 x 8.5 front/20 x 9.0 rear alloy wheels: V Spoke design #356	NA	OPT	OPT	NA	OPT	OPT
M Double Spoke design #373M	ZMP+ OPT	ZMP+OPT	ZMP+OPT	ZMP+OPT	ZMP+OPT	ZMP+OPT
Individual V Spoke #374I, forged	Z11+OPT	Z11+OPT	Z11+OPT	Z11+OPT	Z11+OPT	Z11+OPT

4 – Also affects steering ratio if vehicle is equipped with Integral Active Steering. 5 – Optional.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable
Z11 – BMW Individual Composition

Z11+OPT – Optional in combination with BMW Individual Composition
ZMP – M Sport Package
ZMP+OPT – Optional in combination with M Sport Package

Standard & optional features

2013 6 Series

Bold within table indicates new feature for 2013 or as of 7/12 production. Gran Coupe models are new for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Performance & efficiency (cont.)	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Run-flat tires ⁶ :						
245/45R-18 performance all-season	S	S	S	–	–	–
245/40R-19 performance all-season	–	–	–	S	S	S
245/40R-19 front / 275/35R-19 rear performance	ZMP/Z1/ OPT	ZMP/Z1/ OPT	ZMP/Z1/ OPT	ZMP/Z1 [NA]	ZMP/Z1 [NA]	ZMP/Z1 [NA]
245/35R-20 front / 275/30R-20 rear performance	ZMP+ OPT/ Z1+OPT	ZMP+OPT/ Z1+OPT	ZMP+OPT/ Z1+OPT	ZMP+OPT/ Z1+OPT/ OPT	ZMP+OPT/ Z1+OPT/ OPT	ZMP+OPT/ Z1+OPT/ OPT
Comfort & convenience	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Doorsill trims with BMW lettering in chrome	S	S	S	S	S	S
BMW M doorsill trims	ZMP	ZMP	ZMP	ZMP	ZMP	ZMP
BMW Individual doorsill trims	Z11	Z11	Z11	Z11	Z11	Z11
Vehicle & Key Memory with Personal Profile user-specific settings	S	S	S	S	S	S
Mobile Profile for export or import of user settings to another so-equipped vehicle	S	S	S	S	S	S
Multi-function remote control with switch for turning on side lights for approx. 40 sec.	S	S	S	S	S	S
Comfort Access keyless entry	S	S	S	S	S	S
3-position door checks	S	S	S	S	S	S
Soft-close doors	ZEC	ZEC	NA	ZEC	ZEC	NA
Dual power/heated exterior mirrors	S	S	S	S	S	S
Auto-dimming interior & exterior mirrors, power-folding exterior mirrors	S	S	S	S	S	S
Automatic tilt-down of right exterior mirror for visibility of low obstructions when backing up	S	S	S	S	S	S
BMW Universal Transceiver (3-function garage-door opener)	S	S	S	S	S	S
Comprehensive lighting amenities:						
Welcome Light (automatic switch-on of interior & ground lighting, double flash of all turn signals upon unlocking & locking vehicle)	S	S	S	S	S	S
Fade-in/fade-out operation of interior lights	S	S	S	S	S	S
Ground lighting at exterior door handles	S	S	S	S	S	S
Front left/right reading lamps	S	S	S	S	S	S
Xenon rear reading lamps with Cardan-joint adjustment	NA	NA	S	NA	NA	S
Front footwell lighting	S	S	S	S	S	S

6 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 6 Series models are not equipped with a spare

tire and wheel. Performance tires are not recommended for driving in snow and ice conditions. All performance tires include increased top-speed limiter.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable
ZEC – Executive Package
Z11 – BMW Individual Composition

Z11+OPT – Optional in combination with BMW Individual Composition
ZMP – M Sport Package
ZMP+OPT – Optional in combination with M Sport Package

Standard & optional features

2013 6 Series

Bold within table indicates new feature for 2013 or as of 7/12 production. Gran Coupe models are new for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Comfort & convenience (cont.)	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
BMW Ambiance Lighting, including doorsill trims (Gran Coupe: front), interior door panels & storage bins (Gran Coupe: front) rear doors or side panels, front center storage compartment, trunklid	S	S	S	S	S	S
Ambient lighting in roof at rear interior/ reading lights	NA	NA	S	NA	NA	S
Illuminated visor vanity mirrors	S	S	S	S	S	S
Accessory power outlets in front center console, under front center armrest	S	S	S	S	S	S
BMW M driver's footrest, aluminum-trimmed	ZMP	ZMP	ZMP	ZMP	ZMP	ZMP
Leather-wrapped power tilt/telescopic sport steering wheel with fingertip cruise, audio, phone & Voice Command controls, auto tilt-up for entry & exit	S	S	S	S	S	S
Leather-wrapped power tilt/telescopic M sport steering wheels with same features as standard wheel	ZMP	ZMP	ZMP	ZMP	ZMP	ZMP
Heated steering wheel or steering wheel	ZCW	ZCW	ZCW	ZCW	ZCW	ZCW
Steering wheel with inlaid-wood trim	ZCW +OPT/ Z1+OPT	ZCW+OPT/ Z1+OPT	ZCW+OPT/ Z1+OPT	ZCW+OPT/ Z1+OPT	ZCW+OPT/ Z1+OPT	ZCW+OPT/ Z1+OPT
Dynamic cruise control	S	S	S	S	S	S
Active Cruise Control with Stop-and-Go function & Frontal Collision Warning System	OPT	OPT	OPT	OPT	OPT	OPT
Instrument cluster in Black Panel technology	S	S	S	S	S	S
Condition-Based Service system	S	S	S	S	S	S
Integrated owner's manual via iDrive	S	S	S	S	S	S
Speed Limit Info	ZDA	ZDA	ZD2	ZDA	ZDA	ZDA
12-way power front seats including 4-way power lumbar support, power-adjustable head-restraint height	S	S	S	S	S	S
Power easy-entry feature	S	S	–	S	S	–
Seat-integrated front safety belts	NA	S	S	NA	S	S
20-way power front Multi-Contour seats with standard seat adjustments + power cushion tilt, backrest width & upper support, & thigh support; head restraints with adjustable side support	ZEC/OPT	ZEC/OPT	ZLS	S	S	S
Memory system for both front seats, steering wheel & exterior mirrors, 2 settings per user	S	S	S	S	S	S

S – Standard
OPT – Optional
NA – Not available
– – Not applicable

ZCW – Cold Weather Package
ZDA – Driver Assistance Package (for Gran Coupes as of 7/12 production, ZD2)
ZEC – Executive Package

Z1+OPT – Optional in combination with BMW Individual Composition
ZLS – Luxury Seating Package (requires Cold Weather Package or heated front seats)

ZMP – M Sport Package

Standard & optional features

2013 6 Series

Bold within table indicates new feature for 2013 or as of 7/12 production. Gran Coupe models are new for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Comfort & convenience (cont.)	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Active Support feature, both front seats	OPT ⁷	OPT ⁷	ZLS	OPT ⁷	OPT ⁷	ZLS
Active Ventilation feature, both front seats	ZEC	ZEC	ZLS	ZEC	ZEC	ZLS
Heated front seats with balance control	S	S	ZCW/OPT	S	S	ZCW/OPT
Check Control vehicle monitor system, information displayed in main instrument cluster	S	S	S	S	S	S
Dakota leather upholstery	S	-	-	S	-	-
Nappa leather upholstery	OPT	S	S	OPT	S	S
Nappa leather-trimmed instrument panel, upper front-door & rear side-panel (Coupes & Convertibles) or rear-door (Gran Coupes) areas with contrast stitching; Gran Coupes add B-pillar	OPT ⁸	OPT ⁸	OPT ⁸	ZEC/OPT	ZEC/OPT	OPT
Full Merino Leather upholstery	Z1/P1 ⁹	Z1/P1 ⁹	Z1/P1 ⁹	Z1/P1 ⁹	Z1/P1 ⁹	Z1/P1 ⁹
Gray Poplar wood interior trim	S	S	S	S	S	S
Fine Line Oak wood interior trim	NC	NC	NC	NC	NC	NC
Aluminum interior trim	NC	NC	NC	NC	NC	NC
Choice of BMW Individual interior trims: Piano Finish, Dark Red Sycamore or White Ash Gran	Z1/P1 ⁹	Z1/P1 ⁹	Z1/P1 ⁹	Z1/P1 ⁹	Z1/P1 ⁹	Z1/P1 ⁹
Ceramic-trimmed controls	OPT	OPT	OPT	ZEC/OPT	ZEC/OPT	OPT
Power windows with key-off operation, 1-touch open/close & anti-trapping function	S	S	S	S	S	S
All-window switch	NA	S	NA	NA	S	NA
Power door-window sealing system:						
Front	S	S	S	S	S	S
Rear	-	-	S	-	-	S
Power retractable rear window	NA	S	NA	NA	S	NA
Automatic climate control with left/right (dual-zone) temperature & air-distribution controls, automatic recirculation control, misting control, bi-directional solar sensor, 5 intensity settings, activated-charcoal interior air filtration, ALL function & other features	S	S	S	S	S	S
Automatic ventilation function for use in parked vehicle	S	S	S	S	S	S
Additional climate-control features for driving Convertible with top down: speed-dependent air-volume control, ambient-temperature-sensitive interior-temperature control	-	S	-	-	S	-

7 - Requires Executive Package or Multi-Contour front seats..

8 - Included with Nappa upholstery.

9 - Included in BMW Individual Composition; otherwise available as P1 option.

S - Standard

OPT - Optional

P1 - Priority 1 option

NC - No extra cost

NA - Not available

- - Not applicable

ZCW - Cold Weather Package

ZEC - Executive Package

Z1 - BMW Individual Composition

ZLS - Luxury Seating Package (requires Cold Weather Package or heated front seats)

Standard & optional features

2013 6 Series

Bold within table indicates new feature for 2013 or as of 7/12 production. Gran Coupe models are new for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Comfort & convenience (cont.)	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
4-zone automatic climate control	NA	NA	ZLS	NA	NA	ZLS
Anthracite-color headliner	Note ¹⁰	S	S	Note ¹⁰	S	S
Anthracite-color Alcantara headliner	ZMP	NA	ZMP	ZMP	NA	ZMP
Alcantara headliner, choice of Anthracite or upholstery color	ZI1	NA	ZI1	ZI1	NA	ZI1
Power-tilting Contour moonroof with 1-touch opening & closing, anti-trapping function, opening from remote, power-operated interior shade	S	–	S	S	–	S
iDrive system with free-standing 10.2-in. high-resolution control display, GPS Navigation; direct-select radio, media , phone ¹¹ & Navigation menus; 8 Programmable Memory Keys, Voice Command, Real Time Traffic Information & other features	S	S	S	S	S	S
Head-up Display with full color/3D-effect graphics, extensive range of displays, adjustable height & rotation	ZEC	ZEC	ZD2	ZEC	ZEC	ZDA
AM/FM/HD/CD/MP3 audio system with 9 speakers, Radio Data System (RDS), in-dash single-disc CD player, auxiliary audio input & FM diversity antenna system; includes front coaxial center-fill speaker & 2 subwoofers	S	S	S	–	–	S
Logic7 audio system with Digital Sound Processing, Surround Sound simulation & 16 (Coupe & Gran Coupe) or 12 speakers (Convertibles); upgraded audio power & componentry, all features of 9-speaker system	ZEC	ZEC	ZPS	S	S	ZPS
Bang & Olufsen premium audio system with 16 speakers, Dirac Dimensions™ acoustic signal processing, Surround Sound, all-aluminum speaker grilles; front center-fill midrange & tweeter retract when system is off; includes upgraded audio power & componentry, all features of 9-speaker system	OPT	OPT	ZPS+OPT	OPT	OPT	ZPS+OPT
80-GB hard drive providing data storage for Navigation, audio system, phonebook & Voice Command; ripping capability from CD & DVD players	S	S	S	S	S	S
Satellite Radio with 1-year subscription	S	S	ZPS	S	S	ZPS
BMW Apps + Smartphone Integration	ZEC/OPT	ZEC/OPT	OPT	ZEC/OPT	ZEC/OPT	OPT
Enhanced Bluetooth + USB connectivity	S	S	S	S	S	S

10 – Headliner color coordinates with upholstery color in standard-equipped Coupes.

11 – Phone controls active when approved mobile device is paired with Bluetooth interface.

S – Standard
OPT – Optional
NA – Not available

– – Not applicable
ZDA – Driver Assistance Package (for Gran Coupes as of 7/12 production, ZD2)

ZEC – Executive Package
ZI1 – BMW Individual Composition
ZLS – Luxury Seating Package (requires Cold Weather Package or heated front seats)

ZMP – M Sport Package
ZPS – Premium Sound Package

Standard & optional features

2013 6 Series

Bold within table indicates new feature for 2013 or as of 7/12 production. Gran Coupe models are new for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Comfort & convenience (cont.)	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Power outlets in front console & under front center armrest	S	S	S	S	S	S
Storage bins or compartments in center console, under front center armrest, in doors, on backs of front seat backrests; storage net in passenger's footwell	S	S	S	S	S	S
Dual cupholders front & rear	S	S	S	S	S	S
Split folding, "2+1" rear seats	NA	NA	S	NA	NA	S
Heated rear seats	NA	NA	ZCW	NA	NA	ZCW
Power rear-window sunshade	OPT	–	ZLS	ZEC	–	ZLS
Power rear door-window sunshades	–	–	ZLS	–	–	ZLS
Fully finished trunk compartment	S	S	S	S	S	S
Variable softtop storage compartment	–	S	–	–	S	–
Ski bag	ZCW	ZCW	ZCW	ZCW	ZCW	ZCW
Safety & security	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Dynamic Stability Control (DSC), including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, electronic limited-slip differential	S	S	S	S	S	S
Night Vision with Pedestrian Detection	OPT	OPT	OPT	OPT	OPT	OPT
Side- & Top-view cameras	ZDA	ZDA	ZDA	ZDA	ZDA	ZDA
Lane Departure Warning	ZDA	ZDA	ZDA	ZDA	ZDA	ZDA
Active Blind Spot Detection	ZDA	ZDA	ZDA	ZDA	ZDA	ZDA
Speed Limit Info	ZDA	ZDA	ZDA	ZDA	ZDA	ZDA
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags with variable venting	S	S	S	S	S	S
Active Knee Protection	–	–	S	–	–	S
Active head restraints, front seats	S	S	S	S	S	S
Safety belts at all seating positions; front belts have automatic tensioners, 2-stage adaptive force limiters & belt stoppers; rear belts have force limiters	S	S	S	S	S	S
Seat-integrated front safety belts with power belt-height adjustment	NA	S	S	NA	S	S

S – Standard
 OPT – Optional
 NA – Not available
 – – Not applicable

ZCW – Cold Weather Package
 ZDA – Driver Assistance Package (for Gran Coupes as of 7/12 production, ZD2)
 ZEC – Executive Package

ZLS – Luxury Seating Package (requires Cold Weather Package or heated front seats)

ZMP – M Sport Package
 ZPS – Premium Sound Package

Standard & optional features

2013 6 Series

Bold within table indicates new feature for 2013 or as of 7/12 production. Gran Coupe models are new for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Safety & security (cont.)	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
LATCH attachments in rear seat for installation of child restraint seats	S	S	S	S	S	S
Front- & rear-seat Head Protection System	S	S	S	S	S	S
Front-seat side-impact airbags	S	S	S	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S	S	S	S
Post-impact safety measures:						
Unlocking of central locking system	S	S	S	S	S	S
Switch-on of hazard flashers	S	S	S	S	S	S
Switch-on of interior lighting	S	S	S	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S	S	S	S
BMW Assist, including Enhanced Automatic Collision Notification, SOS button, Enhanced Roadside Assistance, TeleService ¹³ , BMW Assist Safety Plan ¹³	S	S	S	S	S	S
Central locking system with selective unlocking	S	S	S	S	S	S
Coded Driveway Protection	S	S	S	S	S	S
Pathway Lighting ¹⁴	S	S	S	S	S	S
Alarm system with operation from remote, interior motion detector	S	S	S	S	S	S

13 – Requires BMW Assist annual fee after 4th year. 14 – Duration adjustable via iDrive.

S – Standard

Technical specifications

2013 6 Series

Bold within table indicates new specification for 2013 or as of 7/12 production.

Gran Coupe models are new for 2013.

General	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Curb weight, lb.	4001	4255	4190	4275 [4410]	4520 [4650]	4430 [4605]
Weight distribution, front/rear, %	51.2/48.8	49.2/50.8	50.2/49.8	52.9/47.1 [53.7/46.3]	50.8/49.2 [52.2/47.8]	51.5/48.5 [53.1/46.9]
Wheelbase, in.	112.4 ¹		116.9²			
Track, front/rear, in.	63.0/65.3 ^{1,3}		63.0/65.6^{2,3}			
Length, in.	192.8 ¹		197.2²			
Width, in.	74.6 ⁴					
Height, in.	53.9	53.7	54.8	53.9	53.7	54.8
Body	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Type	2-door coupe	2-door convertible	4-door sedan	2-door coupe	2-door convertible	4-door sedan
Aerodynamic drag coefficient	0.30	0.32	0.29	0.30 [0.32]	0.32	0.31
EPA size classification	Compact ¹	Subcompact ²				
Accommodations	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Seating capacity, persons	4	4	4+1	4	4	4+1
Shoulder room, front/rear, in.	56.9/49.7	56.9/49.6	56.7/54.6	56.9/49.7	56.9/49.6	56.7/54.6
Head room, front/rear, in.	40.0/35.7	40.3/36.5	40.6/37.0	40.0/35.7	40.3/36.5	40.6/37.0
Leg room, front/rear, in.	42.1/30.5	42.1/30.5	42.1/35.3	42.1/30.5	42.1/30.5	42.1/35.3
EPA passenger volume, cu ft.	86.8	87.9	97.3	86.8	87.9	97.3
EPA cargo volume, cu ft.	13.0	11.0 ⁵	12.0⁶	13.0	11.0 ⁵	12.0⁶

1 – Specification applies to all Coupes and Convertibles.

2 – Specification applies to all Gran Coupes.

3 – With standard wheels.

4 – Specification applies to all models.

5 – With softtop raised.

6 – Can be expanded via folding rear seats.

Technical specifications

2013 6 Series

Bold within table indicates new specification for 2013 or as of 7/12 production.

Gran Coupe models are new for 2013.

Engine & electrical	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Engine type	DOHC inline 24-valve 6-cylinder, aluminum construction with cast-iron cylinder liners, direct fuel injection via solenoid injectors, twin-scroll turbocharger, Valvetronic variable intake-valve lift, Double VANOS ⁷ variable intake- & exhaust-valve timing ⁸			DOHC (4-cam) 32-valve V-8, aluminum construction with silicon-impregnated cylinders, direct fuel injection via solenoid injectors, twin single-scroll turbochargers, Valvetronic variable intake-valve lift , Double VANOS ⁷ variable intake- & exhaust-valve timing ⁹		
Bore x stroke, mm/in.	84.0 x 89.6/3.31 x 3.53 ⁸			89.0 x 88.3/3.50 x 3.48 ⁹		
Displacement, cc/cu in.	2979/182 ⁸			4395/268 ⁹		
Compression ratio	10.2:1 ⁸			10.0:1 ⁹		
Power @ rpm, hp	315 @ 5800-6000 ⁸			445 @ 5500⁹		
Torque @ rpm, lb-ft.	330 @ 1400-4500 ⁸			480 @ 2000-4500⁹		
Engine-management system	Motronic MEVD 17.2 with knock control, direct fuel injection, Valvetronic, variable valve timing, engine cooling, auto start/stop & other functions included in control strategy ⁹			Motronic MEVD 7.2.8. with knock control, direct fuel injection, Valvetronic , variable valve timing, engine cooling, auto start/stop & other functions included in control strategy ⁹		
Fuel requirement	Premium unleaded ⁴					
Fuel capacity, U.S. gal.	18.5 ⁴					
Battery capacity, amp-hr.	105 ⁴					
Alternator output, amp./watt	210/2940⁴					
Drivetrain	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Drive system	Front engine/rear-wheel drive ⁸			Front engine/rear-wheel drive [all-wheel drive] ⁹		
Automatic transmission	8-speed, 8 HP 45 ⁸			8-speed, 8 HP 70 ⁹		
Ratios: 1st	4.71:1 ⁴					
2nd	3.14:1 ⁴					
3rd	2.11:1 ⁴					
4th	1.67:1 ⁴					
5th	1.28:1 ⁴					
6th	1.00:1 ⁴					
7th	0.84:1 ⁴					
8th	0.67:1 ⁴					
Reverse	3.30:1 ⁸			3.32:1 ⁹		
Final drive ratio	3.23:1 ⁸			2.81:1⁹		

4 – Specification applies to all models.

7 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

8 – Specification applies to all 640i models.

9 – Specification applies to all 650i models.

Technical specifications

2013 6 Series

Bold within table indicates new specification for 2013 or as of 7/12 production.

Gran Coupe models are new for 2013.

Chassis	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Body/frame construction	Unitized all-steel structure with aluminum hood, front spring towers & doors ⁴					
Front suspension	Multi-link double-wishbone system: upper & lower lateral links (double-pivot lower links) & steering knuckle of aluminum on RWD models; coil springs, anti-roll bar, Dynamic Damping Control; Active Roll Stabilization optional ⁴					
Rear suspension	Integral suspension with aluminum upper & lower links & wheel carriers, coil springs, anti-roll bar, Dynamic Damping Control; Active Roll Stabilization optional ⁴					
Servotronic steering system (standard)	Rack & pinion, vehicle-speed-sensitive power assist (640i/650i electric, xDrive models hydraulic) ⁴					
Integral Active Steering (optional RWD models only)	Rack & pinion front steering, vehicle-speed-sensitive ratio & electric assist, vehicle-speed-sensitive rear-wheel steering up to 2.5" via servo motor & spindles					
Overall ratio, Servotronic steering	Mechanically variable; mean ratio is 17.2:1 (RWD models), 18.0 (xDrive models)					
Overall ratio, Integral Active Steering	Electronically variable over wide range					
Turns lock-to-lock: standard steering	3.0 (RWD models), 3.1 (xDrive models)					
Integral Active Steering, min.	2.1 (RWD models only)					
Turning circle, ft.: standard steering	38.4 ¹					
Integral Active Steering, min.	36.8 ¹ (RWD models only)					
Brakes	4-wheel ventilated discs with lightweight aluminum/cast-iron rotors; calipers aluminum front/cast iron rear ⁴					
Diameter front, mm/in.	348/13.7 ⁸					
Diameter rear, mm/in.	345/13.6 ⁸					
Alloy wheels:						
Standard	18 x 8.0 ⁹					
M Sport Package or BMW Individual Composition	19 x 8.5 front/19 x 9.0 rear ⁹					
Stand-alone option	19 x 8.5 front/19 x 9.0 rear ⁸					
Performance all-season run-flat tires (standard) ¹¹	245/45R-18 ⁹					
Performance run-flat tires ¹¹ :						
M Sport Package or BMW Individual Composition	245/40R-19 front / 275/35R-19 rear ¹³					
Stand-alone option	245/40R-19 front / 275/35R-19 rear ⁸					
M Sport Package or BMW Individual Composition upgrade	245/40R-19 front / 275/30R-20 rear ⁹					
Stability-enhancement system	245/35R-20 front / 275/35R-20 rear ⁴					
	Dynamic Stability Control (DSC); includes Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, Start-up Assistant, electronic limited-slip differential					

1 – Specification applies to all Coupes and Convertibles.

8 – Specification applies to all 640i models.

9 – Specification applies to all 650i models.

2 – Specification applies to all Gran Coupes.

10 – Rear-wheel-drive 650i models only.

4 – Specification applies to all models.

11 – Due to low-profile tires, please note: wheels, tires and suspension parts

are more susceptible to road hazard and consequential damages. 6 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

12 – xDrive models' M Sport Package & BMW Individual Composition also specify this size.

13 – Specification applies to all RWD models.

– – Not applicable

Technical specifications

2013 6 Series

Bold within table indicates new specification for 2013 or as of 7/12 production.

Gran Coupe models are new for 2013.

Performance & efficiency	640i Coupe	640i Convertible	640i Gran Coupe	650i [xDrive] Coupe	650i [xDrive] Convertible	650i [xDrive] Gran Coupe
Acceleration, 0-60 mph, sec. ¹⁴	5.3	5.5	5.4	4.5 [4.3]	4.5 [4.4]	4.5 [4.3]
Top speed, mph ¹⁵ : Standard all-season tires	130 ¹					
M Sport Package, BMW Individual Composition or optional performance tires	155 ¹					
EPA estimated MPG, city/highway/combined	23/33/26	20/30/34	20/30/24	17/25/19 [16/24/19]	17/25/19 [16/24/19]	17/25/19 [16/24/29]

1 – Specification applies to all Coupes and Convertibles.

14 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle, road and environmental conditions; testing procedures and driving style. These

results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

15 – Electronically limited.

NA – Not available

— – Not applicable

2013 5 Series Gran Turismo:

Merging the qualities of a prestige sedan, versatile Sports Activity Vehicle and classic Grand Touring automobile into a unique concept: the BMW Progressive Activity Sedan.

The 5 Series GT occupies a unique position in the BMW line. For 14 years now, BMW has been proving with the X5, X3, X6 and – most recently – the X1 that the legendary BMW attributes of performance, agility and active driving pleasure can be allied with the utility and versatility of an SUV. For four of those years, the 5 Series GT has been demonstrating that the elegance of a luxury sedan, much of the versatility of a Sports Activity Vehicle (like the X5) and all the driving pleasure of a fine European Grand Touring (GT) automobile could also be blended into a single, harmonious vehicle concept.

So it is that the 5 Series Gran Turismo enriches the field of luxury automobiles by appealing to a particular clientele – one whose lifestyles and professional achievements are characterized by spontaneity and wide-ranging activities, yet whose tastes run more to the automobile format than that of a Sports Activity Vehicle.

Continuing for 2013 in four models, the GT presents typical BMW proportions in various ways via its distinctive exterior design. An elegantly swept profile features a coupe-like roofline, 6-window greenhouse and frameless door windows. Within this exclusive presence, a capacious and practical interior embodies BMW's customary luxury, quality, comfort and amenities while adding elements uniquely its own:

- Greater versatility of people and cargo space
- Enhanced ease of entry and egress
- A moderately elevated seating position
- Large window areas
- A standard dual-panel Panoramic moonroof.

Throughout the GT, exquisite materials and elegant design are in evidence. And for 2013, significant updates and refinements make it even more of a masterpiece.

What's new for 2013

As of 7/12 production:

New engine for 550i models

- N63 TU V-8 engine with Valvetronic, replacing previous N63 unit with conventional valvetrain; increased power and torque, higher fuel efficiency

Other engineering/technology enhancements

- Automatic engine start/stop added to all models
- Driving Dynamics Control adds ECO PRO mode; other modes now Comfort, Comfort+, Sport and Sport+ in vehicles with Dynamic Damping Control (Dynamic Handling Package or stand-alone option)
- Electric power steering on 550i models; increases fuel efficiency over previous hydraulic. Includes optional Integral Active Steering of RWD¹ model. Hydraulic system of 535i models also gains in efficiency.
- Automatic Hold function adds automatic drive-away release

- Next-generation iDrive/GPS Navigation with faster processing, enhanced graphics and new features/functions
- New top-speed ratings, differing between RWD and xDrive models

Additional standard equipment

- Automatic liftgate opening and closing
- Bluetooth/USB connectivity (535i only, already standard on 550i models)
- BMW Universal Transceiver (535i only, already standard on 550i models)

New or enhanced options

- Parking Assistant newly offered, RWD models only
- Comfort Access keyless entry adds hands-free tailgate opening from outside (Premium Package 535i, Executive Package 550i)
- Bang & Olufsen audiophile audio system newly offered (stand-alone 535i, Executive Package upgrade 550i)
- Speed Limit Info newly available (Driver Assistance Plus)
- Head-up Display (Value Package 535i, Executive Package 550i) adds height adjustment
- New-generation Rear Seat Entertainment, Professional version
- Voice Command integrated into Bluetooth/USB (6NL) and Navigation (609) options

New or revised Packages

- Most Packages have revised contents; Value Package continues for 535i models, with new contents
- New Premium Package for 535i, Executive Package for 550i models
- New Driver Assistance Plus
- Sport Package discontinued
- No Priority 1 options

Other changes

- xDrive badge moved from front flanks to trunklid (535i xDrive and 550i xDrive models)

Changes shared with other Series

- Climate controls: "snowflake" symbol changed to "A/C," AUC (automatic recirculation) supplemented by "M" (manual) setting, blower control adds "OFF" label
- "CD" key at iDrive controller changed to "Media"

1 – Rear-wheel drive.

5 Series GT models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 298-309.

535i GT

With its emphasis on occupant and cargo space and versatility, the Gran Turismo is larger and roomier than 5 Series Sedans. Its design, both exterior and interior, is entirely distinct from that of the Sedan models but of course retains a strong BMW identity. In terms of performance, it is positioned strongly with a choice of two turbocharged engines and a standard 8-speed automatic transmission. This is the 6-cylinder GT, powered by BMW's brilliant N55 engine with Twin Scroll turbocharging. Standard equipment and options that are unique to this Series further distinguish the GT from the 5 Series Sedans. Here are the 535i GT's key features.

Exterior design & function

- Weight-saving aluminum hood, front side panels (fenders), roof panel and doors
- Xenon Adaptive headlights with luminous rings (rings function as parking lights and Daytime Running Lamps)
- Dynamic auto-leveling of headlights with topographical compensation
- Retractable headlight cleaning system
- Cornering lights
- Front foglights
- Rain-sensing windshield wipers
- Frameless door windows (front and rear) with power window sealing system
- Park Distance Control, front and rear
- Adaptive brakelights
- Dual round chrome exhaust outlets, opposite sides of vehicle

Performance & efficiency

- 3.0-liter DOHC 24-valve inline 6-cylinder engine with aluminum construction, twin-scroll turbocharger, Valvetronic variable intake-valve lift and Double VANOS² variable valve timing; 300 hp/300 lb-ft. torque, EPA combined mileage 24 mpg
- Automatic start/stop function for engine
- 8-speed STEPTRONIC automatic transmission
- Aluminum multi-link double-wishbone front suspension
- Aluminum 5-link Integral rear suspension with self-leveling air springs
- Vehicle-speed-sensitive variable-assist, variable-ratio rack-and-pinion power steering
- Driving Dynamics Control – Comfort and Sport settings for engine response, transmission shift characteristics and steering assist; additional setting (Sport+) switches Dynamic Stability Control to Dynamic Traction Control mode. In vehicles so equipped, these settings plus a Comfort+ mode also apply to available Dynamic Damping Control. New ECO PRO mode for driving with optimum fuel efficiency.
- 4-wheel ventilated disc brakes with weight-saving aluminum/cast-iron front rotors, aluminum front calipers
- Brake Energy Regeneration
- 18 x 8.0 alloy wheels, Double Spoke design #234
- 245/50R-18 run-flat performance all-season tires
- Dynamic Stability Control
- Tire Pressure Monitor

Comfort & convenience

- Leather-wrapped power tilt/telescopic steering wheel with auto tilt-away
- Auto-dimming interior & exterior mirrors
- Dual power/heated, power-folding exterior mirrors
- Dynamic cruise control
- Instrument cluster in Black Panel technology
- 10-way power front seats
- Memory system for driver's seat, steering wheel and exterior mirrors; 2 settings per user
- iDrive control system with direct-select menu keys and 8 Programmable Memory Keys
- Dakota leather upholstery
- High-gloss Dark Ash wood interior trim
- Dual-zone climate control
- Power dual-panel Panoramic Contour Moonroof with power interior shade, vehicle-speed-sensitive wind deflector
- AM/FM/HD/CD/MP3 audio system with Radio Data System, 12 speakers
- Bluetooth mobile-device interface and USB connectivity
- Cupholders, 2 front + 2 rear
- Multiple accessory power outlets
- Variable seating/cargo configuration: rear seats adjustable for fore-aft position and backrest angle, 40/20/40 split folding
- Power-operated Dual-Access Tailgate provides tailgate or trunklid access
- Cargo compartments likewise twofold: either as in Sedans, with trunk separated from interior; or as in Wagons, with cargo area from front backrests to rear of vehicle
- Floor mats, front and rear
- Integrated Owner's Manual, accessed through iDrive

Safety & security

- Dynamic Stability Control (DSC), including Dynamic Traction Control (DTC), electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby and Brake Drying, electronic limited-slip differential, Start-off Assistant, Automatic Hold
- Front- and rear-seat Head Protection System
- Active front head restraints
- Advanced Crash Safety Management (ACSM) for control of vehicle safety systems
- Coded Driveway Protection
- BMW Assist Safety Plan with 4-year subscription, automatic collision notification, many other features and benefits
- Anti-theft alarm system
- Pathway Lighting

Packages & options

- Available option packages:
 - Premium (Comfort Access keyless entry, soft-close doors, Satellite Radio with 1-year subscription)
 - Driver Assistance (Active Blind Spot Detection; rear, side- and top-view cameras)
 - Driver Assistance Plus (Lane Departure Warning, Speed Limit Info)
 - Dynamic Handling (Active Roll Stabilization, Dynamic Damping Control)
 - Luxury Seating (18-way power/heated Multi-Contour front seats with Active Support and Active Ventilation)

2 – VANOS = VAriable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

5 Series GT models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 298-309.

- Cold Weather (retractable headlight cleaning system, heated steering wheel, heated front and rear seats)
- M Sport (19-in. M wheels in differentiated front/rear sizes with run-flat performance tires³, increased top-speed limiter, M aerodynamic exterior treatment, specific exterior color selection, Shadowline exterior trim, Dark Chrome exhaust outlets, M Sport steering wheel, Palladium Gray interior trim, Anthracite-color headliner; 20-in. wheels/performance tires available as upgrade)
- Luxury Rear Seating (individual 4-way power rear seats with memory and Active Ventilation, 4-zone climate control)
- Value (Navigation system, Head-up Display, BMW Apps, Smartphone Integration)⁴
- Stand-alone options:
 - Dynamic Damping Control
 - Integral Active Steering
 - 19-in. performance wheels/tires
 - Night Vision with Pedestrian Detection
 - Automatic High Beams
 - Active Cruise Control
 - Parking Assistant
 - Rear-view camera
 - 18-way power front Multi-Contour seats
 - Heated front seats with balance control
 - Two alternate wood interior trims
 - Ceramic-trimmed shift knob, iDrive controller surround, audio and climate controls
- 16-speaker Logic7 premium audio system
- Audiophile 16-speaker Bang & Olufsen audio system
- Rear Seat Entertainment with 2 monitors, DVD player, dedicated remote control; new-generation Professional system
- BMW Apps including Smartphone Integration

535i xDrive GT

AWD⁵ model, powered by same TwinPower Turbo 6-cylinder engine as rear-wheel-drive 535i. Differs from its RWD counterpart in the following ways:

- xDrive AWD system
- EPA combined rating 21 mpg, vs. 24 for RWD model
- DSC system adds Hill Descent Control
- Lower lateral front-suspension links of forged steel, vs. aluminum of AWD system
- Packages and options as 535i RWD, except –
 - M Sport Package wheels and tires: xDrive gets all-season, vs. RWD's performance equipment
 - Same M Sport Package 20-in. upgrade wheels and performance tires as RWD model; upgrade contrasts more sharply here because base Package equipment is all-season
 - Integral Active Steering not available
 - Stand-alone 19-in. wheel/tire option is all-season, vs. performance on RWD model
 - Parking Assistant not available

550i GT

Top-of-line RWD model, powered by new 445-hp N63 TU (Technically Updated) TwinPower Turbo V-8 engine. Adds increments of standard equipment over 535i; packages and stand-alone options also differ from those of the 6-cylinder model. The following points differentiate the 550i GT from its 535i counterpart:

- 4.4-liter TwinPower Turbo (twin-turbo) V-8 engine with direct fuel injection, Valvetronic variable intake-valve lift, Double VANOS² variable intake- and exhaust-valve timing; 445 hp/480 lb-ft., 0-60 mph 5.0 sec. vs. 6.2, EPA combined rating 19 mpg
- Higher-capacity version of 8-speed automatic transmission
- Larger brake dimensions
- Different standard wheel design, Turbine #271 (10 spokes) vs. Double Spoke #234 (5 pairs of double spokes)
- Additional standard equipment:
 - Rear-view camera
 - Multi-Contour front seats
 - Navigation system
- Package distinctions:
 - Driver Assistance Package deletes rear-view camera, lower price
 - Executive instead of Premium Package; more extensive content (Comfort Access keyless entry, soft-close doors and Satellite Radio shared with 535i Premium, plus premium audio, Head-up Display, BMW Apps, Smartphone Integration, ceramic-trimmed controls)
 - Luxury Seating Package deletes Multi-Contour seats, lower price

- M Sport Package adds sport exhaust system
- Value Package not available
- Stand-alone options:
 - Stand-alone wheel/tire option is different wheel design, Y Spoke #315 (2-plane spokes) vs. Multi-Spoke #235 (15 single spokes)
 - Bang & Olufsen audio system is upgrade to Executive Package, vs. pure stand-alone

550i xDrive GT

AWD version of 550i, also featuring new, more powerful and more efficient N63 TU engine. Differs in same ways from RWD 550i as for 535i xDrive and RWD models, except that EPA mileage ratings for xDrive are same as for RWD model.

2 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series GT models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

4 – Value Package is a default option for 535i models, at no extra cost, upon start of model year 2013.

5 – All-wheel drive.

5 Series GT key features

Except as noted, all current 5 Series GT models offer the following features:

Exterior design & function

A unique vehicle concept

The 5 Series Gran Turismo radiates a unique blend of sportiness and stylish elegance. Typical BMW proportions, moderately greater height, four doors with frameless windows, and a coupe-like roofline combine into a harmonious, highly distinctive silhouette that visually represents this vehicle's unusual blend of attributes and capabilities.

Its elongated hood and long – 120.9 in. – wheelbase coalesce with a “greenhouse” set well rearward and a fastback roofline into a profile that's immediately recognizable as a BMW, yet at the same time communicates the distinctive vehicle concept. From the first glance, it's clear that this is an exceptionally roomy conveyance, yet also a highly dynamic one as expected from BMW.

At the front. The GT's frontal aspect has a marked forward thrust, with its traditional BMW “kidneys” grille leaning slightly forward and emphasized by its separation from the flanking (and also traditional) 4-beam headlights.

Since their introduction some years ago, BMW's luminous rings have taken on several functions: as parking lights, as an identifying element when the headlights are on, and as Daytime Running Lamps – this last with 100% of their lighting power, the other functions with just 10%.

In profile. The GT was BMW's first 4-door with frameless, or sashless, door windows – a feature BMW had generally reserved for especially sporty models like the 3 and 6 Series Coupes and Convertibles. (It now shares them

with the 4-door 6 Series Gran Coupe.) These give a more “open” look to profile and angled views of the vehicle, enhance the driver's outward vision, and when lowered ease ingress and egress.

Over the years, another window detail has become a tradition: the so-called “reverse kink” or “Hofmeister Kink” – named after Wilhelm Hofmeister, who headed BMW design when this shape first appeared. On the GT, it appears in “6-window” form (3 windows per side) in the quarter windows aft of the rear doors, framed in matte black plus chrome or (on vehicles with the M Sport Package) high-gloss Shadowline black trim. Other than wagons and SAVs, BMW's last 6-window body was the 501-502 Series of 1952-63.

At the rear. Another BMW design tradition is the (freely interpreted) L-shape of the rear lighting clusters. On the GT this theme is expressed in elegant LED lighting that wraps far around the body sides and provides yet another recognizable BMW design cue. Together, these elements reinforce the impression of the GT's wide stance – further enhanced by strong horizontal lines spanning the trunklid/liftgate and likewise wrapping around to tie in with character lines of the profile.

Yet here it's function, more even than handsome esthetics, that catch the eye in the GT's interesting rear view. Below the rear window is in effect a conventional, though shorter-than-usual, sedan trunklid that opens separately to reveal a fully enclosed trunk – sealed off from the passenger cabin by a movable partition that renders the interior as quiet as that of a sedan.

To take full advantage of the GT's great cargo capacity, though, the liftgate – including the lower trunklid, rear window and an upper section reaching a few inches above the window – can also be opened; there are two releases here, one for the trunklid alone, the other for the entire liftgate including trunklid. BMW calls this innovative arrangement the **Dual-Access Tailgate**.

Innovative in design and construction: aluminum doors, tailgate

In addition to the GT body's hood and front spring towers, its four doors are of aluminum, saving a significant 61.7 lb. compared to steel. The Dual-Access Tailgate is of aluminum as well.

Performance & efficiency

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (535i GT models)

Upon the 2011 debut of this engine, it was seen as a major evolution of the previously introduced N54 twin-turbo 6-cylinder engine. The N55 achieved the same 300-hp/300-lb-ft. performance via the following principal changes:

- A single Twin Scroll turbo-charger instead of the N54's twin single-scroll turbos.
- Valvetronic variable valve timing. This was the first time BMW combined Valvetronic and turbocharging.
- A different type of direct fuel injection, operated via solenoids instead of the N54's piezo injectors.

Now the N55 is familiar, delivering its 300/300 performance in the 135i models as well as 3 and 5 Series, X1, X3, X5 and X6; 315 hp/330 lb-ft. in the 6 and 7 Series; and 320 hp/317 lb-ft. in 135is models. Here, with its 300 lb-ft. of torque on tap all the way from an amazingly low 1200 all the way to 5000 rpm, the power output staying at peak from 5800 to 6250 rpm, the 6-cylinder engine endows the 535i GT with a lively 0-60-mph time of 6.2 sec.; the 535i xDrive model actually attains 60 mph a tenth of a second quicker. EPA mileage ratings are higher for '13: 20 mpg city/30 mpg highway/24 mpg combined for the RWD model, 18/26/21 for the xDrive. The N55 is described more extensively in BMW features.

N63 TU 4.4-liter DOHC 32-valve Twin Turbo V-8 engine (550i GT models)

Although the TwinPower Turbo designation appears on its handsome engine cover, a Twin Turbo designation is equally correct and usefully clarifies its technology.

For 2013, BMW presents a TU (Technically Updated) version of this strong, refined V-8 engine. Its highlights are:

- Valvetronic variable intake-valve lift. N63 TU is one of two new BMW V-8s for 2013 to combine Valvetronic with turbocharging. (The M5/M6 S63 TU engine is the other.)
- Newly engineered direct fuel injection. Bringing the N63 into line with the N55 6-cylinder; its solenoid-controlled injectors utilize multiple, inward-directed openings, positioned centrally in the combustion chambers.

5 Series GT key features

Except as noted, all current 5 Series GT models offer the following features:

- Two single-scroll turbochargers as before; thus not single twin-scroll type of N55.

Other changes, mainly directed toward reduced fuel consumption, include:

- 3-pump cooling system with switchable mechanical main pump; 50-watt electric pump for intercooler and engine controls; 20-watt electric pump that continues running to cool turbocharger bearings after engine shutoff.
- Volume-controlled oil pump
- Automatic engine start/stop.

The N63 TU continues with its ultra-robust aluminum block and silicon-impregnated, soft-honed cylinder surfaces; like all other current BMW engines it also retains Double VANOS² variable intake- and exhaust-valve timing. This wide-ranging upgrade also benefits performance and efficiency:

- **Power output** rises from 400 to 445 hp.
- **Torque output** increases from 450 to 480 lb-ft.
- **Vehicle performance** naturally reflects these increased outputs. Again comparing parallel models, 0-60 times improve from 5.4 to 5.0 sec. for the 550i GT, 5.3 to 4.7 for the xDrive model.
- **Fuel efficiency** too – EPA ratings up from 15 city/22 highway/18 combined mpg to 16/24/19 for both RWD and xDrive models.

Once again, BMW achieves higher performance in combination with higher fuel efficiency, and these great automobiles become even greater!

8-speed STEPTRONIC automatic transmission

BMW's brilliant 8-speed automatic transmission is standard in all GT models. With either of its two distinct engines, this ultimate automatic transmission brings smooth shifting, sportiness and efficiency to the height of perfection: the 8-speed's "tall" cruising gears reduce fuel consumption and carbon-dioxide emissions and promote quietness. And its wide spread of ratios from lowest to highest gear enhances acceleration and response across the entire range of driving speeds.

Two versions are employed: 8 HP 45 in 535i, higher-capacity 8 HP 70 in 550i models. Both have the same ratios and essentially the same operational characteristics, which include such a high level of smoothness that drivers have to "try" to tell when the transmission has shifted.

This aspect of the 5 Series GT, too, belongs to the BMW Efficient-Dynamics concept: the 8-speed transmission plays a significant role in EPA mileage ratings that are commendable for such capacious, luxurious vehicles. For further details on this ultimate powertrain achievement, see **BMW features**.

Front suspension: the multi-link system

For generations, most BMW front suspension systems have been of the **strut** type, in which a long, essentially vertical strut carries the spring and shock absorber and participates in the suspension geometry – that is, along with the lower arms it co-determines the angles wheels take as they move up and down. With its double-pivot lower arms,

the strut concept attains a high level of sophistication in handling, straight-ahead stability and riding comfort.

Yet BMW conceptualists and engineers continually seek better solutions. So it is that BMW developed a front suspension system that achieves even better results, particularly in BMW's larger, relatively heavy and very powerful vehicles such as the GT. Called a **multi-link** system, it adds one lateral link per side, relieving the struts of their wheel-locating duties and leading primarily to greater riding comfort. All 7, 6 and 5 Series, M5 and M6, X5 and X6 models now employ this suspension concept. For a detailed description, see **BMW features**.

Rear suspension: the advanced Integral V

The rear suspension, too, is a significant evolution. As at the front, it is a multi-link system; BMW calls it the **Integral** system for a small, essentially vertical Integral Link connecting the upper and lower lateral control planes.

The Integral concept has been in use for some years in BMW automobiles, appearing on various models in 4-link form. With one additional link per side, the Integral V (V for "5") system moves one step closer to perfection in its combination of handling response, road adhesion and riding comfort. Because customers are expected to utilize its cargo-carrying talents, the GT's rear suspension is standard-equipped with electronically controlled air springs to keep the vehicle level with varying occupant-and-cargo loads.

In rear-wheel-drive GT models, the rear suspension adds yet another capability via the optional

Integral Active Steering: By steering the rear wheels by a modest amount (2.5" maximum), a further enhancement of maneuverability, stability and riding comfort is achieved. For details, see **BMW features**.

For even more perfected handling and ride: Dynamic Damping Control

Dynamic Damping Control Offered along with Active Roll Stabilization as part of the Dynamic Handling Package (or as a stand-alone), BMW's system of electronically controlled variable shock absorbers is called Dynamic Damping Control. As such it is a refinement of the familiar Electronic Damping Control (EDC). See **BMW features** for a detailed description of this advanced system for even finer handling precision and riding comfort; all current versions are described.

Generously dimensioned ventilated disc brakes with composite front rotors

In this patented construction, the brake rotor (disc) consists of two pieces: the high-carbon cast-iron outer portion, which functions conventionally as the surface onto which the brake pads grip to slow or stop the vehicle; and an aluminum "hat" in the center, which mounts the rotor to the vehicle. Its main advantage is reduced unsprung weight, complementing the aluminum suspension in benefiting ride comfort and road adhesion. See **BMW features** for a full explanation of this technology. Additional braking features found on all GT models include –

2 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

5 Series GT key features

Except as noted, all current 5 Series GT models offer the following features:

- **Automatic Hold**, also standard on current 7, 6, X5 and X6 Series models as well as 5 Series Sedans with automatic transmission. Holds the brakes for an indefinite time anytime the vehicle is stopped, preventing rollback or creep; it can be activated or de-activated by the driver with a console button just behind that of the electro-mechanical parking brake.
- **Brake Energy Regeneration**, which boosts fuel efficiency by permitting alternator operation only under deceleration or braking.

Wheels and tires: 18-in. standard, 19- or 20-in. optional, run-flat across the board³

Continuing BMW's established practice of standard-equipping most models with all-season, run-flat tires, all GT models come with standard 18 x 8.0 alloy wheels in two designs, one on 535i and another on 550i models. The tires are 245/50R-18 all-seasons, which with their V speed rating can be classified as "performance all-season."

Next up, the RWD models' M Sport Package includes 19x 8.5 front/19 x 9.5 rear wheels. Here

the tires are full performance "summer" rubber, sized 245/45R-19 front / 275/40R-19 rear. xDrive models' M Sport Package specifies 19 x 8.5 wheels all around, carrying 245/45R-19 all-season tires that complement the all-weather capabilities of xDrive. Either way, the wheel design is the same M V Spoke #302M, with seven pairs of slender spokes. At the top is 20-in. equipment, available as an upgrade to the M Sport Package of all models: 20 x 8.5 front/20 x 10.0 rear wheels in M Double Spoke #303M design. These give a classic

BMW sports look and mount 245/40R-20 front / 275/35R-20 rear performance tires. The upgrade price is the same for all models.

All models are also available with a stand-alone option of 19-in. wheels and tires: all-season for the RWD models; here too there are two designs, one for 535i, another for 550i models. These are sporty, though not M, designs.

The table below summarizes the GTs' wheel/tire equipment spectrum.

Model & Version	Wheel size & design / code	Run-flat tires ³	Changes for '13
535i GT standard ⁶	18 x 8.0 Double Spoke #234 2SR	245/50R-18 performance all-season	No changes
550i GT standard ⁶	18 x 8.0 Turbine #271 2AF	245/50R-18 performance all-season	↑
535i xDrive GT optional	19 x 8.5 Multi-Spoke #235 2H1	245/45R-19 performance all-season	Previously in Sport Package, now stand-alone
535i GT RWD optional	19 x 8.5 front/19 x 9.5 rear Multi-Spoke #235 2ST	245/45R-19 front / 275/40R-19 rear performance	↑
550i xDrive GT optional	19 x 8.5 Y Spoke #315 2LN	245/45R-19 performance all-season	↑
550i GT RWD optional	19 x 8.5 front/19 x 9.5 rear Y Spoke #315 2LG	245/45R-19 front / 275/40R-19 rear performance	↑
535i & 550i GT xDrive M Sport Package	19 x 8.5 M V Spoke #302M 2NG	245/45R-19 performance all-season	No changes
535i & 550i GT RWD M Sport Package	19 x 8.5 front/19 x 9.5 rear V Spoke #302M 2NW	245/45R-19 front / 275/40R-19 rear performance	↑
All models M Sport Package upgrade	20 x 8.5 front/20 x 10.0 rear M Double Spoke #303M 2NX	245/40R-20 front / 275/35R-20 rear performance	↑

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series GT models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

6 – Includes xDrive model.

5 Series GT key features

Except as noted, all current 5 Series GT models offer the following features:

Comfort & convenience

Intelligent concept for contemporary mobility

The 5 Series GT expresses the very essence of contemporary mobility. It was created for people who value, and expect, a certain expansiveness and exclusivity in their motor vehicles, yet also appreciate practicality and versatility that support their sporting and leisure activities.

Luxurious comfort, impressive variability, generous space

The 5 Series GT interior combines exceptional space, personal luxury and quality materials into a truly premium ambience – as expansive as its owner’s lifestyle, communicating to users a feeling of spontaneous and liberating well-being. In the rear seats as well as up front, there’s a pervasive sense of generous space and comprehensive amenities. Standard rear seating is for three persons, manually adjustable for fore-aft position and backrest angle. Yet there’s more here than just adjustability: also outstanding space, with leg room actually exceeding that of the BMW 750i Sedan and head room as in the BMW X5 Sports Activity Vehicle. Accompanying the variable seating accommodations is variable cargo capacity, ranging from 10.0 cu ft. (EPA rating) or 15.5⁷ cu ft. in the sedan-style enclosed trunk to fully 60.0 cu ft.⁷ with folded rear seats and SAV-style long cargo floor. A variable partition between the trunk and passenger compartments provides occupants with sedan-type climate and noise insulation, yet moves with the seats when they

are adjusted and folds flat when greater carrying capacity is needed. The shelf behind the rear seats can be stored beneath the cargo floor.

Interior design: highlighting the space

The outstanding spaciousness is enhanced by elegant design and materials. Dash and instrument-panel lines are decidedly horizontal; door panels sweep dramatically and harmoniously from front to rear. Thanks to their frameless design, the door windows are larger than they would be with frames, adding to the openness and airiness of this remarkable cabin as well as the driver’s outward view; the dual-panel Panoramic Contour Moonroof also contributes to these effects.

With the standard rear seating, the backrest’s 40/20/40 split allows for selective fold-down. In addition, the entire seat cushion can be adjusted 3.9 in. fore and aft and the individual backrest sections can be adjusted over a range of 15°-33°.

Optional as part of the Luxury Rear Seating Package are individual, multi-adjustable power Comfort seats, separated by a center console with cupholders and a storage compartment; here the backrest range is 15°-40° and even the fold-down function is powered. In addition to the power adjustments, a further attraction of this configuration is that it transforms the cabin into a sportier, strictly 4-seater configuration that some customers will prefer for its esthetic, intimacy and greater luxury.

Optimum outward view for driver, comfortable entry and egress thanks to mildly elevated seating

Thanks to its “semi-command” front seating height, the GT driver and front passenger enjoy especially comfortable entry and egress. For comparison, the GT’s standard seat height from the ground is 22.6 in., vs. the 7 Series’ 20.8 and the X3’s 26.6. In other words, the GT is enough higher than the typical BMW sedan for easier access and an enhanced outward view, yet not so high as to require “climbing in.”

Rear seating is also somewhat higher than in BMW sedan models. As in all BMWs, thoughtfully worked-out ergonomics make for optimum operation of driving controls and other functions. All displays, knobs and buttons serving comfort functions are situated centrally for use by the driver and front passengers; controls for the driver’s use only are to the left of the steering wheel, on or near the steering wheel, or on the front center console. The steering wheel has power tilt/telescopic adjustment and tilt-away for exit and entry; both front seats come standard with 10-way power adjustment including head-restraint height. (18-way Multi-Contour seats are available in 535i GT models as part of the Luxury Seating Package or as a stand-alone option; in 550i GT models these ultra-luxurious seats are standard.)

Instrument panel in Black Panel technology

Like so many aspects of the Gran Turismo, its instrument cluster combines BMW tradition with advanced, beautiful executions. Here the entire cluster is in a high-resolution Black Panel display, in which four classic circular instruments are most prominent; other driving-relevant displays and readouts – including GPS Navigation if present, vehicle-monitoring functions, upcoming service requirements and other information – also appear here in their various (and function-related) graphic forms.

For extensive details on this dramatic, high-tech way of displaying instrumentation and information, see BMW features.

Next-generation iDrive with enhanced graphics and functionality

The iDrive system appears in standard form with a 7.0-in. control display. Optionally in 535i and standard in 550i models, iDrive includes GPS Navigation, a dazzling 10.2-in., 1280 x 480-pixel control display, eight Programmable Memory Keys and a wide range of features and functions.

Along with 5 Series Sedans, 7 Series and ActiveHybrid 3, this Series’ iDrive system incorporates dramatic enhancements for 2013. Its user interface includes enhanced graphics, with higher resolution, higher contrast and 3-dimensional effects throughout;

7 – Measurements according to European standards..

5 Series GT key features

Except as noted, all current 5 Series GT models offer the following features:

individual menus, for example, are presented in virtual-3D spaces. A more powerful, 1.3-GHz processor and dedicated 3D graphics card enable new levels of animation and dynamic transitions between menus and options. See **BMW features** for detailed descriptions of iDrive in general and these new enhancements in particular.

Materials and colors: enhancing the elegance

The GT's choices of colors and materials further enhance the impression of personal luxury and the interior's interplay of lines and surfaces. For the dash's finely grained upper section, there are two colors depending upon the chosen interior scheme. The standard Dakota leather is available in six color schemes; BMW's more luxurious Nappa leather, with three color choices, is optional in all models.

High-gloss Dark Burl Ash wood interior trim is standard, appearing in sweeping expanses on the dash, doors and front center console; high-gloss Ash Grain Anthracite (gray tone) and another distinctive wood called Fine Line Matte are optional. As a special visual and tactile treat, ceramic trim is available for the shift knob, iDrive controller surround, and audio and climate controls.

Climate control: standard dual-zone, optional 4-zone

Nearly all climate-control functions are served by the control panel in the center stack. The standard dual-zone system allows the driver and front passenger to set their preferred temperatures separately and override the automatic blower and air-distribution controls when desired; optional as

part of the Luxury Rear Seating Package is a 4-zone system that enables the rear passengers to make the same adjustments from a control panel at the rear of the center console.

Current front climate-control settings are indicated in a second Black Panel display in the center stack, along with the system's controls.

Audio systems and data storage

The standard 12-speaker/205-watt audio system includes a CD player and auxiliary audio input; an iPod/USB adapter is also standard for convenient connectivity with one's own variety of audio sources. Available newly as a stand-alone option in 535i and as part of the Executive Package in 550i models is a premium audio system with 16 speakers, 600-watt power rating and Neodymium speakers throughout.

A new offering for '13 is the audiophile **Bang & Olufsen** system, available as a stand-alone option in 535i and an upgrade to the new 550i Executive Package. The B&O system is described briefly in **packages & options** for this Series, and in detail in **BMW features** as it's also available in 7, 6, other 5 Series models, and the M5 and M6 as well.

With any of the available audio systems, if the vehicle is equipped with Navigation, an 80-GB hard drive provides ample data storage for the GPS Navigation, entertainment server, iDrive system, newly enhanced Voice Command, phonebook and Gracenote® music database.

All audio systems include two subwoofers in BMW's patented, highly effective underseat locations. Also available is a new-generation Rear Seat Entertainment system, with its own DVD player, two 9.2-in. high-resolution monitors in the front seats' backrests, and a dedicated remote. This is a stand-alone option in all models; see **BMW features** for details.

Panoramic Contour Moonroof: abundant light, strength and head room

All U.S. GT models come standard with an exclusive version of BMW's dual-panel Panoramic moonroof. Encompassing about 55% of the roof's surface area, the entire assembly is 45.7 in. long and 37.1 in. wide; its forward glass panel slides open 17.3 in. or tilts upward. The rear glass panel is fixed, bound to the roof so as to serve as a rigid part of the overall body structure.

The moonroof's forward wind deflector rises to different heights on the basis of vehicle speed, helping tame potential low-speed air drumming or high-speed wind roar; its interior sunshade is also powered. A further refinement is the moonroof's harmonious integration into the roof contours: its front edge is curved parallel to the roof's front edge for a subtle design touch. This is the meaning of the Contour designation.

Compared to the X5, the GT actually has more head room: 39.9 in. front/38.6 in. rear, vs. 38.4/38.3 for the X5 with moon-

roof. In fact, for customers who prioritize head room, the GT with its standard moonroof provides even a bit more front head room than the X5 without moonroof!

Unique: Dual-Access Taigate with full, independent functionality

To achieve maximum convenience and versatility of loading various cargo items, BMW developed a remarkable system, consisting of a smaller, trunklid-like opening under the rear window and a large liftgate similar to that of BMW's X models. The "trunklid" can be opened separately; when the liftgate is opened it includes the lower lid. Newly for '13, liftgate operation is powered, and in combination with Comfort Access (535i Premium Package, 550i Executive Package) affords hands-free operation by waving a foot in a certain way under the rear bumper. Opening height is variable via iDrive.

The overall frame for this assembly is of aluminum, of great strength and unprecedented precision of manufacture and fit. Both sections are on tubular hinges; release of both is via buttons on the remote or inside the cabin.

Safety & security

The 5 Series GT is equipped with the same range of safety features as other BMW models in general and the 7 Series in particular; as such it incorporates state-of-the-art active- and passive-safety engineering and technology.

5 Series GT key features

Except as noted, all current 5 Series GT models offer the following features:

Active safety

BMW's current, state-of-the-art active-safety systems are available:

- **Automatic High Beams** – now a stand-alone option, optimizes the driver's forward vision at night by making it more likely that the high beams will be used when it is safe to do so.
- **Active Blind Spot Detection** – part of the Driver Assistance Package. Via radar sensors, monitors traffic in adjacent lanes and displays a warning in the appropriate exterior mirror if there is a vehicle in a critical area that may not be covered by the mirror itself. If driver activates turn signal, vibrates the steering wheel.
- **Lane Departure Warning** – also part of Driver Assistance Plus. Employing a camera near the interior rearview mirror, detects when vehicle begins to move across a lane marking without turn signals activated, and vibrates the steering wheel.
- **Rear-view camera** – adds a wide-angle view to rear of vehicle, plus lines depicting vehicle trajectory, to the standard Park Distance Control for additional driver perception. 535i Driver Assistance Package or stand-alone, standard on 550i models.
- **Side-view cameras** – provide views to sides at front of vehicle that driver might not see directly, such as when pulling out of a garage or alley into a busy street. Part of Driver Assistance Package.

- **Top-view cameras** – consisting of a camera in each exterior mirror's housing. Enhances driver's perception of vehicle surroundings when maneuvering. Included with the side-view cameras.
- **Integral Active Steering** – enhances the GT's already outstanding directional stability at higher speeds by slight, precise countersteering of the rear wheels in turns. The front-wheel aspect of Integral Active Steering also contributes to stability at speed by progressively increasing the numerical steering ratio up to approximately 75 mph. Available on RWD models; on 550i, now electrically powered.
- **Night Vision** – with Pedestrian Detection to help make driver aware of pedestrians or critters near the roadway. Stand-alone option.

For further details and availability, see **packages & options** for this Series; for more technical details, see **BMW features**.

Passive safety

The GT's passive-safety features include one function beyond those that are standard on all models: Active front head restraints, as in 3 Series Coupes and Convertibles as well as 5, 6 and 7 Series, X3, X5 and X6.

Packages & options

Packages

Value Package

(535i models, code ZVP)

This concept enhances customer value with additional features at no extra cost[®]. It is a default option for 535i models, so in effect it upgrades standard equipment even more than the "official" standard enhancements for '13. Contents are as follows:

- **Navigation system**, code 609, next-generation version including Real Time Traffic Information, Online Information Services, enhanced Voice Command.
- **Head-up Display**, code 610
- **BMW Apps**, code 6NR
- **Smartphone Integration**, code 6NF.

Driver Assistance Package

(all models, code ZDA)

This Package enhances the 5 Series GT's active-safety attributes in three ways:

All models:

- **Active Blind Spot Detection**, code 5AG. Described on previous page.
- **Side- and top-view cameras**, code 5DL; also described on previous page.

535i models only:

- **Rear-view camera**, code 3AG. Standard on 550i models.

Driver Assistance Plus

(all models, code ZDB)

- **Lane Departure Warning**, code 5AD. Described on previous page.
- **Speed Limit Info**, code 8TH; first appearance on GT Series; described in **BMW features**.

Premium Package

(535i models, code ZPP)

Adds three features to these models' extensive standard luxury and convenience equipment:

- **Comfort Access keyless entry**, code 322. Described in **BMW features**; newly for '13, includes hands-free liftgate opening from behind the vehicle.
- **Soft-close doors**, code 323. User closes door gently; an electric mechanism draws it fully in.
- **Satellite Radio with 1-year subscription**, code 655.

Executive Package

(550i models, code ZEC)

New for '13, this package corresponds to that offered for 550i Sedan and 6 Series models; it includes all content of the 535i models' Premium Package, plus an extensive range of further luxury, convenience and communications/infotainment amenities. Contents are identical for both 550i models:

- **Comfort Access keyless entry**, code 322. Described in **BMW features**; newly includes hands-free liftgate opening from behind the vehicle.
- **Soft-close doors**, code 323. User closes door gently; an electric mechanism draws it fully in.
- **Satellite Radio with 1-year subscription**, code 655
- **Head-up Display**, code 609
- **Premium audio system**, the familiar 16-speaker, 600-watt Logic7 system that has always been available in GT models. Code 677; described in **BMW features**.

8 – Offer subject to change.

5 Series GT key features

Except as noted, all current 5 Series GT models offer the following features:

- **Bang & Olufsen audiophile system**, newly available as an upgrade to the package. 16 speakers of the highest quality, each with its own amplifier; Dirac Dimensions™ Surround Sound and 1200-watt overall amplification. As this system is also available in the 6 and 7 Series, it is described in detail in **BMW features**.
- **BMW Apps**, code 6NR. Now a familiar and popular BMW option, described in **BMW features**.
- **Smartphone Integration**, code 6NF, facilitating the use of sophisticated mobile devices via in-vehicle infotainment amenities.
- **Ceramic-trimmed controls**, code 4U1.

M Sport Package (all models, code ZMP)

The M Sport Package proved to be more popular than the milder, now discontinued Sport Package. Content is essentially the same for all models, but wheel/tire equipment varies between RWD and xDrive models as does the presence of an increased top-speed limiter; also, only the 550i models include a special exhaust note.

M wheels:

- **xDrive models** – 19 x 8.5 M V Spoke #302M with 245/45R-19 performance all-season tires³, code 2NG
- **RWD models** – 19 x 8.5 front/19 x 9.5 rear M V Spoke #302M with 245/45R-19 front / 275/40R-19 rear performance tires³, code 2NW
- **All models upgrade** – 20 x 8.5 front/20 x 10.0 rear M Double Spoke #303M with 245/45R-20 front / 275/35R-20 rear performance tires³, code 2NX

M functional and esthetic features, all models:

- **M aerodynamic exterior treatment**, a striking exterior distinction. Special front bumper/spoiler and rear bumper ensembles, plus a rear-bumper insert in Dark Shadow Metallic. Code 715.
- **Shadowline exterior trim** around the side windows, code 760
- **Specific exterior color selection**. ZMP is available only with Alpine White, Titanium Silver, Jet Black, Space Gray, Imperial Blue and Dark Graphite Metallic II, the latter two being Brilliant Effect (Xirallic) paints; additionally, Carbon Black Metallic is available only with ZMP.
- **Dark Chrome exhaust outlets**, part of factory Sport Package option code 7MP
- **M Sport steering wheel**, code 710, featuring the M logo, extra-thick rim and thumb rests
- **Palladium Gray interior trim**, code 4L7
- **Anthracite-color headliner**, code 775

RWD models only:

- **Increased top-speed limiter**, code 840

550i models only:

- **Sportier exhaust sound**, part of 7MP.

Dynamic Handling Package (all models, code ZDH)

Now available without combination requirements, this package comprises familiar, high-tech BMW handling systems:

- **Adaptive Drive**, newly named and coded 2VA but same as former Active Roll Stabilization code 229

- **Dynamic Damping Control**, with new code ZDD (formerly 223).

These two important enhancements to handling prowess are described in detail in **BMW features**.

Luxury Seating Package (all models, code ZLS; requires Cold Weather Package or stand-alone heated front seats) The contents of this package match its name.

All models:

- **Active Support** on both front seats, code 455. Gently and slightly raising and lowering the seat cushion's left and right halves to relieve fatigue during extended trips. Described in **BMW features**.
- **Active Ventilation** on both front seats, code 453. Cushion and backrest center areas are in perforated leather. Described in **BMW features**.

535i models only:

- **18-way Multi-Contour front seats**, code 456. These are standard in 550i models.

Luxury Rear Seating Package (all models, code ZLU; requires Luxury Seating or Cold Weather Package)

Given the GT's special emphasis on spacious seating, and rear seating in particular, this is an especially attractive option. It consists of –

- **Comfort rear seats** with their 2-passenger configuration and 4-way power adjustment, power fold-down and other luxury/utility features. The seats are separated by a fixed center armrest with storage compartment beneath it, and dual cupholders. Code 460.

- **Active Ventilation** (code 454) of the Comfort rear seats
- **4-zone climate control**, code 4NB.

Cold Weather Package (all models, code ZCW)

Includes four features:

- **Retractable headlight cleaning system**, code 502. Jets rise out of front bumper when activated.
- **Heated steering wheel**, code 248, for quick warmth in a cold vehicle
- **Heated front seats**, code 494
- **Heated rear seats**, code 496.

Stand-alone options

Active Cruise Control with Stop-and-Go function, Collision Warning System (all models, code 5DF)

In addition to the ability to bring the vehicle to a complete stop and then back to set speed, this version of ACC utilizes its radar sensors to detect critical closing-rate situations with standing and moving objects and alert the driver, even with ACC off. If the vehicle has the Head-up Display, the visual warning also appears there. The ACC offered here is one of three types now available in various BMW Series. See **BMW features** for descriptions of all three.

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series GT models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

5 Series GT key features

Except as noted, all current 5 Series GT models offer the following features:

Night Vision with Pedestrian Detection

(all models, code 6UK)

Via an infrared camera, Night Vision scans up to 1600 ft. ahead of the vehicle over a 36-degree-wide range, variable according to the road's path and driver input. Pedestrian Detection denotes its ability to recognize the direction a pedestrian (or animal) near the roadway is moving. See **BMW features** for a detailed description of this advanced safety system.

Automatic High Beams

(all models, code 5AC)

By switching the headlights between low and high beams, helps ensure optimum forward lighting according to traffic conditions.

Integral Active Steering

(RWD models, code 2VH)

Active Steering appears here in its enhanced version, adding rear-wheel steering to the variable-ratio front-wheel Active Steering. For details on this spectacular driving enhancement, see **BMW features**.

Dynamic Damping Control

(all models, code 223)

Continuing under its previous option code, this is the same comfort/handling-enhancing system of electronically controlled shock absorbers that's included in the Dynamic Handling Package under code ZDD.

Stand-alone wheel-and-tire options

(all models, codes as noted)

With 18-in. wheels and performance all-season tires standard on all GT models, a 19-in. option³

is offered for each model, independently of the M Sport Package:

- **RWD models** – 19 x 8.5 front/ 19 x 9.5 rear wheels with 245/45R-19 front / 275/40R-19 rear performance tires. The 535i wheel design is Multi-Spoke #235, with 15 spokes; for the 550i it is Y Spoke #315, with a highly distinctive configuration of five Y-spokes in the outer plane and five single spokes in an inner plane.
- **xDrive models** – 19 x 8.5 wheels all around, with 245/45R-19 performance all-season tires; same wheel designs as for RWD models.

Rear-view camera

(535i models, code 3AG)

Though included in the Driver Assistance Package, this popular option is also available as a stand-alone option.

Parking Assistant

(RWD models, code 5DP)

One of BMW's newest, highest-tech options. Evaluates potential parallel-parking spaces, then once the driver has selected a space and activated the Assistant, operates the steering for maneuvering into it. Described in **BMW features**.

18-way Multi-Contour

front seats

(535i models, code 456)

Standard in 550i models and included in the 535i Luxury Seating Package, these ultimate seats include articulated upper backrests, 4-way power lumbar support and many other amenities. They are described in **BMW features**.

Heated front seats

(all models, code 494)

Though included in the Cold Weather Package, heated front seats are also offered as a stand-alone option to allow customers maximum flexibility in specifying options.

Nappa leather upholstery

(all models, codes NA; in 535i models, requires Luxury Seating Package or stand-alone Multi-Contour front seats)

This more upscale upholstery scheme applies premium Nappa leather to the seat facings, head restraints and front/rear center armrests. It is available in three color schemes: Ivory White/Black, Cinnamon Brown and Black.

Alternate interior trims

(all models, codes 4CA & 4CB)

High-gloss Ash Grain Anthracite (4CA, gray tone) and Fine Line Matte (4CB, dark brown) are optional at no extra cost as alternatives to the standard high-gloss Dark Burl Ash.

Ceramic-trimmed controls

(all models, code 4U1)

Ceramic-trimmed shift knob, iDrive controller surround, audio and climate controls lend an extra touch of elegance to the already elegant GT interior. These are also available in the 550i Executive Package.

Premium audio system

(535i models, code 677)

A stand-alone option on these models, this 16-speaker system is included in 550i models' Executive Package. Its features include increased audio power (600

watts), Digital Sound Processing (Dolby Pro Logic), Surround Sound simulation and higher-caliber componentry throughout. Though not officially so named, this system is essentially identical to Logic7, which is described in **BMW features**.

Bang & Olufsen audiophile audio system

(535i models, code 6F2)

For 2013, the 5 Series (including GT) adds the super-audiophile Bang & Olufsen system for a total of three available audio systems. It is available in these models as a stand-alone; in 550i models it's offered as an upgrade to the Executive Package. For details on this industry-leading audio system, see **BMW features**.

Rear Seat Entertainment

(all models, code 6FH)

This new, updated and enhanced system (called Professional) features larger monitors and other upgrades over the 6FG system previously offered. It consists of:

- **Two color monitors**, 9.2-in. high-resolution, angle-adjustable, integrated into the front seats' backrests (up from 8.0-in. previously)
- **6-disc DVD changer**
- **Dedicated remote control** for system
- **Separate ports** for connecting MP3 players and game consoles
- **Access to vehicle's entertainment functions** (radio, DVD changer, online services, phone)

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series GT models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

5 Series GT key features

Except as noted, all current 5 Series GT models offer the following features:

- **Separate GPS Navigation:** rear passengers can “suggest” a navigation destination and transmit it to front iDrive; driver can accept destination and program it into GPS.
- **Connectivity for wired and wireless headphones.**

BMW Apps

(all models, code 6NR; includes Smartphone Integration)
BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function is released, users can update and customize their vehicle’s infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party App.

Rear door-window sunshades

(all models, code 416)

Formerly included in the Luxury Rear Seating Package, these power-operated shades are now available as a stand-alone; a rear-window shade is not available in the GT.

BMW center-installed accessories

Among the many accessories available for 5 Series GT models are:

- **Complete wheel and tire sets,** including 20-in. Star Spoke wheels in Midnight Chrome (design #311)
- **Wheels alone** in Star Spoke #311 or Cross Spoke #312, choice of finishes
- **Valve-stem caps** with BMW logo or lettering
- **Carbon-fiber or chrome exterior-mirror caps**
- **High-performance headlight bulbs**
- **Nose mask**
- **Mud flaps**
- **Bicycle carriers**
- **Roof-rack system, attachments and lifts**
- **Car covers**
- **Clear protective covering** for front of vehicle
- **Ultraviolet windshield sunshade**

- **Snap-in sunshades** for rear door and quarter windows
- **License-plate frames**
- **Floormats, rubber**
- **Snap-in adapter** with USB interface for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- **Wireless stereo headphones** for use with available Rear Seat Entertainment system
- **Ash wood trim** for E-shift lever
- **Wood steering-wheel trims**
- **Trunk mats** and other trunk accessories
- **BMW Mobility Kit**

For details and more choices, see the latest **Accessories** listing for the 5 Series GT on bmwusa.com.

Standard & optional features

2013 5 Series GT

Bold within table indicates new feature for 2013.

Exterior design & function	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Aluminum hood, front spring towers, main roof panel & doors	S	S	S	S
Xenon Adaptive headlights with luminous rings	S	S	S	S
Dynamic auto-leveling of headlights	S	S	S	S
Cornering lights	S	S	S	S
Automatic headlight control	S	S	S	S
Automatic High Beams	OPT	OPT	OPT	OPT
Daytime Running Lamps via luminous rings	S	S	S	S
Retractable high-intensity headlight cleaning system	ZCW	ZCW	ZCW	ZCW
Front foglights	S	S	S	S
M aerodynamic exterior treatment (front bumper/spoiler & rear bumper)	ZMP	ZMP	ZMP	ZMP
Specific exterior color selection	ZMP	ZMP	ZMP	ZMP
Rain-sensing windshield wipers & heated washer jets	S	S	S	S
Power-folding exterior mirrors	S	S	S	S
Metallic or Xirallic paint	OPT	OPT	NC	NC
Park Distance Control with graphic display	S	S	S	S
Parking Assistant	OPT	NA	OPT	NA
Ground lighting at door handles	S	S	S	S
Adaptive brakelights	S	S	S	S
High-gloss Shadowline exterior trim around side windows	ZMP	ZMP	ZMP	ZMP
Dual exhaust outlets:				
Chrome, round, single at each side of vehicle	S	S	–	–
Titanium-silver chrome, square, single at each side of vehicle	NA	NA	S	S
Dark Chrome in same shape as standard	ZMP	ZMP	ZMP	ZMP
Performance & efficiency	535i GT	535i xDrive GT	550i GT	550i xDrive GT
3.0-liter TwinPower Turbo 6-cylinder engine	S	S	–	–
4.4-liter TwinPower Turbo (twin-turbo) V-8 engine	–	–	S	S
Engine features:				
Aluminum construction with silicon-impregnated cylinders	–	–	S	S
Aluminum construction with cast-in iron cylinder liners	S	S	–	–
Dual overhead camshafts & 4 valves/cylinder (535i 24 valves, 550i 32 valves)	S	S	S	S
High Precision direct fuel injection	S	S	S	S
Valvetronic variable intake-valve lift	S	S	S	S
Double VANOS ¹ steplessly variable valve timing	S	S	S	S
Twin Scroll turbocharger	S	S	–	–
Twin single-scroll turbochargers	–	–	S	S

1 – VANOS = **V**ARiable **N**Ockenwellen
Steuerung = variable camshaft control,
or variable valve timing.

S – Standard
OPT – Optional
NA – Not available
NC – No extra cost
– – Not applicable

ZCW – Cold Weather Package
ZMP – M Sport Package

Standard & optional features

2013 5 Series GT

Bold within table indicates new feature for 2013.

Performance & efficiency (cont.)	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Electronically controlled engine cooling	S	S	S	S
Electric coolant pump	S	S	S	S
Volume-controlled oil pump	S	S	S	S
Electronic sensing of oil level and condition	S	S	S	S
Exhaust system	Partial dual	Partial dual	Dual	Dual
Sportier exhaust sound	–	–	ZMP	ZMP
Automatic engine start/stop with function display in tachometer	S	S	S	S
Driving Dynamics Control – 3 settings for engine response, transmission shift characteristics & steering assist ² including ECO PRO mode ; additional setting switches DSC to DTC (Sport+)	S	S	S	S
8-speed STEPTRONIC automatic transmission with Adaptive Transmission Control, E-shift, selectable Comfort, Sport & Manual modes	S	S	S	S
Liquid-cooled alternator	–	–	S	S
Aluminum front & rear subframes, front with aluminum thrust plate	S	S	S	S
Aluminum multi-link double-wishbone front suspension	S	S ³	S	S ³
Aluminum 5-link Integral rear suspension with self-leveling air springs	S	S	S	S
Active Roll Stabilization (ARS)	ZDH	ZDH	ZDH	ZDH
Dynamic Damping Control with Comfort, Comfort+ & Sport modes	ZDH/OPT	ZDH/OPT	ZDH/OPT	ZDH/OPT
Vehicle-speed-sensitive variable-assist, variable-ratio rack-and-pinion power steering:				
Hydraulic assist	S	S	–	–
Electric assist	–	–	S	S
Integral Active Steering	OPT	NA	OPT	NA
4-wheel ventilated disc brakes with aluminum/cast-iron front rotors	S	S	S	S
Brake Energy Regeneration with function indication in fuel-economy readout	S	S	S	S
Electromechanical parking brake	S	S	S	S
Automatic Hold	S	S	S	S
Dynamic Stability Control with Dynamic Traction Control, electronic limited-slip differential	S	S	S	S
18 x 8.0 alloy wheels:				
Double Spoke design #234	S	S	–	–
Turbine design #271	NA	NA	S	S
19 x 8.5 alloy wheels:				
Multi-Spoke design #235	NA	OPT	NA	NA
Y Spoke design #315	NA	NA	NA	OPT
M V Spoke design #302M	–	ZMP	–	ZMP

2 – Also affects steering ratio if vehicle is equipped with Integral Active Steering. If vehicle is equipped with Dynamic Damping Control (Dynamic Handling Package or stand-alone option), settings affect shock-absorber firmness.

3 – Lower lateral links are of forged steel on xDrive models.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable

ZDH – Dynamic Handling Package
ZMP – M Sport Package

Standard & optional features

2013 5 Series GT

Bold within table indicates new feature for 2013.

Performance & efficiency (cont.)	535i GT	535i xDrive GT	550i GT	550i xDrive GT
19 x 8.5 front/19 x 9.5 rear alloy wheels: Multi-Spoke design #235	OPT	NA	NA	NA
Y Spoke design #315	NA	NA	OPT	NA
M V Spoke design #302M	ZMP	NA	ZMP	NA
20 x 8.5 front/20 x 10.0 rear alloy wheels: M Double Spoke design #303M	ZMP+OPT	ZMP+OPT	ZMP+OPT	ZMP+OPT
245/50R-18 run-flat performance all-season tires	S	S	S	S
245/45R-19 run-flat performance all-season tires ⁴	NA	ZMP/OPT	NA	ZMP/OPT
245/45R-19 front / 275/40R-19 rear run-flat performance tires ⁴	ZMP/OPT	NA	ZMP/OPT	NA
245/45R-20 front / 275/40R-20 rear run-flat performance tires ⁴	ZMP+OPT	ZMP+OPT	ZMP+OPT	ZMP+OPT
Increased top-speed limiter	ZMP	NA	ZMP	NA
Tire Pressure Monitor	S	S	S	S
Comfort & convenience	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Vehicle & Key Memory with Personal Profile user-specific settings	S	S	S	S
Multi-function remote control	S	S	S	S
Comfort Access keyless entry including hands-free liftgate opening	ZPP	ZPP	ZEC	ZEC
3-position door checks	S	S	S	S
Soft-close doors	ZPP	ZPP	ZEC	ZEC
Dual power/heated/auto-dimming/power-folding exterior mirrors	S	S	S	S
Auto-dimming inside rearview mirror	S	S	S	S
Automatic tilt-down of right exterior mirror for visibility of low obstructions when backing up	S	S	S	S
BMW Universal Transceiver (3-function garage-door opener)	S	S	S	S
Comprehensive lighting amenities: Welcome Light (automatic switch-on of front luminous rings, taillights, license-plate lights, ground lighting & interior lights upon unlocking & locking vehicle)	S	S	S	S
Illuminated doorsill trims	S	S	S	S
Fade-in/fade-out operation of interior lights	S	S	S	S
Ground lighting in exterior door handles	S	S	S	S
Front & rear left/right reading lamps	S	S	S	S
BMW Ambiance Lighting, including front overhead, door handles & storage pockets, front center console, back sides of front backrests; footwell lighting front & rear, Illuminated visor vanity mirrors	S	S	S	S
Leather-wrapped power tilt/telescopic steering wheel with fingertip cruise, audio & phone controls, auto tilt-away for entry & exit	S	S	S	S
M sport steering wheel with same features	ZMP	ZMP	ZMP	ZMP

⁴ - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series GT

models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

S - Standard
OPT - Optional
NA - Not available

ZEC - Executive Package
ZMP - M Sport Package
ZPP - Premium Package

Standard & optional features

2013 5 Series GT

Bold within table indicates new feature for 2013.

Comfort & convenience (cont.)	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Heated steering wheel	ZCW	ZCW	ZCW	ZCW
Dynamic cruise control	S	S	S	S
Active Cruise Control with Stop-and-Go function & Frontal Collision Warning System	OPT	OPT	OPT	OPT
Instrument cluster with Black Panel technology	S	S	S	S
Condition-Based Service system	S	S	S	S
Integrated owner's manual via iDrive	S	S	S	S
10-way power front seats	S	S	-	-
18-way power/heated front Multi-Contour seats, including articulated upper backrests, adjustable thigh support, active head restraints with adjustable side support, easy-entry feature	ZLS/OPT	ZLS/OPT	S	S
Memory system for both front seats, steering wheel & exterior mirrors, 2 settings per user	S	S	S	S
Active Support, both front seats	ZLS	ZLS	ZLS	ZLS
Active Ventilation, both front seats	ZLS	ZLS	ZLS	ZLS
Heated front seats with balance control	ZCW/OPT	ZCW/OPT	ZCW/OPT	ZCW/OPT
Rear seating 40/20/40 with fold-down center armrest containing storage compartment; all seats adjustable for fore-aft position & backrest angle; 40/20/40 folding backrest	S	S	S	S
4-way power/ventilated rear Comfort seats, 2-seat configuration including fore-aft & backrest angle plus memory, switch for backrest reset, also control panel in cargo compartment; fixed center compartment with storage compartment, dual cupholders	ZLU	ZLU	ZLU	ZLU
Heated rear seats	ZCW	ZCW	ZCW	ZCW
Check Control vehicle monitor system, with information displayed in main instrument cluster	S	S	S	S
Dakota leather upholstery	S	S	S	S
Nappa leather upholstery	OPT ⁵	OPT ⁵	OPT	OPT
High-gloss Dark Ash wood interior trim	S	S	S	S
High-gloss Ash Anthracite wood interior trim	NC	NC	NC	NC
Fine Line matte wood interior trim	NC	NC	NC	NC
Palladium Gray interior trim	ZMP	ZMP	ZMP	ZMP
Ceramic-trimmed controls	OPT	OPT	ZEC/OPT	ZEC/OPT
Power windows with key-off operation, 1-touch open/close & anti-trapping feature, power door-window sealing system	S	S	S	S
Dual-zone automatic climate control with left/right temperature controls, automatic recirculation control, misting control, bi-directional solar sensor, activated-charcoal ventilation, Heat at Rest & other features	S	S	S	S
Automatic ventilation function for use in parked vehicle	S	S	S	S

5 – Requires ZLS or stand-alone Multi-Contour front seats.

S – Standard
OPT – Optional
NC – No extra cost
– – Not applicable

ZCW – Cold Weather Package
ZEC – Executive Package
ZLS – Luxury Seating Package (requires ZCW or stand-alone heated front seats)
ZMP – M Sport Package

Standard & optional features

2013 5 Series GT

Bold within table indicates new feature for 2013.

Comfort & convenience (cont.)	535i GT	535i xDrive GT	550i GT	550i xDrive GT
4-zone automatic climate control with full left/right temperature & air-distribution controls front & rear, additional air outlets in B-pillars, draft-free air delivery plus all features of standard dual-zone system	ZLU	ZLU	ZLU	ZLU
Power Panoramic Contour Moonroof with 2-way (tilt/slide) operation of forward glass panel, fixed rear glass panel; power interior shade; 1-touch operation of power functions, vehicle-speed-sensitive wind deflector	S	S	S	S
iDrive system with 7.0-in. (diagonal) high-resolution control display, direct-select radio, media & phone ⁶ menus + Menu, Back & Option keys, 8 Programmable Memory Keys, On-board Computer & other functions	S	S	–	–
New-generation iDrive system with 10.2-in. (diagonal) high-resolution control display, GPS Navigation, additional direct-select Navigation menu key, enhanced Voice Command, Real Time Traffic Information, expanded On-board Computer functions, automatic ventilation & many other features	ZVP	ZVP	S	S
Head-up Display	ZVP	ZVP	ZEC	ZEC
Anti-theft AM/FM/HD/CD/MP3 audio system with 12 speakers, Radio Data System (RDS), in-dash single-disc CD player, auxiliary audio input & FM diversity antenna system; includes front centerfill speaker & 2 subwoofers	S	S	S	S
Logic7 audio system with 16 speakers, Dirac Live Sound Processing, Surround Sound; includes upgraded audio power & components, all features of standard system	OPT	OPT	ZEC	ZEC
Bang & Olufsen premium audio system with 16 speakers, Dirac Dimensions™ acoustic signal processing, Surround Sound, illuminated aluminum speaker bezels; front center-fill midrange & tweeter retract when system is off; includes upgraded audio power & componentry, all features of standard system	OPT	OPT	ZEC+OPT	ZEC+OPT
80-GB hard drive providing data storage for Navigation, audio system, phonebook & Voice Command; ripping capability from CD & DVD players	ZVP/OPT ⁷	ZVP/OPT ⁷	S	S
iPod/USB Adapter	S	S	S	S
BMW Apps ⁸	ZVP/OPT	ZVP/OPT	ZEC/OPT	ZEC/OPT
New-generation Rear Seat Entertainment system	OPT	OPT	OPT	OPT
Satellite Radio with 1-year subscription	ZPP	ZPP	ZEC	ZEC
Bluetooth mobile-device interface with high-capacity phonebook download	S	S	S	S
Accessory power outlets in front console, between front cupholders, rear of center console & cargo compartment	S	S	S	S
Seatback storage compartments	S	S	S	S
Power rear door-window sunshades	OPT	OPT	OPT	OPT
Floor mats, front & rear	S	S	S	S
Opening of Dual-Access Tailgate from remote or interior, separately for trunklid & liftgate	S	S	S	S
Automatic liftgate opening & closing, including lift-height adjustment via iDrive	S	S	S	S
Fully finished trunk with inside trunk release, partially removable partition to passenger compartment	S	S	S	S

6 – Phone controls active when approved cellphone or mobile device is paired with Bluetooth interface.

7 – Included with optional Navigation system.

8 – Includes Smartphone Integration.

S – Standard
OPT – Optional

ZEC – Executive Package
ZLU – Luxury Rear Seating Package
(requires ZCW & ZLS)

ZPP – Premium Package
ZVP – Value Package (default for all models)

Standard & optional features

2013 5 Series GT

Bold within table indicates new feature for 2013.

Safety & security	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Dynamic Stability Control (DSC), including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, electronic limited-slip differential	S	S	S	S
Night Vision with pedestrian detection	OPT	OPT	OPT	OPT
Rear-view camera	ZDA/OPT	ZDA/OPT	S	S
Side-view & top-view cameras	ZDA	ZDA	ZDA	ZDA
Automatic High Beams	OPT	OPT	OPT	OPT
Lane Departure Warning	ZDB	ZDB	ZDB	ZDB
Active Blind Spot Detection	ZDA	ZDA	ZDA	ZDA
Speed Limit Info	ZDB	ZDB	ZDB	ZDB
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S	S	S
Active head restraints, front seats	S	S	S	S
Safety belts at all seating positions: Front – with 2-stage force limiters	S	S	S	S
Rear outboard – with force limiters	S	S	S	S
LATCH attachments in rear seat for installation of child restraint seats	S	S	S	S
Interlocking door anchoring system for side impacts	S	S	S	S
Front- & rear-seat Head Protection System	S	S	S	S
Front-seat side-impact airbags	S	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S	S
Post-impact safety measures: Unlocking of central locking system	S	S	S	S
Switch-on of hazard flashers	S	S	S	S
Switch-on of interior lighting	S	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S	S
BMW Assist, including Enhanced Automatic Collision Notification, SOS button, Enhanced Roadside Assistance, TeleService ⁹ , BMW Assist Safety Plan ⁹	S	S	S	S
Central locking system with selective unlocking	S	S	S	S
Coded Driveaway Protection	S	S	S	S
Pathway Lighting	S ¹⁰	S ¹⁰	S ¹⁰	S ¹⁰
Alarm system with operation from remote, interior motion detector	S	S	S	S

9 – Requires BMW Assist annual fee after 4th year.

10 – Duration of lighting adjustable via iDrive.

S – Standard
OPT – Optional

ZDA – Driver Assistance Package
ZDB – Driver Assistance Plus (requires ZDA)

Technical specifications

2013 5 Series GT

Bold within table indicates new specification for 2013.

General	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Curb weight, lb.	4553	4707	4894	4960
Weight distribution, front/rear, %	47.2/52.8	48.7/51.3	48.9/51.1	50.0/50.0
Wheelbase, in.	120.9 ¹			
Track, front/rear, in.	63.4/65.1 ¹			
Length, in.	196.8 ¹			
Width, in.	74.8 ¹			
Height, in.	61.4 ¹			
Accommodations	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Seating capacity, persons	4 or 5 ^{1,2}			
Shoulder room, front/rear, in.	59.3/57.7 ¹			
Head room, front/rear, in.	39.9/38.6 ¹			
Leg room, front/rear, in.	40.6/41.8 ¹			
EPA passenger volume, cu ft.	112.1 ¹			
EPA cargo volume, cu ft. (closed trunk only)	10.0 ¹			
ECE cargo volume, cu ft. (closed trunk only)	15.5 ¹			
ECE cargo volume, cu ft.	20.8/60.0 ³			
Body	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Type	4-door Progressive Activity Sedan ¹			
Aerodynamic drag coefficient	0.31	0.31	0.32	0.32
EPA size classification	Large ¹			
Engine & electrical	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Engine type	DOHC inline 24-valve 6-cylinder, aluminum construction with cast-in iron cylinder liners, direct fuel injection, twin-scroll turbo-charger, Valvetronic variable intake-valve lift, Double VANOS ⁴ variable intake- & exhaust-valve timing ⁵		DOHC (4-cam) 32-valve V-8, aluminum construction with silicon-impregnated cylinder surfaces, direct fuel injection, twin single-scroll turbochargers, Valvetronic variable intake-valve lift , Double VANOS ⁴ variable intake- & exhaust-valve timing ⁵	
Bore x stroke, mm/in.	84.0 x 89.6/3.31 x 3.53 ⁵		89.0 x 88.3/3.50 x 3.48 ⁵	
Displacement, cc/cu in.	2979/182 ⁵		4395/268 ⁵	
Compression ratio	10.2:1 ⁵		10.0:1 ⁵	
Power @ rpm, hp	300 @ 5800-6250 ⁵		445 @ 5500⁵	
Torque @ rpm, lb-ft.	300 @ 1200-5000 ⁵		480 @ 2000-4500⁶	

1 – Specification applies to all models.

2 – 5 with standard full-width rear seat, 4 with optional Comfort rear seats.

3 – Behind 2nd row/behind 1st row with rear seats folded; ECE = European measurements, not comparable to EPA volumes.

4 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.
5 – Specification applies to both 535i models.

6 – Specification applies to both 550i models.

Technical specifications

2013 5 Series GT

Bold within table indicates new specification for 2013.

Engine & electrical (cont.)	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Engine-management system	MEVD 17.2 ⁵		MEVD 17.2.8. ⁶	
Fuel requirement	Premium unleaded ¹			
Fuel capacity, U.S. gal.	18.5 ¹			
Battery capacity, amp-hr.	90 ¹			
Alternator output, amp./W	210/2940 ¹			
Drivetrain	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Drive system	Front engine/ rear-wheel drive	Front engine/ all-wheel drive	Front engine/ rear-wheel drive	Front engine/ all-wheel drive
Automatic transmission	8 HP 45, 8-speed ⁵		8 HP 70, 8-speed ⁶	
Ratios: 1st	4.71:1 ¹			
2nd	3.14:1 ¹			
3rd	2.11:1 ¹			
4th	1.67:1 ¹			
5th	1.29:1 ¹			
6th	1.00:1 ¹			
7th	0.84:1 ¹			
8th	0.67:1 ¹			
Reverse	3.30:1 ⁵		3.32:1 ⁶	
Final drive ratio	3.08:1 ⁵		2.81:1⁶	
Chassis	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Body/frame construction	Unitized all-steel structure with aluminum hood, doors, main roof panel, Dual Access Tailgate frame, front spring towers ¹			
Front suspension	Multi-link double-wishbone system; aluminum upper & lower lateral links ⁷ (double-pivot lower links), wheel carriers; coil springs, anti-roll bar ¹			
Rear suspension	5-link Integral V suspension with aluminum upper & lower links & wheel carriers; self-leveling air springs, anti-roll bar ¹			
Optional Dynamic Handling Package (ZDH) or stand-alone code 223	Dynamic Damping Control & Active Roll Stabilization ¹			
Servotronic steering system (standard)	Rack & pinion, vehicle-speed-sensitive power steering with variable assist level; hydraulic assist (535i models) or electric assist (550i models)			

1 – Specification applies to all models.
5 – Specification applies to both 535i models.

6 – Specification applies to both 550i models.

7 – Lower lateral links are of forged steel on xDrive models.

Technical specifications

2013 5 Series GT

Bold within table indicates new specification for 2013.

Chassis (cont.)	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Integral Active Steering (RWD models only)	Rack & pinion front steering, vehicle-speed-sensitive ratio & assist; vehicle-speed-sensitive rear-wheel steering up to 2.5" via servo motor & spindles			
Overall ratio, Servotronic steering	Mechanically variable; mean ratio is 19.1:1			
Overall ratio, Integral Active Steering (RWD models only)	Electronically variable over wide range			
Turns lock-to-lock: standard steering	3.1 ¹			
Integral Active Steering, min. (RWD models only)	2.1	–	2.1	–
Turning circle, ft.: standard steering	40.0	41.0	40.0	41.0
Integral Active Steering (RWD models only)	37.7	–	37.7	–
Brakes	4-wheel ventilated discs with lightweight aluminum/cast-iron front rotors, aluminum front/cast-iron rear calipers			
Diameter, front, mm/in.	348/13.7 ⁵		374/14.7 ⁶	
Diameter, rear, mm/in.	345/13.6 ⁵		370/14.6 ⁶	
Cast-alloy wheels: 18 x 8.0	Standard ¹			
19 x 8.5	NA	ZMP/OPT	NA	ZMP/OPT
19 x 8.5 F/19 x 9.5 R	ZMP	NA	ZMP	NA
20 x 8.5 F/20 x 10.0 R	ZMP+OPT	ZMP+OPT	ZMP+OPT	ZMP+OPT
Run-flat tires:				
Performance all-season, 245/50R-18	S ¹			
Performance all-season, 245/45R-19 ⁸	NA	ZMP	NA	ZMP
Performance, 245/45R-19 F / 275/40R-19 R ⁸	ZMP	NA	ZMP	NA
Performance, 245/40R-20 F / 275/35R-20 R ⁸	ZMP+OPT	ZMP+OPT	ZMP+OPT	ZMP+OPT
Stability-enhancement system	Dynamic Stability Control (DSC); includes Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, electronic limited-slip differential. xDrive models add Hill Descent Control.			
Performance & efficiency data	535i GT	535i xDrive GT	550i GT	550i xDrive GT
Acceleration, 0-60 mph, sec. ⁹	6.2	6.1	5.4	5.3
Top speed, mph ¹⁰	155	150	155	150
EPA estimated MPG,city/highway/combined	20/30/24	18/26/21	16/24/19	16/24/19

1 – Specification applies to all models.

5 – Specification applies to both 535i models.

6 – Specification applies to both 550i models.

8 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series GT models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

9 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle; road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

10 – Electronically limited.

F – Front
R – Rear
NA – Not available
– – Not applicable
RWD – Rear-wheel drive
ZMP – M Sport Package

2013 5 Series Sedans:

Extensive updates and new options, headlined by a BMW Individual Composition, new-generation Navigation, Bang & Olufsen audio, and more.

The 5 Series Sedans are one of BMW's true core products, elegantly defining the middle of the line with trim exterior dimensions, ample interior space and a perfectly calibrated balance of sport, luxury and practicality. Model year 2011 launched an all-new 6th generation of this signature BMW concept in its finest, most sophisticated form ever; 2012 brought newly powered 528i models and the ActiveHybrid 5, expanded standard equipment and a wider range of options.

True to BMW tradition, today's 5 Series isn't merely elegant and competent. It also embodies BMW's extensive technologies for performance, efficiency, handling, comfort and safety. This is all the more so for '13, as last year's wider range of models is further enhanced by appealing new options plus further refined versions of existing options and technologies.

What's new for 2013

As of 7/12 production:

Exterior design

- Liquid Blue Metallic replaces Blue Water as ActiveHybrid signature color
- xDrive badge moved from front flanks to trunklid

Engine-related

- TwinPower Turbo designation added to engine covers that didn't have it already
- Automatic engine start/stop adds "Ready" indication in tachometer

New standard equipment

- Enhanced Bluetooth and USB connectivity, all models
- Xenon Adaptive headlights, 528i models
- Split folding rear seats, all except ActiveHybrid 5
- BMW Universal Transceiver, all models (new to 528i, 535i)
- 550i standard wheel design: Star Spoke #330, vs. previous V Spoke #328

New option packages

- BMW Individual Composition, available on 535i/xDrive and 550i/xDrive models
- Executive Package, 550i models only; Convenience Package discontinued
- Dynamic Handling Package, 535i and 550i models
- Driver Assistance Plus; adds features to continuing Driver Assistance Package, including Lane Departure Warning with new Frontal Collision Warning (Approach Control).

Overall option program

- Lineup and content of packages significantly changed; specifics too numerous to list
- Stand-alone options significantly revised; only highlights are listed here

Reduced number of Priority 1 options

- One package: new BMW Individual Composition
- Stand-alone Individual interior trims
- Stand-alone Individual steering wheel with wood inlays
- BMW Individual Xirallic exterior colors

New stand-alone options

- BMW Individual exterior paints
- Soft-close doors
- Bang & Olufsen premium audio system

Revised stand-alone options

- New-generation Rear Seat Entertainment, Professional version
- Ski bag no longer offered
- 4-zone climate control now offered only in ActiveHybrid 5

Changes shared with other Series

- Climate controls: "snowflake" symbol changed to "A/C," AUC (automatic recirculation) supplemented by "M" (manual) setting, blower control adds "OFF" label
- "CD" key at iDrive controller changed to "Media"
- Panic button with red symbol added to remote fob

5 Series Sedan models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 348-363.

528i Sedan

The Series' "basic" model, powered by advanced TwinPower Turbo 4-cylinder engine delivering a remarkable combination of high-torque performance and outstanding fuel efficiency. In its exterior and interior dimensions, passenger and cargo accommodations, this is a thoroughbred automobile with all the luxury and on-the-road capabilities that are expected of a 5 Series Sedan.

Exterior design & function

- Xenon Adaptive headlights with dynamic auto-leveling
- Front foglights
- Automatic headlight control
- Rain-sensing windshield wipers
- Dual power/heated, power-folding exterior mirrors
- Ground lighting and Welcome Light
- Adaptive brakelights
- Aluminum hood, front spring towers and doors for weight savings and optimized front/rear weight distribution

Performance & efficiency

- 2.0-liter DOHC 16-valve inline 4-cylinder engine with aluminum construction, twin-scroll turbocharger, direct fuel injection, Valvetronic variable intake-valve lift and Double VANOS¹ variable intake- and exhaust-valve timing, 240 hp/260 lb-ft., 0-60 mph in 6.2 sec., EPA combined 28 mpg
- Automatic start/stop function for engine
- 8-speed STEPTRONIC automatic transmission with E-shift
- Aluminum multi-link double-wishbone front suspension
- Vehicle-speed-sensitive variable-assist, variable-ratio rack-and-pinion electric power steering

- Driving Dynamics Control – Comfort and Sport modes for engine response and steering assist; Sport+ setting switches Dynamic Stability Control to Dynamic Traction Control mode. In vehicles so equipped, these settings and a Comfort+ mode also apply to Dynamic Damping Control.
- 4-wheel ventilated disc brakes with composite aluminum/cast-iron rotors
- Brake Energy Regeneration
- Automatic Hold
- 17 x 8.0 alloy wheels, Star Spoke design #327
- 225/55R-17 run-flat performance all-season tires
- Dynamic Stability Control with electronic limited-slip differential
- Tire Pressure Monitor

Comfort & convenience

- BMW Universal Transceiver (3-function garage-door opener)
- Auto-dimming interior & exterior mirrors
- Vehicle & Key Memory with Personal Profile user-specific settings
- Mobile Profile for import or export of personal settings from/to another so-equipped vehicle (via USB stick in glove compartment)
- Multi-function remote control
- Keyless engine start/stop
- Power tilt/telescopic leather-wrapped steering wheel with auto tilt-up
- Comprehensive lighting amenities, including Ambient Lighting
- 14-way power front seats with power head restraints
- Memory system for driver's seat, steering wheel and exterior mirrors
- "Gentleman function" allows driver to adjust front passenger's seat

- Next-generation iDrive control system with direct-select menu keys and 8 Programmable Memory Keys; extensive functional and esthetic refinements
- Leatherette upholstery
- High-gloss Dark Ash wood interior trim
- Power windows with 1-touch open/close, anti-trapping function
- Dual-zone automatic climate control with Intensity settings
- 2-way power Contour moonroof with 1-touch open/close, anti-trapping function, power-operated interior sunshade
- AM/FM/HD/CD/MP3 audio system with Radio Data System, 12 speakers
- iPod/USB Adapter
- Enhanced Bluetooth and USB connectivity
- Floor mats, front and rear

Safety & security

- Dual-airbag Supplementary Restraint System
- Front safety belts with automatic tensioners, force limiters and belt stoppers
- Rear safety belts with automatic tensioners and force limiters
- Front- and rear-seat Head Protection System
- Front-seat side-impact airbags
- Active front head restraints
- Pathway Lighting
- Coded Driveaway Protection
- Anti-theft alarm system
- BMW Assist Safety Plan with 4-year subscription

Packages & options

- Available packages:
 - Premium (Comfort Access keyless entry, power trunklid opening/closing, Dakota leather upholstery, Satellite Radio with 1-year subscription)

- M Sport (18-in. wheels in M Double Spoke design #350M, performance tires², increased top-speed limiter, M aerodynamic exterior treatment, Shadowline exterior trim, Dark Chrome exhaust outlets, M Sport steering wheel, Aluminum Hexagon or other interior trims, Anthracite-color headliner)
- Driver Assistance (Park Distance Control, rear-view camera, side- and top-view cameras, Active Blind Spot Detection)
- Driver Assistance Plus (Speed Limit Info, Lane Departure Warning)
- Technology (Navigation system, Head-up Display, BMW Apps, Smartphone integration, extended instrument cluster)
- Cold Weather (retractable headlight cleaning system, heated steering wheel, heated front and rear seats)
- Luxury Seating (Multi-Contour front seats with Active Ventilation and Active Support)
- Stand-alone options:
 - Sport automatic transmission with shift paddles
 - Dynamic Damping Control
 - Integral Active Steering
 - Active Cruise Control with Stop-and-Go function, Frontal Collision Warning
 - Night Vision with Pedestrian Detection

1 – VANOS = VAriable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

5 Series Sedan models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 348-363.

- Automatic High Beams
- Rear-view camera
- Park Distance Control
- Parking Assistant
- Soft-close doors
- 20-way power Multi-Contour front seats
- Heated front seats with balance control
- Dakota leather upholstery
- Light Ash or Anthracite wood, or aluminum interior trim (no-cost choice)
- Next-generation Navigation system
- Premium audio system
- BMW Apps + Smartphone Integration
- Ceramic controls
- Rear Seat Entertainment, new Professional version
- Power rear-window + manual rear door-window sunshades

528i xDrive Sedan

Combines strong, fuel-efficient performance of TwinTurbo 4-cylinder power with BMW's acclaimed xDrive all-wheel drive system. The 528i xDrive differs from its RWD counterpart as follows:

- Newest generation of xDrive system
- DSC system adds Hill Descent Control
- Upper and lower lateral front-suspension links of forged steel, vs. aluminum
- Fuel efficiency somewhat affected by additional weight and mechanism of AWD system, steel suspension components. Combined EPA mileage 26 mpg, vs. 28 for RWD model; 0-60 mph 6.3 sec. vs. 6.2.
- Same options and packages as 528i, except:
 - M Sport Package wheels and tires (18-in.) same-size

- front/rear vs. RWD model's differentiated sizes; performance all-season tires vs. "summer" performance type. Wheel design same.
- Integral Active Steering and Parking Assistant not available

535i Sedan

This upmarket 6-cylinder Sedan, with higher performance and more standard equipment, differs from its 528i counterpart in these ways:

- TwinPower Turbo 6-cylinder engine, technology similar to that of 528i engine but 6 cylinders vs. 4; 300 hp/300 lb-ft./23 mpg combined EPA rating with manual transmission, 24 with automatic
- 6-speed manual transmission optional at no extra cost
- 18 x 8.0 alloy wheels, Radial Spoke design #237
- 245/45R-18 run-flat all-season tires²
- Dakota leather upholstery standard, vs. optional
- Same options and packages as 528i, except:
 - Premium Package deletes leather upholstery, because standard
 - M Sport Package adds sport suspension; wheels and tires 19- vs. 18-in.
 - Adds Dynamic Handling Package (not offered on 528i)
 - Adds BMW Individual Composition, P1 package (19-in. wheels in Individual V Spoke design #349i, performance tires², Shadowline or Satin Aluminum exterior trim, Individual rear badge, Individual doorsill trim, Extended Merino leather upholstery, choice of Individual interior trims, Alcantara or cloth headliner in Anthracite color)

- Lower Nappa leather upholstery option price because Dakota leather standard
- 8-speed STEPTRONIC automatic transmission optional at no extra cost, vs. standard

535i xDrive Sedan

AWD model, powered by same TwinPower Turbo 6-cylinder engine as rear-wheel-drive 535i. Distinctions from RWD model include:

- Automatic transmission standard, vs. no-cost option; manual transmission not available
- Same options and packages, except:
 - M Sport Package deletes sport suspension; wheels and tires same-size front/rear vs. RWD model's differentiated sizes; performance all-season tires vs. performance. Wheel design same.
 - Integral Active Steering and Parking Assistant not available

550i Sedan

Top 5 Series RWD Sedan model, powered by spectacular twin-turbo V-8 engine. 6-speed manual transmission, 8-speed automatic at no extra cost. Also adds significant incremental standard equipment. Points of differentiation from 535i include:

- Twin-turbo V-8 engine, 400 hp/450 lb-ft.
- Wheel design is Star Spoke #330 (18-in. wheel/tire dimensions same as 535i)
- Exhaust outlets in rhomboid shape, vs. round
- Additional standard equipment:
 - Park Distance Control
 - Rear-view camera
 - Multi-Contour front seats
 - Navigation system

- Same options and packages as 535i, except:
 - Executive Package instead of Premium Package; more extensive content (adds soft-close doors, extended instrument cluster, premium audio system, Head-up Display, BMW Apps, Smartphone Integration, ceramic controls)
 - Lower Driver Assistance Package price because Park Distance Control and rear-view camera standard
 - Lower Luxury Seating Package price because Multi-Contour front seats standard

550i xDrive Sedan

BMW responds to growing demand for all-wheel drive by offering even the most powerful 5 Series model with the acclaimed xDrive system. Distinctions from RWD 550i model are the same as for 535i xDrive model from its RWD counterpart.

ActiveHybrid 5

Having been available since February '12, the ActiveHybrid 5 is now joined by two other models based on essentially the same new Full Hybrid 2.0 technology: ActiveHybrid 3 and 7. All three are full hybrids, combining the brilliant N55 TwinPower Turbo inline 6-cylinder engine (as in the 535i models) with electric power.

² – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

5 Series Sedan models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 348-363.

The ActiveHybrid 5 departs from the RWD 535i Sedan via the variations in equipment and specifications listed here. For brevity, this model will often be referred to as AH5. Its Full Hybrid 2.0 technology is explained in the 5 Series section of **Fast Facts 2012** or the **BMW features** section of **Fast Facts 2013**.

Exterior design & function

- Available in Liquid Blue, similar to the previous Blue Water and now BMW's signature ActiveHybrid color
- ActiveHybrid 5 badging on C-pillars and trunklid

Performance & efficiency

- New-generation full-hybrid system combines 300-hp TwinPower Turbo 6-cylinder engine (as in 535i models) with 55-hp electric motor integrated into special version of 8-speed automatic transmission (manual transmission not available)

- Compact lithium-ion high-voltage battery pack, carried at forward end of trunk
- All-electric driving at speeds up to 37 mph; all-electric range of 2.5 miles at 22-mph average speed
- Hybrid-specific auto start-stop function: shuts off engine when vehicle is stopped as on pure combustion-engine models, adds "coasting" mode that shuts off engine during deceleration
- Brake Energy Regeneration specially engineered to maximize regeneration in hybrid system
- Intelligent Energy Management System, integrated with standard Navigation system, enables proactive analysis of driving conditions to conserve fuel
- Dynamic Stability Control with special hybrid functions

- Driving Dynamics Control with special hybrid functions, especially in ECO PRO mode
- Special instrumentation with hybrid-specific functions

Comfort & convenience

- ActiveHybrid 5 identification on doorsills and center console
- Rear seats do not fold
- Additional standard equipment:
 - Navigation system (with expanded functionality)
 - 4-zone climate control

Packages & options

- Seven regular packages, vs. total of nine among other Series models
- AH5 packages include Sport, but not M Sport Package
- Like 535i and 550i models, adds BMW Individual Composition for '13 (in addition to regular packages)
- Optional wheel design (Streamline #365) unique to AH5
- Active Roll Stabilization, Integral Active Steering and Active Cruise Control not available

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

Exterior design & function

The look: another BMW masterpiece of esthetics and function

With the longest wheelbase in their segment, a long and sleek hood that proclaims “front engine/rear-wheel drive,” and a coupe-like roofline, the 5 Series Sedans once again confirm BMW’s skill in creating a design that –

- Moves ahead from its predecessor, while maintaining design continuity
- Is all-new, yet instantly recognizable as a BMW
- Does not follow trends, but rather sets them
- Exudes good taste in every contour, line and detail
- Possesses masterful proportions.

As a core element of the BMW tradition and identity, the proportions are set by the long wheelbase and hood, short overhangs (especially at the front), a greenhouse set well back, and a sleek roofline that nevertheless allows excellent rear-seat head room.

As always, the visual proportions are matched by superbly balanced weight distribution, ranging from the 528i xDrive’s perfect 50.1% front/49.9% rear to the 550i xDrive’s 53.9%/46.1%. See **technical specifications** for the weight distribution of all models.

At the front, a contemporary expression of BMW’s traditional dual “kidney” grilles stands prominently forward and near-vertical, seeming from some angles to lean slightly forward “into the wind.” The bumper/spoiler ensemble, as always, incorporates a wide range of functions – foglights, ample air-intake area,

available retractable headlight washers – while wrapping gracefully into front wheelwells that accentuate assertively wide wheels and tires. Wheel width is at least 8.0 in., tire section at least 225 mm; most M Sport and all BMW Individual Composition equipment is 8.5-in. front wheels with 245-mm tires.

In profile, the long-hood/cabin-back/short-deck proportions are accented: front overhang is shorter, the hood is longer and there’s that distinctive forward thrust to the grille section. Along the side there’s strong character in a flared line that slopes upward toward the taillight wraparound; the graceful roofline speaks “sport” and “practicality” simultaneously. Aluminum door construction allows thinner door-window framing, contributing to a finely detailed look and improving driver’s outward view. The rear wheels and tires – from 528i models’ 8.0-in. wheel width and 225-mm tire section to 9.0-in./275-mm on M Sport Package-equipped 535i and 550i models – also run in forcefully flared arches that declare tenacious roadability.

At the rear, another BMW tradition, the “L-shaped” taillight cluster, is now in LED technology. The sculpted trunklid enhances aerodynamics; a large rear window bucks an industry trend toward “tunnel vision” to provide the driver a rearward view that Germany’s *auto motor und sport* magazine (March 25, ‘10) called “a good overview.”

So today’s 5 emphatically maintains the “BMW ethic” that harmonizes esthetics and function.

Body structure: increased use of weight-saving and high-strength materials

The use of weight-saving and high-strength materials has been expanded to help achieve greater strength and impact-absorbing ability with minimal weight increase. Highlights of these measures include:

- Higher-strength steels – median strength up 55% over predecessor models
- New applications of aluminum – front spring towers, doors
- Increased use of warm-formed steels with “passive” corrosion protection (thus sparing weight of additional protective treatments)
- 46.7% increase in static torsional rigidity (up from 22,500 Newton-meters per degree of twist to 33,000).

Aerodynamics: efficient, effective

Another abiding BMW principle is that aerodynamics must be optimized not only for efficiency, but also for stability at all speeds the vehicle can attain. In the first regard, the 528i and 535i RWD models have an excellent aerodynamic drag coefficient (C_D) of 0.29; 535i xDrive and both 550i models come in at 0.30. Regarding stability at speed, expanded test facilities at the BMW Group’s Energy and Environmental Test Center – plus the high-speed track at the company’s existing proving grounds – help BMW engineers ensure that there are no unpleasant surprises at high speeds. Again quoting the *auto motor und sport* test: of high-speed stability, “calm, stoic, free from criticism.”

Performance & efficiency

N20 2.0-liter DOHC 16-valve TwinPower Turbo 4-cylinder engine with Valvetronic (528i models)

This all-new 528i engine offers especially fuel-efficient yet also lively performance, while leaving the 535i models with their familiar twin-turbo 6-cylinder engines as higher-performance alternatives. Its key features and attributes are:

- **4 cylinders** – the first 4-cylinder BMW engine offered in the U.S. since 1998; applies BMW’s latest engine technology to achieve a new level of fuel efficiency while maintaining typical BMW performance.
- **Valvetronic variable valve lift**, replacing the traditional throttle and enhancing power, efficiency and response to the driver’s demands.
- **Twin Scroll turbocharger**, for a hearty performance boost in combination with Valvetronic.
- **Direct fuel injection** adding both performance and efficiency.
- **Twin balance shafts**, BMW’s first application of a feature that endows a 4-cylinder engine with smoothness approaching that of engines with more cylinders.

Valvetronic, Twin Scroll turbocharging and solenoid-operated direct fuel injection are all shared with the N55 6-cylinder engine that powers 35i models in the 1, 3, 5, 6, X3, X5 and X6 lines. The N20 also shares the N55’s cylinder spacing (distance between cylinder centers), bore, and valve diameters. Yet it is not merely a 4-cylinder reduction of the N55: see **BMW features** for full details on this impressive powerplant.

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

	2011 528i	2012-13 528i (RWD)
Power @ rpm, hp	240 @ 6600	240 @ 5000-6500
Torque @ rpm, lb-ft.	230 @ 2600-3000	260 @ 1250-4800
0-60 mph, sec.	6.6	6.2
EPA mileage, city/highway/combined	22/32/25	24/34/28
Engine weight, lb.	355	335
Vehicle curb weight, lb.	3814	3814
Weight distribution, front/rear, %	49.4/50.6	49.4/50.6

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (535i models & ActiveHybrid 5)

Upon the 2011 debut of this engine, it was seen as a major evolution of the previously introduced N54 twin-turbo 6-cylinder engine. The N55 achieved the same 300-hp/300-lb-ft. performance via the following principal changes:

- A single Twin Scroll turbocharger instead of the N54's twin single-scroll turbos.
- Valvetronic variable intake-valve lift, as in the previous N52 engine. This was the first time BMW combined Valvetronic and turbocharging.
- A different type of direct fuel injection, operated via solenoids instead of the N54's piezo injectors.

In 2013 the N55 is familiar, delivering its 300/300 performance in the 1, 3 and 5 Series, X3, X5 and X6; and 315 hp/332 lb-ft. in the 6 and 7 Series as well as the new 135is models. In addition, here as in other Series, the N55 is accompanied by another engine with similar technology, the N20 4-cylinder described nearby; the entry-level engine is the N20 and the N55 is a step up.

The N20 4-cylinder and N55 6-cylinder share their basic power concept, including all three major engineering attributes

listed at left. They differ in their block and cylinder construction. And with its inherent smoothness, the 6-cylinder engine does not have either the balance shafts or the centrifugally compensated flywheel.

With its 300 lb-ft. of torque available all the way from an amazingly low 1300 to a relatively high 5000 rpm, and its power output peaking at 300 lb-ft. @ 5800 rpm, the 6-cylinder engine ends the 535i Sedan with an appropriate performance increment over the 528i 4-cylinder: 0-60 mph in 5.7 sec. with either the standard 6-speed manual transmission or available 8-speed automatic; the 535i xDrive model actually attains 60 mph in a tenth of a second less time.

EPA mileage ratings for the 535i models are 20 mpg city/30 mpg highway/23 mpg combined with manual transmission; 20/30/24 with automatic; and 21/30/24 for the automatic-only 535i xDrive. Comparing automatic-equipped models, these ratings come down to a 4-mpg penalty for the 535i – a moderate and appropriate increment for its advantages in performance and refinement.

The N55 engine version employed in the AH5 has several distinguishing features; see **BMW Full Hybrid 2.0 power system**, overleaf.

N63 4.4-liter DOHC 32-valve Twin Turbo V-8 engine (550i models)

As the 5 Series' most powerful engine choice, this 400-hp unit delivers a 100-hp, fully 150-lb-ft. jump in power and torque over the already robust 535i engine. Its key features include:

Twin turbocharging. In contrast to the 4- and 6-cylinder engines' single Twin Scroll, the V-8 continues with two relatively small, conventional turbochargers. In a distinctive configuration, these are positioned between the V-8's two cylinder banks. For consistent naming, this engine now sports **TwinPower Turbo** lettering on its top cover as does the N55 six.

Conventional valvetrain. Thus not the 4- and 6-cylinder's Valvetronic. Valve lift is constant; power regulation is via a throttle.

Piezo fuel injectors. Like all BMW's turbocharged gasoline engines, the N63 has performance- and efficiency-enhancing direct fuel injection. But here, in contrast to the N55's solenoid-controlled injectors, the V-8 has piezo injectors. These are also found on the Twin Turbo 6-cylinder engines that continue in high-performance 335is and Z4 35i/35is models.

In the 550i Sedan, the N63 delivers truly spectacular performance: 0-60 mph in just 5.0 sec. with either of its transmission choices. And considering its all-encompassing range of performance, luxury and premium technology, the 550i's EPA mileage ratings are remarkable:

- 15 mpg city/22 mpg highway/17 mpg combined with the standard 6-speed manual transmission

- 17/25/20 with the 8-speed automatic, whose advanced technology and multiplicity of ratios shine through in these impressive numbers.
- 16/24/19 for the xDrive model.

6-speed manual transmission (535i & 550i RWD Sedans)

Anticipating that 528i customers will focus more on smooth driving than all-out sportiness, BMW offers the 528i only with the 8-speed automatic in the U.S. All xDrive models are also offered only with the automatic. For the RWD 535i and 550i models, two quite different manual transmissions are employed.

BMW's engineers developed the **Type K** 6-speed manual gearbox specifically to accommodate BMW's "middle" engines' torque output while being more compact and lighter than the **Type G** previously teamed with the 35i engine.

Type K incorporates internal refinements for optimized efficiency, ease and precision of shifting, and quiet operation:

- An advanced bearing and gearset layout helps provide torque capacity for the N55 engine (and other, even torquier engines) while being relatively light and compact.
- Notable from the driver's standpoint are carbon synchronizers for 1st and 2nd gears and a very low-friction internal shift mechanism that reduces shifting effort.
- A further increase in efficiency is achieved by a dry-sump lubrication system that eliminates the friction of gears running immersed in oil, instead using a pump to target oil to precisely where it needs to be (gears and bearings).

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

For the even higher-torque 550i, the **Type G** was chosen. This is BMW's most robust manual box, also offered in the M3, twin-turbo 335is and Z4 35i models. To accommodate the N63's 450 lb-ft. of torque without risking clutch damage, a control system limits engine rpm upon clutch engagement and, in case slip develops, reduces engine torque momentarily. The gearbox has an external coolant-to-oil cooler and, for smoothness and silence, hydraulic mounts.

Both these gearboxes are shifted via a highly developed linkage that improves on the typical "BMW feel": crisp, precise motions without unduly high effort. The linkage is mounted directly to the gearbox, geometrically optimized for the Series' console position and fitted with a 1-piece, leather-covered knob. The manual transmission carries the option code ZMT.

8-speed STEPTRONIC automatic transmission (all models)

In all 5 Series Sedan models, BMW's 8-speed automatic transmission is either standard (528i models, xDrives, AH5) or optional at no extra cost (RWD 535i, 550i). With any of the three distinct engines, this ultimate automatic transmission brings smooth shifting, sportiness and efficiency to a new level of perfection.

Three versions are employed: 8 HP 45 in the 528i and 535i, higher-capacity 8 HP 70 in 550i, and a special hybrid version in the AH5. All have the same ratios and essentially the same operational characteristics, which

include such a high level of smoothness that drivers have to "try" to tell when the transmission has shifted.

This aspect of the 5 Series, too, belongs to the BMW Efficient-Dynamics concept: the 8-speed transmission plays a significant role in the remarkable, in some cases significantly improved, EPA mileage ratings of the new models.

For further details on this ultimate powertrain achievement, see **BMW features**.

BMW Full Hybrid 2.0 system (ActiveHybrid 5)

"Full Hybrid 2.0" signifies the 2nd generation of BMW's full-hybrid concept.

In hybrid power systems, a primary distinction is between "mild" and "full." Both employ a combustion engine and electric motor(s), the latter providing a portion of the vehicle's motive power and operating as generator(s) to charge a high-voltage (HV) battery pack. "Mild" denotes employing an electric motor to augment the combustion engine's power and charge the HV battery pack; mild hybrids cannot be driven on electric power alone.

A "full" hybrid, by contrast, can be driven under certain conditions on electric power alone. BMW's first hybrid models were the 2010-11 ActiveHybrid X6, with a complex full-hybrid system; and the ActiveHybrid 7 of 2010-12 with a less complex mild-hybrid system. Both of these hybrid concepts are now superseded by the Full Hybrid 2.0 system that powers the 2012-13 AH5 and 2013 AH3 and AH7.

With minor differences among

these three models, the system is described in detail in **BMW features**.

Here are some particulars of the system as it appears in the AH5:

- **Electric-only driving.** The AH5 can operate electrically up to 37 mph; the battery pack can store energy sufficient for an all-electric driving range of about 2.5 miles at an average speed of 22 mph.
- **Total system power is 335 hp,** total torque 330 lb-ft., vs. 300/300 for the engine alone. The AH5 can accelerate from rest to 60 mph in the same 5.7 sec. as the combustion-engine 535i, despite its greater weight.
- **EPA mileage ratings** are 23/30/26, vs. 20/30/24 for the automatic 535i.
- **The high-voltage battery pack** is carried in a reinforced steel housing at the front of the trunk. Split folding rear seats, now standard in other 5 Series models, are precluded.

Driving Dynamics Control (all models, included as described below)

The Driving Dynamics Control, familiar from other models, appears in all 5 Series models with automatic transmission. As in its other applications, this system provides the driver multiple choices of vehicle dynamics. Settings with an asterisk (*) apply only to vehicles with Dynamic Damping Control:

Comfort – normal settings for engine response, suspension* and Dynamic Stability Control (DSC).

Comfort+ – with greater emphasis on comfort in all the variables

Sport – here there are three "sub-choices," programmable within iDrive on a menu that pops up when the driver selects Sport with the console control:

- **Sporty driving with optimized suspension** – sporty engine and suspension*, DSC normal
- **Optimized suspension** – sporty suspension*, normal engine and DSC
- **Sporty driving** – sporty engine, normal suspension* and DSC.

(Once this choice is made, it is the one activated when Sport is selected with the DDC.)

Sport + – engine and suspension* settings as in Sport, plus DSC with reduced intervention (Dynamic Traction Control setting)

In the 5 Series, some of these differences are calibrated for especially sporty effect; one is an immediate change in engine torque when its response is changed from Comfort to Sport. Changes in the displayed settings also aid perception of the change from one mode to the other.

Additionally, as in the other Series applications, there's a DSC switch (with graphic labeling) that operates in the usual way: short push for reduced DSC intervention, longer push de-activates DSC except ABS.

Driving Dynamics Control with ECO PRO mode (all except 550i models)

The ECO PRO mode, now also appearing in many other 2013 models, modifies vehicle behavior in many ways and encourages energy-conscious driver behavior as well. ECO PRO described in detail in **BMW features**.

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

xDrive: BMW's "intelligent" all-wheel drive system

(all xDrive models)

Increasingly, customers – especially those who live in, or drive to, snowy winter conditions – choose all-wheel drive. All current xDrive models incorporate this advanced AWD and traction system. The concept and operation of xDrive are explained in **BMW features**.

As offered in the 5 Series, xDrive is in its newest generation.

Multi-link front suspension (all models)

Two types of front suspension appear in current BMW models:

- **Strut-type**, in which a long, essentially vertical strut carries the shock absorber and spring and participates in the suspension geometry – that is, along with the lower arms it co-determines the angles wheels take as they move up and down. This type appears in 1 and 3 Series, Z4, X1 and X3 models.
- **Multi-link** or "double-wishbone," which adds an upper lateral link to each side and thus relieves the strut of its wheel-location duties. Employed in 5, 6 and 7 Series, X5 and X6 models and their BMW M derivatives, this type is especially well suited to these larger, heavier BMWs. Both types are described in more detail in **BMW features**.

Integral V rear suspension (all models)

As at the front, this is a multi-link system; BMW calls it Integral for a small, essentially vertical Integral Link connecting the upper and lower lateral control planes.

This concept has been in use for some years in BMW automobiles, appearing through 2010 in the 5 and 6 Series in 4-link form (Integral IV). With one additional link per side, the Integral V system – now employed in all 7, 6 and 5 Series models – moves a step closer to perfection in its combination of handling response, road adhesion and riding comfort.

As a stand-alone option for the RWD 535i and 550i Sedans, the rear suspension adds yet another capability via the optional Integral Active Steering: By steering the rear wheels by a modest amount (2.5° maximum), IAS achieves a further enhancement of maneuverability, stability and riding comfort. For details, see **BMW features**.

Aluminum suspension systems (all models)

In the RWD models, most links of both the front and rear suspension systems are aluminum, contributing to the 5 Series' prowess in handling and ride comfort. Via forged-steel upper and lower lateral links and wheel carriers, additional strength is engineered into the front suspension of the xDrive models to accommodate the greater loads imposed by their all-wheel drive system.

For even better handling: Dynamic Damping Control (optional all models)

Dynamic Damping Control had been offered previously on the 7 Series. As of 2011-13, it became available on the 5 Series and standard on the 6 Series; an M version is standard on the new M5 and M6. There are also other versions of this concept: M Elec-

tronic Damping Control, available on M3 and standard on X5-X6 M models; Electronic Damping Control on X5 and X6; and Adaptive M Suspension, available on Z4 and the new 3 Series Sedans. All these are versions of a system of electronically controlled variable shock absorbers, with various settings and capabilities on the various vehicle lines. Exclusively, the Dynamic Damping Control version varies the shock absorbers' jounce and rebound strokes (wheels moving upward and downward, not just upward) both steplessly and independently. This capability gives a unique combination of desirable firmness (for handling) and superior comfort on bumpy road surfaces.

For 2013, all 5 Series models offer Dynamic Damping Control as a stand-alone option; 535i/550i models offer it via their Dynamic Handling Package; and the AH5 includes it in a Sport Package as well. See **BMW features** for a description of this advanced system that imparts even greater handling precision and riding comfort.

Electric power steering (all models)

Generating steering assist electrically instead of hydraulically, electric power steering (EPS) has always been employed on the Z4; now it's in the 5, 6 and 7 Series as well as the X1, X3 and new 3 Series. The fundamental advantage is that EPS draws engine power only when the steering wheel is being turned, rather than (via a hydraulic pump) anytime the engine is running. A secondary advantage is that the steering's return action can be

actively programmed into the system for optimum feel.

In the 5, 6 and 7 Series it is a new system, retaining the mildly variable steering ratio and variable power assist of their hydraulic power steering. As with the new-generation EPS in the Z4, X3 and new 3, the electric servo motor is mounted adjacent and parallel to the steering rack and thus provides excellent feel and greater overall rigidity for the system as a whole.

In xDrive models, a refined conventional power-steering system includes special valving that reduces the hydraulic pump's power draw.

Generously dimensioned disc brakes with aluminum/cast-iron composite rotors (all models)

In this BMW-patented construction, the brake rotor (disc) consists of two pieces: the high-carbon cast-iron outer portion, which functions conventionally as the surface onto which the brake pads grip to slow or stop the vehicle; and an aluminum "hat" in the center, which mounts the rotor to the vehicle. Its main advantage is reduced unsprung weight, complementing the aluminum suspension in benefitting ride comfort and road adhesion. This construction is described in more detail in **BMW features**.

Like other current BMW models, the 5 Series' DSC system also includes **Start-off Assistant**, which when the vehicle is stopped facing uphill, briefly holds the brakes to prevent rollback after the pedal is released. Automatic Hold, standard on 5 Series models equipped with automatic transmission,

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

holds the brakes for an indefinite time anytime the vehicle is stopped, preventing rollback or creep; it can be activated or de-activated by the driver with a console button.

Brake Energy Regeneration (all models)

The 5 Series Sedans join most other current BMW models in adopting Brake Energy Regeneration as a standard feature.

To save energy and reduce fuel consumption, this system governs when the alternator charges the battery. Conventionally, a car's alternator runs continuously and thus charging is always available. With Brake Energy Regeneration, it charges only when the vehicle is decelerating or braking; otherwise, it freewheels, drawing virtually no power from

the engine. An electronically controlled clutch, similar to that used with the air-conditioning compressor, engages and disengages the alternator.

A more elaborate system of regenerative braking appears in the ActiveHybrid. Brake Energy Regeneration is explained in greater detail in **BMW features**.

Wheels and tires: 17- or 18-in. standard, 18- or 19-in. available; always run-flat tires (all models)

Like most current BMWs, all 5 Series models come standard with run-flat tires. 17-in. equipment is standard on 528i models, 18-in. on all others. All models except AH5 offer an M Sport Package that includes specific wheel-and-tire equipment.

Comfort & convenience

Elegant design, outstanding ergonomics, true to BMW traditions

As in all BMWs, well-researched ergonomics facilitate intuitive operation of driving controls and other functions. All displays and controls of comfort functions are placed centrally for use by the driver or front passenger; those for the driver's use only are to the left of the steering column, on or near the steering wheel, or on the front center console. The steering wheel is power-adjustable tilt/telescopically (1.57 in. vertical, 2.36 in. longitudinal) and includes tilt-up for exit and entry. In 528i, 535i and ActiveHybrid models, both front seats come standard with 14-way power adjustment including 4-way power lumbar support and power-adjusted head restraints. 20-way Multi-Contour front seats are standard in 550i models, optional in all others.

Driver-oriented cockpit

In the BMW tradition, main instruments and controls are grouped in a driver-oriented cockpit, angled toward the driver though not so much as to hamper passenger use of controls in the center stack. It's a layout that looks and works great.

The great sweep of the dash has a typical BMW gradation of colors and materials. Its upper section is in black or, with lighter interior colors, Dolomite Dark. Reaching all the way across is a broad trim panel in the selected material – standard is high-gloss Dark Ash – and below that is the main interior color. The same trim material also appears on the center con-

sole and doors. Chrome and galvanized elements set discreet visual accents; adjustment wheels for the center and side air outlets are illuminated at night. Ceramic-trimmed controls are available in all models.

With automatic transmission, dual cupholders are positioned ahead of the E-shift; with manual, there are a single cupholder aft of the iDrive controller and a second one in the center compartment.

No more ignition slot

Recent BMW generations have provided a dashboard slot into which the multi-function remote was inserted before starting the engine with the start/stop button. As in other recently introduced Series, this slot has been eliminated; the remote need only be inside the vehicle for the engine to be started. Comfort Access keyless entry, which also allows entry and locking without actuation from the remote, is available in Premium or Executive Packages according to model.

Mobile Profile

"Personal Profile" refers to the various settings a given user chooses, and which then apply whenever that person's remote is used to unlock the vehicle. (This function may also be selected in iDrive.)

- 2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.
3 – Including xDrive model.

Model & version	Wheel size & design/code	Run-flat tires ²
528i ³ standard	17 x 8.0 Star Spoke #327 2DB	225/55R-17 performance all-season
535i ³ & ActiveHybrid 5 standard	18 x 8.0 Radial Spoke #237 2HM	225/45R-18 performance all-season
550i ³ standard	18 x 8.0 Star Spoke #330 2DD	↑
528i xDrive M Sport Package	18 x 8.0 M Double Spoke #350M 2NA	245/45R-18 performance all-season
528i M Sport Package	18 x 8.0 front/18 x 9.0 rear M Double Spoke #350M 2NC	245/45R-18 front / 275/40R-18 rear performance
535i xDrive Sport Package	19 x 8.5 V Spoke #331 2K4	245/40R-19 performance all-season
535i & 550i xDrive BMW Individual Composition	19 x 8.5 BMW Individual V Spoke #349i 2M3	↑
535i & 550i xDrive M Sport Package	19 x 8.5 M Double Spoke #351M 2NB	↑
535i & 550i M Sport Package	19 x 8.5 front/19 x 9.0 rear M Double Spoke #351M 2ND	245/40R-19 front / 275/35R-19 rear performance
535i & 550i xDrive BMW Individual Composition	19 x 8.5 front/19 x 9.5 rear BMW Individual V Spoke #343i 2MZ	↑
ActiveHybrid 5 optional	18 x 8.0 Streamline #364 2AU	245/45R-18 performance all-season

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

Additionally, the 5 Series includes Mobile Profile, which allows the export of Personal Profile settings to, or import from, another Mobile Profile-equipped vehicle. This amenity, also present in other recently introduced vehicle lines, is described in **BMW features**.

Instrument panel in Black Panel technology

Like so many aspects of the 5 Series, its instrument cluster combines BMW tradition with advanced, beautiful new executions. Here the entire cluster is in a high-resolution Black Panel display, in which BMW's four classic circular instruments are most prominent; other driving-relevant displays and readouts – including GPS Navigation if present, vehicle-monitoring functions, upcoming service requirements and other information – also appear here in their various (and function-related) graphic forms.

iDrive: elegant, user-friendly, intuitive

In the 5 Series Sedans this advanced, user-friendly system of vehicle control appears in two versions.

The high-resolution control display is in the 7-in.-diagonal size, with 800 x 480-pixel resolution; with Navigation (standard 550i and AH5, Technology Package or stand-alone 528i and 535i), the display is 10.2 in./ 1280 x 480 pixels.

The instrument cluster interacts in fascinating ways with the iDrive control display and the available Head-up Display. According to selected function, users can call up phone numbers or radio

stations via the steering-wheel controls. In Navigation-equipped vehicles the instrument cluster augments the Navigation display with turn-by-turn instructions; with the Head-up Display these can be displayed in the driver's line of sight.

Materials and colors: more elegant than ever

Materials and color choices further enhance the impression of personal luxury and the interior's interplay of lines and surfaces. In 528i models, high-quality leatherette is standard, with two colors offered: the ever-popular Black and a Venetian Beige that was new in '11. Dakota leather, now standard in all other models, is available in 528i models as part of the Premium Package or a stand-alone option in four regular color choices: Oyster/Black, Everest Gray, Venetian Beige, Cinnamon Brown and Black.

Even finer Nappa leather is offered in Extended form in Oyster/Black and Black. The choice of interior trims is also broad: standard High-Gloss Dark Ash, no-extra-cost optional Light Ash and Anthracite woods, and two types of aluminum. One, Brushed Aluminum, is available as a regular option in all models. Another, the especially sporty Hexagon Aluminum, is available only in combination with the M Sport Package. All alternate trims except the BMW Individual ones (see next column) are offered at no extra cost.

New for 2013: BMW Individual choices

The popular and lavish BMW Individual Composition is newly available in all 535i and 550i

models and the AH5. For the interior, this encompasses BMW Individual door sill trims, Extended Merino leather upholstery in a choice of five dramatic color schemes; three choices of BMW Individual trim materials, and Alcantara headliner. Independently of the Composition, Individual's elegant steering wheel with wood inlays and three Individual interior trims are available as P1 options. See **packages & options for details**.

Climate control: standard dual-zone standard in 535i/550i, 4-zone in AH5

Nearly all climate-control functions are served by the control panel in the center stack. The standard dual-zone system allows the driver and front passenger to set their preferred temperatures separately and override the automatic blower and air-distribution controls when desired, also separately.

Current climate-control settings are indicated in a second Black Panel display in the center stack, along with the system's controls. Standard in the AH5, a 4-zone system gives the rear-seat passengers a degree of control over their climate comfort similar to that afforded front-seat occupants. Beyond the standard dual-zone system, this state-of-the-art system includes –

- Separate rear blower
- Additional air outlets in B-pillars
- Full rear control panel with left/right temperature and air-distribution settings
- Individual heating elements in the foot space
- Separate automatic programs front/rear.

Audio systems and data storage

For 2013, the 5 Series adds the super-audiophile Bang & Olufsen system for a total of three available audio systems. The two standard systems are listed here; for details on the Bang & Olufsen see **packages & options** or, for more details, **BMW features**.

The 12-speaker/205-watt system that's standard in 528i, 535i and AH5 models continues; this includes a CD player, auxiliary audio input and iPod/USB adapter. The speaker array includes two subwoofers in BMW's patented, highly effective under-seat locations. If the vehicle is equipped with Navigation, BMW's customary 80-GB hard drive provides ample data storage for the GPS Navigation, entertainment server, iDrive system, Voice Command, phonebook and Gracenote® music database.

Newly standard in 550i models is a premium audio system with 16 speakers, 600-watt power rating, and audiophile-quality Neodymium speakers throughout. This is the Logic7 system described in **BMW features**.

As of introduction of the current 5 Series, antenna systems were further developed, especially with regard to AM reception. AM and FM signals are received simultaneously and the list of receivable stations in both bands is constantly updated in the background. Particular emphasis was devoted to the reduction of the effects of electromagnetic disturbances in the vehicle's environment. Fully four phone antennas allow simultaneous operation of various telematics and telecommunication services; a backup

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

antenna helps ensure that emergency calls go through. The antennas are:

AM – in rear window. Shared with other F-platform Series is an antenna amplifier that increases reception range. Receives long-, medium- and short-wave signals.

FM – also in rear window. Quadruple diversity system with intelligent selection of the best signal at all times. Also receives the standard weather band.

DAB (Digital or HD Radio) – one in rear window, one in roof fin. As in all current BMW models, HD Radio is standard.

Phone – two in the roof fin, one in the rear bumper, one in a protected location below the rear package shelf.

Satellite Radio – in roof fin; thanks to further technological development, more compact than before.

GPS – in roof fin, captures the maximum possible number of GPS satellite signals.

Remote functions – antenna for remote, Comfort Access and wireless service access is in roof fin. Optional in all models is a new-generation Rear Seat Entertainment system, with its own DVD player, two high-resolution monitors in the front seats' backrests and a dedicated remote. This is described in **BMW features**.

Contour moonroof

A striking amenity is the moonroof that's standard on U.S. models. Its 60 x 92-cm (23.6 x 36.2-in.) glass area makes the interior feel brighter and roomier; its front edge is curved parallel to the windshield's top edge for an

unusual and subtle design touch. Functional aspects figure in this concept too: the interior shade is now powered. Not only is this more convenient; it obviates a handgrip recess, making the interior more elegant.

Rear seating: enhanced space and comfort

A thoughtfully designed center armrest enhances seating comfort for rear passengers. Instead of reaching from bottom to top, the armrest now begins a few inches up, and ends a few inches down from the top. This allows –

- More refined appearance
- Head restraint integrated into armrest
- At the bottom, extra space for passengers' legs.

Newly for '13, split folding rear seats are standard in all 5 Series models except the AH5, where the battery pack is at the trunk's forward end.

Safety & security

5 Series Sedans are equipped with the same range of safety features as other BMW models in general and the 7 Series in particular; like any new-generation BMW platform, it incorporates the latest and best active- and passive-safety engineering and technology.

Active safety

The most significant safety news is on the **active** side, in that a number of new features and systems are available to enhance the driver's ability to avoid

accidents. The following are either standard or optional in various Packages:

- Automatic High Beams
- Active Blind Spot Detection
- Lane Departure Warning
- Rear-, side- and top-view cameras
- Speed Limit Info
- Integral Active Steering
- Night Vision with Pedestrian Detection.

For details on availability in this Series, see **packages & options**. For detailed explanations of these advanced driving assists, see **BMW features**.

Passive safety

Additional passive-safety features standard in 5 Series Sedans

The new 5 Series includes certain features that enhance crash safety beyond those standard in all current BMW models:

- **Active front head restraints** – standard in 3, 5, 6 and 7 Series; X3, X5 and X6.
- **2-stage force limiters on front safety belts** – standard in 5, 6 and 7 Series.
- **Active Knee Protection** – standard in 3 Series Sedans and Convertibles, 5 Series, Z4.
- **Enhanced emergency calling.** Automatic emergency calling, long a standard feature of the BMW Assist telematics scheme, is now included in all BMW models equipped with BMW Assist, which is standard in the 5 Series.

For further details, see the **BMW Assist** pages in this or the 2012 edition.

Rated 5 Stars in Euro NCAP test.

The independent, multi-national European auto-safety organization Euro NCAP (New Car Assessment Program) has already put the new 5 Series through its newly sharpened battery of tests:

- **Straight frontal impact** into barrier at 64 km/h (40 mph)
- **Side impact** at 50 km/h (30 mph)
- **Side impact into pole** at 29 km/h (18 mph)
- **Rear impact** at 24 km/h (15 mph), simulated with front seats and restraint systems mounted on test equipment
- **Impact with pedestrian** at 40 km/h (25 mph) with simulated adult and child tests.

The presence of safety systems in the vehicle is also rated: credit is given for Dynamic Stability Control, Night Vision, Active Blind Spot Detection and Lane Change Departure, for example, and other systems or devices that help reduce the likelihood of accidents. For the final "star" rating, each vehicle receives a score for –

- protection of adult passengers
- protection of child passengers
- protection of pedestrians
- the safety systems, or "assistants" as the rating agency calls them.

The current 5 Series scored high in all these disciplines, and overall rated the maximum **5 Stars** overall.

Rated 5 stars in U.S. NCAP test.

The 5 Series also earned the top 5-star rating in the U.S. National Highway Safety Administration's (NHTSA) crash tests under its recently updated, more stringent NCAP regime.

New criteria include –

- More stringent side-impact tests

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

- Use of crash-test dummies of varying size, now simulating a small adult female as well as a medium-size adult male
- A single overall rating score
- Highlighting of high-tech crash-avoidance systems such as those listed on previous page plus BMW's long-standard Dynamic Stability Control.
- **Comfort Access** keyless entry, code 322
- **Satellite Radio** with 1-year subscription, code 655
- **Automatic trunklid opening/closing**, code 316
- **Soft-close doors**, code 323
- **Extended instrument cluster**, code 6WA. This is a 9.2-in. lateral extension of the main dials, reaching over into and overlapping the tachometer's fuel-economy indicator and offering a range of choice for individual users' preferences such as range on fuel and energy regeneration. (It is standard in the AH5, with Hybrid-specific functions.)

At the time of NHTSA's testing (October '10), the 5 Series was one of only two vehicles to receive the 5-star rating.

Packages & options

Packages

Premium Package

(528i & 535i models, AH5; code ZPP)

Combining three or four features respectively for these five models, this package consists of:

All 528i & 535i models, Active-Hybrid 5:

- **Comfort Access** keyless entry, code 322
- **Satellite Radio** with 1-year subscription, code 655
- **Automatic trunklid opening/closing**, code 316

528i models only:

- **Dakota leather upholstery** – available in five color schemes; codes LC. Standard in 535i and AH5 models.

Executive Package

(550i models, code ZEC)

New for '13, this package is now appearing in other higher-level BMW Series; here it includes three of the Premium Package features, adds numerous other content, and is identical for the two 550i models:

- **Comfort Access** keyless entry, code 322
- **Satellite Radio** with 1-year subscription, code 655
- **Automatic trunklid opening/closing**, code 316
- **Soft-close doors**, code 323
- **Extended instrument cluster**, code 6WA. This is a 9.2-in. lateral extension of the main dials, reaching over into and overlapping the tachometer's fuel-economy indicator and offering a range of choice for individual users' preferences such as range on fuel and energy regeneration. (It is standard in the AH5, with Hybrid-specific functions.)
- **Head-up Display**, code 610, with full-color indications and 3D effects
- **Ceramic-trimmed controls**, code 4U1; described under **stand-alone options**
- **BMW Apps**, code 6NR
- **Smartphone Integration**, code 6FR
- **Premium audio system**, 16-speaker, as described under **Logic7** in BMW features; code 677
- **Bang & Olufsen audiophile audio system**, code 6F2, as an upgrade to this package. This new top-of-line system includes the same number (16) and positions as the 677 system, but provides double the wattage (1200) and other spectacular attributes including retracting centerfill speakers. First seen in the '12 6 Series and now also available in the 7 Series, it is described in the **Fast Facts 2012 6 Series** section and this edition's **BMW features**.

Sport Package

(ActiveHybrid 5 only, code ZSP)

Formerly available on all models, this group has been phased out in favor of the more assertive M Sport Package, which is now available on all models except AH5 and is described next. Thus now unique to the AH5, ZSP continues with mostly the same content for this model as in '12, but without wheel/tire content (there is one stand-alone wheel/tire option for the AH5). Multi-Contour seats are now in the **Luxury Seating Package**:

- **Dynamic Damping Control**, code 223. Electronically controlled, adjustable shock absorbers; described earlier in this section.
- **Increased top-speed limiter**, code 840. Limits top speed to 155 mph, vs. standard 130.
- **Shadowline exterior trim** (code 760), replacing the standard chrome + black framing around the side windows for a sportier look.
- **Sport steering wheel**, code 255. Like the standard wheel, this is a 3-spoke type; its design differs, diameter is smaller and the rim is thicker.
- **Anthraccite-color headliner**, code 775.

M Sport Package

(all except ActiveHybrid 5, code ZMP)

Takes engineering and esthetics to a higher level of sportiness. Except as noted, the Package is identical for all models on which it is offered.

M Double Spoke wheels –

- **528i xDrive** – 18 x 8.0 #350M with 245/45R-18 performance all-season tires², code 2NA

- **528i RWD** – 18 x 8.0 front/18 x 9.0 rear #350M with 245/45R-18 front / 275/40R-18 rear performance tires², code 2NC
- **535i & 550i xDrive** – 19 x 8.5 #351M with 245/40R-19 performance all-season tires², code 2NB
- **535i & 550i RWD** – 19 x 8.5 front/19 x 9.0 rear #351M with 245/40R-19 front / 275/35R-19 rear performance tires², code 2ND

M functional & esthetic features –

- **Increased top-speed limiter**, code 840
- **Specific exterior color selection**. Alpine White, Jet Black, Titanium Silver, Space Gray, Imperial Blue, Dark Graphite and (available only with ZMP) Carbon Black
- **M aerodynamic exterior treatment** – front spoiler, rear apron and side sills, plus Dark Shadow Metallic insert in rear bumper, code 715
- **Shadowline exterior trim**, code 760
- **M doorsill trims**, part of factory M Sport Package, code 337
- **M Sport steering wheel**, also part of 337. Similar to sport wheel but with M logo and other distinctive design touches.
- **M driver's footrest**, part of 337

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

- Aluminum Hexagon interior trim, code 4MP; all other interior trims may be ordered as alternates to this exclusive ZMP trim.
- Anthracite-color headliner, code 775.

On models where not standard (528i), ZMP requires leather upholstery.

Dynamic Handling Package (535i & 550i models, code ZDH)

This new-for-'13 package bundles two major ride-and-handling systems separately from the M Sport Package, so that customers may choose them independently of their preferences for a sport or luxury image. Together, they enhance the cornering ability, stability and riding comfort of these higher-performance models.

- Dynamic Damping Control, code ZDD. Replacing the former Code 223; BMW's most sophisticated system of electronically controlled shock absorbers also adds a Comfort+ mode to the Driving Dynamics Control. Formerly included in Sport and M Sport Packages, this is a transformative addition to any BMW, and is described in **BMW features**.
- Adaptive Drive, code 2VA. This replaces Code 229 Active Roll Stabilization, formerly a stand-alone option. A remarkable system that dramatically reduces body roll (also known as "lean"), ARS is described in detail in **BMW features**.

Driver Assistance Package (all models, code ZDA)

Re-orders the former ZDA into two packages. This one includes the four active-safety systems that BMW believes most cus-

tomers will want; the new Driver Assistance Plus (described next) adds two further systems. Contents of the new ZDA are:

All models:

- Active Blind Spot Detection, code 5AG. Described in **BMW features**.
 - Side- and top-view cameras (Surround View), code 5DL. Described under exterior cameras in **BMW features**.
- 528i, 535i & AH5 only:
- Park Distance Control front/rear, code 508. Standard on 550i models.
 - Rear-view camera, code 3AG. Standard on 550i models.

Driver Assistance Plus (all models, code ZDB; requires Driver Assistance Package + Technology Package or Navigation)

This group adds two more features that can be said to be related to active safety:

- Lane Departure Warning, code 5AD. Note that this is not the 5AS version with Approach Control as found in the new 7 Series. For details on LDW, see **BMW features**.
- Speed Limit Info, code 8TH. Via the same forward camera used by LDW, captures current speed-limit and other signage such as "no passing," and shows it in the iDrive display.

Luxury Seating Package (all models, code ZLS; requires Cold Weather Package or heated front seats)

For '13 this package has been reduced to only features directly related to seating. It now includes:

- Active Support on both front seats, code 455. This option, offered in other higher-level Series, employs two stretch-

able hollow cavities, filled and emptied alternately with a freeze-proof liquid. The slow, gentle process (about once a minute) creates a cyclical raising and lowering of the cushion's left and right halves by about half an inch, and can be switched on and off as desired. The movement is virtually imperceptible, yet helps relieve fatigue during extended trips.

- Active Ventilation on both front seats, code 453. Described in **BMW features**.

Technology Package (528i, 535i & AH5 models, code ZTP)

Another package that's quite different from its content in '12. Now it includes:

- All these models:
- Head-up Display, code 610. Featuring full-color displays and 3D effects.
 - BMW Apps, code 6NF
 - Smartphone Integration, code 6NR

528i & 535i models only:

- Navigation system, adding GPS and an extensive array of other functions to iDrive, plus a larger (10.2-in.) high-resolution display. Code 609; for details on this signature BMW amenity, see **BMW features**. It is standard in the AH5, with hybrid-specific menu and functions.
- Extended instrument cluster, code 6WA. Also standard in the AH5.

Cold Weather Package

(all models, code ZCW; on 528i models, requires leather upholstery)

Always a popular option in colder climates and with winter-sports enthusiasts, this Package includes:

- Retractable headlight cleaning system – code 502
- Heated steering wheel, code 248; available with all three steering-wheel designs
- Heated front and rear seats, codes 494 and 496.

Priority 1 package⁴

BMW Individual Composition (535i, 550i & AH5 models) Having established itself as BMW's most lavish, customized array of esthetic treatments, the Composition now makes its 5 Series debut. Its content is similar to that of its namesakes on 6 and 7 Series, M3 and X6 models, and includes BMW Individual wheels on all these models except AH5 and X6. 535i, 550i & AH5:

- High-gloss Shadowline or BMW Individual Satin Aluminum exterior trim, code 760 or 3MB. The Shadowline appears on the side-window frames and recess cover exterior-mirror bases, frames and triangles; B-pillars and rear-door window guides. The Satin Aluminum is applied to the side-window frames and recess covers; high-gloss black appears here (as with Shadowline) on the mirrors, B-pillars and rear-door window guides. In combination with Comfort Access (Premium or Executive Package), either of these trim schemes adds a trim strip to the exterior door handles.

⁴ – Priority 1 options accurate at time of publication but subject to change. For current model-specific standard, optional and Priority 1 optional equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

- **BMW Individual doorsill trims,** code 778
- **Extended Merino leather upholstery,** BMW's superlative leather grade; notable for its gentle surface, natural grain and freedom from irregularities. Available in Platinum, Champagne/Black, Silk Gray/Black, Graphite/Black and Cohiba Brown/Black; codes ZA.
- **Choice of three BMW Individual interior trim materials:** Dark Red Sycamore XE5, Walnut Honey XE6 or Piano Black XE7.
- **Alcantara headliner** in Anthracite, code 776; or upholstery color including sun visors, code XD5.

535i & 550i only:

- **19-in. wheels** in BMW Individual V Spoke design #349 I. On the RWD models these are 19 x 8.5 front/19 x 9.0 rear, and carry 245/40R-19 front / 275/35R-19 rear performance tires² (2MZ). On the xDrives, they're 19 x 8.5 with 245/40R-19 performance all-season tires² all around (2M3).

The BMW Individual Nappa-leather steering wheel with inlaid wood (code XL1) is available in combination with Z11; special BMW Individual Xirallic exterior paints are available without restrictions. See P1 stand-alone options.

Stand-alone options

8-speed STEPTRONIC automatic transmission

(standard 528i, all xDrive models & ActiveHybrid 5; optional no extra cost 535i & 550i RWD models; code 205)

Described under **performance & efficiency** and in more detail in **BMW features**, this is BMW's most sophisticated, advanced and efficient "conventional" automatic (i.e. torque-converter) transmission. In the AH5, it is a new version, specially adapted for optimum hybrid performance and efficiency.

Sport automatic transmission with shift paddles

(all models, code 2TB; requires Sport or M Sport Package) Basic features of BMW's Sport automatics, offered in 6- or 8-speed form, include steering-wheel shift paddles, sportier programming and three driver-selected settings for shift characteristics. Described in **BMW features**.

Dynamic Damping Control (all models, code 223)

Though included in the Dynamic Handling Package with a different option code (ZDD), this significant enhancement of both handling and ride comfort continues as a stand-alone option under the 223 code. Together with BMW's other systems of electronically controlled shock absorbers, Dynamic Damping Control is described in **BMW features**.

Integral Active Steering (528i, 535i & 550i RWD models, code 2VH)

This thrilling system enhances the 5 Series' already outstanding directional stability at higher speeds by slight, precise countersteering of the rear wheels. The front-wheel aspect of Integral Active Steering also contributes to stability at speed by progressively increasing the

numerical steering ratio up to approximately 75 mph. Retains the energy-saving electric power assist that is standard in the 5 Series. Described in detail in **BMW features**.

Special wheels

(ActiveHybrid only, code 2AU) These unique wheels, in Streamline design #364, are in the same 18-in. size as the standard wheels and carry the same all-season tire size; they are available at no extra cost.

Park Distance Control (standard 550i models, optional 528i, 535i & AH5 models; code 508)

In addition to being part of the Driver Assistance Package for the 528i, 535i and AH5 models, front/rear PDC is also available as this stand-alone option on these models. It is standard on the 550i models.

Parking Assistant

(all RWD models, code 5DP) One of BMW's newest, highest-tech options. Evaluates potential parallel-parking spaces, then once the driver has selected a space and activated the Assistant, operates the steering for maneuvering into it. Described in **BMW features**.

Active Cruise Control with Stop-and-Go function, Collision Warning System (all except AH5, code 5DF; on 535i & 550i RWD models, requires automatic transmission)

In addition to the ability to bring the vehicle to a complete stop and then back to set speed, this version of ACC utilizes its radar sensors to detect critical closing-

rate situations with standing and moving objects, even with ACC off. If the vehicle is equipped with the Head-up Display, the visual warning also appears there.

The ACC offered here is one of three types now available in various BMW Series. See **BMW features** for descriptions of all three.

Night Vision with Pedestrian Detection (all models, code 6UK; requires Cold Weather Package)

Via an infrared camera, Night Vision scans up to 1600 ft. ahead of the vehicle over a 36-degree-wide range, variable according to the road's path and driver input. Pedestrian Detection denotes its ability to recognize the direction a pedestrian (or animal) near the roadway is moving. See **BMW features** for a detailed description of this advanced safety system.

Automatic High Beams (all models, code 5AC)

By switching the headlights between low and high beams, this amenity can help ensure optimum forward lighting according to traffic conditions.

Rear-view camera (528i, 535i & AH5, code 3AG; requires Park Distance Control) Besides being part of the Driver Assistance Package for these models, the rear-view camera is available singly. It is standard on 550i models.

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

Soft-close doors

(528i, 535i & AH5 models, code 323)

A stand-alone option on these models, soft-close doors are included in 550i models' Executive Package.

Navigation system

(standard 550i & AH5, optional

528i & 535i models; code 609)

Adds GPS Navigation, 10.2-in. control display, and many functional capabilities to the 528i/535i standard iDrive. Described in detail in **BMW features**.

Premium audio system

(528i, 535i & AH5 models, code 677)

A stand-alone option on these models, this 16-speaker system is included in 550i models' Executive Package. Its features include increased audio power (600 watts), Digital Sound Processing (Dolby Pro Logic), Surround Sound simulation and higher-caliber componentry throughout. Though not officially so named, this system is essentially identical to Logic7, which is described in **BMW features**.

Bang & Olufsen audiophile audio system

(528i, 535i & AH5 models, code 6F2)

For 2013, the 5 Series adds the super-audiophile Bang & Olufsen system for a total of three available audio systems. It is available in these models as a stand-alone; in 550i models it's offered as an upgrade to the Executive Package. For details on this industry-leading audio system, see **BMW features**.

Rear Seat Entertainment

(all models, code 6FH; requires leather upholstery & Navigation)

This new, updated and enhanced system (called Professional) features larger monitors and other upgrades over the 6FG system previously offered. It consists of:

- **Two color monitors**, 9.2-in. high-resolution, angle-adjustable, integrated into the front seats' backrests (up from 8.0-in. previously)
- **Dedicated remote control** for system
- **Separate ports** for connecting MP3 players and game consoles
- **Access to vehicle's entertainment functions** (radio, DVD changer, online services, phone)
- **Separate GPS Navigation**⁵
- **Connectivity** for wired and wireless headsets.

BMW Apps

(all models, code 6NR; includes Smartphone Integration, requires Navigation)

BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function is released, users can customize their vehicle's infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party App.

Dakota leather upholstery

(optional 528i, standard all other models; codes LC)

535i, 550i and ActiveHybrid models' standard interior and the regular 528i Dakota option are available in five colors: Oyster/Black, Everest Gray, Venetian Beige, Cinnamon Brown and Black. Dakota leather appears on the seat facings and door + center armrests.

Nappa leather upholstery, extended

(all models, codes NA; in 528i, 535i & AH5 models, requires

Luxury Seating Package or Multi-Contour front seats)

This classic BMW interior scheme applies premium Nappa leather to the seat facings, head-restraint fronts* and sides*, front-seat backrests* and their storage pockets*, and the door and center armrests. The asterisk (*) indicates additional leather coverage over the Dakota interior. The option price is reduced in 535i, 550i and AH5 (because Dakota leather is standard) or 528i models with Premium Package (which includes Dakota). Available colors are Oyster/Black and Black.

Alternate interior trims

(all models; codes 4B5, 4B9, 4CE & 4MR)

Light Ash wood (4B5), Brushed Aluminum (4B9) and Fine Line Anthracite wood (4CE) are all available as no-extra-cost alternates to the Dark Ash (4BN) that's standard in all models. An additional choice, Aluminum Hexagon (4MR), is available as an especially sporty, technical-looking trim only in combination with the M Sport Package. For extra-cost BMW Individual trims, see P1 stand-alone options.

Ceramic-trimmed controls

(all models, code 4U1; requires automatic transmission in 535i & 550i models)

This very special touch, also offered in the 5 GT, 6 and 7 Series,

consists of richly ceramic-trimmed –

- Shift lever
- iDrive controller
- Audio controls
- Climate controls.

Heated front seats

(all models, code 494)

In addition to being included in the Cold Weather Package, heated front seats are offered as this stand-alone option to give our customers a wide range of choices in equipping their vehicles.

Power rear-window & manual rear door-window sunshades

(all models, codes 415 & 416)

These glare-reducing shades are a welcome amenity, especially in hot or sunny weather conditions; and add a measure of privacy. The rear-window shade is power-operated, the rear-door shades easy-to-adjust manual.

Priority 1 stand-alone options⁴

BMW Individual Xirallic paints

(all models, paint codes)

Although they are an ideal accompaniment to the new BMW Individual Composition, five elegant BMW Individual Xirallic paints are offered without restriction: Azurite Black S34, Citrin Black X02, Moonstone X04, Amazonite Silver X07 and Champagne Quartz X08.

4 – Priority 1 options accurate at time of publication but subject to change. For current model-specific standard, optional and Priority 1 optional equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

5 – Rear passengers enter a destination and "suggest" it to Navigation; driver can confirm and enter.

5 Series Sedan key features

Except as noted, all current 5 Series Sedan models offer the following features:

BMW Individual sport steering wheel

(all models, code XL1)

Embellished with wood inlays, this elegant sport steering wheel is available in combination with the BMW Individual interior trims listed below; it is not heated, and is not available in combination with the M Sport Package.

BMW Individual interior trim (all models; codes XE5, XE6 & XE7)

Dark Red Sycamore (XE5) and Walnut Honey (XE6) woods, and Piano Finish Black (XE7): All are available at extra cost without restriction, but do not cost extra when combined with the BMW Individual Composition that's available on 535i, 550i and AH5 models.

BMW center-installed accessories

Among the many accessories available for the 2013 5 Series are:

- **M Performance engine and chassis equipment:**
 - Exhaust system with sportier sound for 535i models, including 80-mm chrome outlets with laser-engraved M logo
- 20-in. Bi-color V Spoke #464M wheels, high-gloss Liquid Black/Orbit Gray finish, + Bridgestone Potenza RE050 A run-flat performance tires
- Complete wheel and tire sets, other designs and sizes
- Wheel locks
- Tire valve-stem caps with BMW lettering or logo
- Tire Mobility Kit and tire sealer kit
- Mud flaps

- M Performance exterior design:
 - All-black kidney grilles, high-gloss finish
 - Carbon-fiber splitter for front spoiler
 - Carbon-fiber mirror caps
 - Rocker-panel decals
 - Carbon-fiber rear spoiler
 - Rear diffuser
- Roof and storage systems
- License-plate frames
- Car covers, outdoor and indoor types
- UV sunshade
- M Performance interior design:
 - Sport steering wheel, Alcantara-wrapped/carbon-fiber-trimmed
 - Carbon-fiber manual shift knob with Alcantara boot
 - Carbon-fiber E-shift lever for automatic transmission
 - Carbon-fiber and Alcantara interior trim, 7-piece set
 - Stainless-steel driver's footrest and pedals
- Floor mats, carpet and all-weather
- Snap-in adaptor with USB interface for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- Snap-in adapter for BMW Apps and various media
- Connection and charging cables of various types
- BMW USB memory stick in style of vehicle remote
- BMW Bluetooth headset and speaker
- CD/DVD storage sleeve
- Cool bag
- BMW umbrella with LED light
- LED hand lamp
- Multi-function luggage mat + storage box and other trunk accessories

For details and a complete listing, see the latest **Accessories** listing for the 5 Series in bmwusa.com.

Standard & optional features

2013 5 Series Sedans

Bold within table indicates new feature for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Exterior design & function	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Aluminum hood, front spring towers & doors	S	S	S	S
Xenon Adaptive headlights with luminous rings as position/parking lights & Daytime Running Lamps, dynamic auto-leveling, cornering lights	S	S	S	S
Automatic headlight control	S	S	S	S
Automatic High Beams	OPT	OPT	OPT	OPT
Retractable high-intensity headlight cleaning system	ZCW	ZCW	ZCW	ZCW
Front foglights	S	S	S	S
Vertical grille slats:				
Chrome	S	S	–	–
Galvanic finish	NA	NA	S	S
Rain-sensing windshield wipers & heated washer jets	S	S	S	S
Power-folding exterior mirrors	S	S	S	S
M aerodynamic exterior treatment including front spoiler, rear apron & side sills plus Dark Shadow Metallic insert in rear bumper	ZMP	ZMP	ZMP	NA
Metallic paint	OPT	OPT	NC	OPT
BMW Individual Xirallic colors	P1	P1	P1	P1
Park Distance Control, front & rear with graphic display	ZDA /OPT	ZDA /OPT	S	ZDA /OPT
Parking Assistant	OPT ¹ [NA]	OPT ¹ [NA]	OPT ¹ [NA]	OPT ¹
Rear-view camera	ZDA /OPT ²	ZDA /OPT ²	S	ZDA /OPT ²
Side- & top-view cameras (Surround View)	ZDA	ZDA	ZDA	ZDA
Ground lighting at door handles	S	S	S	S
Welcome Light	S	S	S	S
Adaptive brakelights	S	S	S	S
High-gloss Shadowline exterior trim	ZMP	Z11 /ZMP	Z11 /ZMP	Z11 /ZSP
Satin Aluminum exterior trim	NA	Z11	Z11	S
Chrome exhaust outlets:				
Round, dual, on left side	S	–	–	–
Round, on left & right sides	–	S	–	–
Rhomboid, on left & right sides	–	–	S	–
Dark Chrome, on left & right sides	–	ZMP	ZMP	S
Dark Chrome, dual, on left side	ZMP	–	–	–

1 – Requires Driver Assistance Package or Park Distance Control.

2 – Requires Park Distance Control.

S – Standard

OPT – Optional

NA – Not available

– – Not applicable

P1 – Priority 1 option

ZCW – Cold Weather Package

ZDA – Driver Assistance Package

Z11 – BMW Individual Composition

ZMP – M Sport Package

ZSP – Sport Package

Standard & optional features

2013 5 Series Sedans

Bold within table indicates new feature for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Performance & efficiency	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
2.0-liter TwinPower Turbo 4-cylinder engine	S	–	–	–
3.0-liter TwinPower Turbo 6-cylinder engine	–	S	–	S
4.4-liter TwinPower Turbo V-8 engine (twin-turbo)	–	–	S	–
Engine features:				
Aluminum construction	S	S	S	S
Cylinder technology	Arc-electro-plated steel coating	Iron liners, cast into block	Silicon-impregnated aluminum	Iron liners, cast into block
Dual overhead camshafts & 4 valves/cylinder	S	S	S	S
High Precision direct fuel injection	S	S	–	S
High Precision direct fuel injection with piezo injectors	–	–	S	–
Valvetronic variable intake-valve lift	S	S	–	S
Double VANOS ³ steplessly variable valve timing	S	S	S	S
Twin-scroll turbocharger	S	S	–	S
Twin single-scroll turbochargers	NA	NA	S	NA
Dual balance shafts	S	–	–	–
Electronically controlled engine cooling	S	S	S	S
Electric coolant pump	S	S	S	S
Volume-controlled oil pump	S	S	S	S
Electronic sensing of oil level & condition	S	S	S	S
Exhaust system	Single	Partial dual	Dual	Partial dual, special tuning
Automatic engine start/stop	S	S	NA	S
Electric motor integrated into automatic transmission (also functions as generator)	NA	NA	NA	S
6-speed manual transmission	NA	S [NA]	S [NA]	NA
Upshift indicator for manual transmission	NA	S	S	NA
8-speed STEPTRONIC automatic transmission with Adaptive Transmission Control, E-shift, selectable Comfort, Sport & Manual modes	S	NC [S]	NC [S]	–
8-speed Sport automatic transmission with sportier programming, rpm matching on downshifts & steering-wheel shift paddles	OPT ³	OPT ³	OPT ³	OPT⁴
8-speed automatic transmission with integrated electric motor/generator, electric oil pump, decoupling clutch & start-off clutch element (no torque converter)	–	–	–	S
Liquid-cooled alternator	–	–	S	–
Aluminum front & rear subframes	S	S	S	S
Aluminum multi-link double-wishbone front suspension	S ⁵	S ⁵	S ⁵	S
Aluminum 5-link Integral rear suspension (Integral V)	S	S	S	S

3 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

3 – Requires M Sport Package.

4 – Requires Sport Package.

5 – Lower lateral links are of forged steel on xDrive models.

S – Standard
OPT – Optional
NC – No extra cost

NA – Not available
– – Not applicable

Standard & optional features

2013 5 Series Sedans

Bold within table indicates new feature for 2012.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Performance & efficiency (cont.)	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Active Roll Stabilization (ARS)	NA	ZDH	ZDH	NA
Dynamic Damping Control with Comfort, Comfort+ & Sport modes	OPT	ZDH/OPT	ZDH/OPT	ZSP/OPT
Vehicle-speed-sensitive variable-assist, variable-ratio rack-and-pinion power steering; steering assist type	Electric [Hydraulic]	Electric [Hydraulic]	Electric [Hydraulic]	Electric
Integral Active Steering (also electric)	OPT [NA]	OPT [NA]	OPT [NA]	NA
4-wheel ventilated disc brakes with aluminum/cast-iron rotors	S	S	S	S
Brake Energy Regeneration with function indication in tachometer	S	S	S	-
Sensotronic brake system combining interaction of regenerative electric braking & disc brakes; function indication in tachometer & iDrive display	-	-	-	S
Driving Dynamics Control – 3 modes for engine response, transmission shift characteristics, & steering assist ⁶ (Comfort , Sport & ECO PRO); 3 modes for Dynamic Damping Control (Comfort, Comfort+ & Sport); additional mode switches DSC to DTC (Sport+)	S	S	NA	-
Driving Dynamics Control with Comfort, Sport & Sport+ modes	-	-	S	-
Driving Dynamics Control with 3 modes + specific ActiveHybrid functions	-	-	-	S
Electromechanical parking brake	S	OPT ⁷	OPT ⁷	S
Automatic Hold	S	OPT ⁷	OPT ⁷	S
Start-up Assistant	S	S	S	S
Dynamic Stability Control with Dynamic Traction Control, electronic limited-slip differential	S	S	S	S
xDrive fulltime all-wheel drive system, electronically controlled with variable front/rear torque split & traction control	NA [S]	NA [S]	NA [S]	NA
17 x 8.0 alloy wheels: Star Spoke design #327	S	-	-	-
18 x 8.0 alloy wheels: Radial Spoke design #237	NA	S	NA	S
Star Spoke design #330	NA	NA	S	NA
M Double Spoke design #350M	NA [ZMP]	NA	NA	NA
Streamline design #364	NA	NA	NA	NC
18 x 8.0 front/18 x 9.0 rear alloy wheels: M Double Spoke design #350M	ZMP [NA]	NA	NA	NA
19 x 8.5 alloy wheels: BMW Individual V Spoke #349I	NA	NA [Z11]	NA [Z11]	NA
M Double Spoke design #351	NA	NA [ZMP]	NA [ZMP]	NA

3 – Requires M Sport Package.

6 – Also affects steering ratio if vehicle is equipped with Integral Active Steering.

7 – Included when vehicle is equipped with automatic transmission.

S – Standard
OPT – Optional
NC – No extra cost
NA – Not available
– – Not applicable

ZDH – Dynamic Handling Package
Z11 – BMW Individual Composition (P1 option)
ZMP – M Sport Package
ZSP – Sport Package

Standard & optional features

2013 5 Series Sedans

Bold within table indicates new feature for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Performance & efficiency (cont.)	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
19 x 8.5 front/19 x 9.0 rear alloy wheels: BMW Individual V Spoke #349I	NA	Z11 [NA]	Z11 [NA]	NA
M Double Spoke design #351M	NA	ZMP [NA]	ZMP [NA]	NA
Run-flat all-season tires: 225/55R-17	S	–	–	–
245/45R-18 ⁸	[ZMP]	S	S	S
245/40R-19 ⁸	NA	– [Z11/ZMP]	– [Z11/ZMP]	NA
Run-flat performance tires ⁸ : 245/45R-18 front / 275/40R-18 rear	NA	NA	NA	NA
245/40R-19 front / 275/35R-19 rear	NA	Z11/ZMP [NA]	Z11/ZMP [NA]	NA
Increased top-speed limiter	ZMP [NA]	ZMP [NA]	ZMP [NA]	ZSP
Tire Pressure Monitor	S	S	S	S
Comfort & convenience	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Vehicle & Key Memory with Personal Profile user-specific settings	S	S	S	S
Mobile Profile for export or import of user settings to another so-equipped vehicle	S	S	S	S
Multi-function remote control	S	S	S	S
Comfort Access keyless entry	ZPP	ZPP	ZEC	ZPP
3-position door checks	S	S	S	S
Soft-close doors	OPT	OPT	ZEC	OPT
Dual power/heated exterior mirrors	S	S	S	S
Doorsill trim: With BMW lettering	S	S	S	S
Illuminated	NA	NA	S	NA
With BMW Individual lettering	NA	Z11	Z11	Z11
With ActiveHybrid 5 lettering (front only)	NA	NA	NA	S
Auto-dimming interior & exterior mirrors, power-folding exterior mirrors	S	S	S	S
Automatic tilt-down of right exterior mirror for visibility of low obstructions when backing up	S	S	S	S
BMW Universal Transceiver (3-function garage-door opener)	S	S	S	S

8 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

S – Standard
 OPT – Optional
 NA – Not available
 – – Not applicable

ZEC – Executive Package
 Z11 – BMW Individual Composition (P1 option)
 ZMP – M Sport Package
 ZPP – Premium Package
 ZSP – Sport Package

Standard & optional features

2013 5 Series Sedans

Bold within table indicates new feature for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Comfort & convenience (cont.)	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Comprehensive lighting amenities: Welcome Light (automatic switch-on of front luminous rings, taillights, license-plate lights, ground lighting & interior lights upon unlocking & locking vehicle)	S	S	S	S
Fade-in/fade-out operation of interior lights	S	S	S	S
Ground lighting in exterior door handles	S	S	S	S
Front & rear left/right reading lamps	S	S	S	S
Front footwell lighting	S	S	S	S
BMW Ambiance Lighting, including interior door handles, door panels & storage compartments, rear footwell lighting, & rear-door entry/exit lighting	S	S	S	S
Illuminated visor vanity mirrors	S	S	S	S
Leather-wrapped power tilt/telescopic steering wheel with fingertip cruise, audio & phone controls, auto tilt-up for entry & exit	S	S	S	S
Sport steering wheel with same features	NA	NA	NA	ZSP
M sport steering wheel with same features	ZMP	ZMP	ZMP	NA
BMW Individual sport steering wheel with wood inlays	P1	P1	P1	P1
Heated steering wheel	ZCW	ZCW	ZCW	ZCW
BMW M driver's footrest	ZMP	ZMP	ZMP	NA
Dynamic cruise control	S	S	S	S
Active Cruise Control with Stop-&-Go function & Frontal Collision Warning System	OPT	OPT ⁹	OPT ⁹	NA
Condition-Based Service system	S	S	S	S
Integrated owner's manual via iDrive	S	S	S	S
14-way power front seats including 4-way power lumbar support	S	S	–	S
20-way power front Multi-Contour seats, including all adjustments of standard seats plus articulated upper backrests, adjustable backrest width & thigh support, head restraints with adjustable side support, easy-entry feature, passenger's-seat memory	ZLS/OPT	ZLS/OPT	S	ZLS/OPT
Memory system for driver's seat, steering wheel & exterior mirrors, 2 settings per user	S	S	S	S
Active Support feature, both front seats	ZLS ¹⁰	ZLS ¹⁰	ZLS ¹⁰	ZLS ¹⁰
Active Ventilation feature, both front seats	ZLS ¹⁰	ZLS ¹⁰	ZLS ¹⁰	ZLS ¹⁰
Heated front seats with balance control	ZCW/OPT	ZCW/OPT	ZCW/OPT	ZCW/OPT
Heated rear seats	ZCW	ZCW	ZCW	ZCW
Black Panel instrument cluster	S	S	S	S
Check Control vehicle monitor system, information displayed in main instrument cluster	S	S	S	S
Special ActiveHybrid instrumentation	–	–	–	S

⁹ – Require automatic transmission.

¹⁰ – Requires Cold Weather Package or heated front seats.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable

ZCW – Cold Weather Package
ZLS – Luxury Seating Package
ZMP – M Sport Package
ZSP – Sport Package

Standard & optional features

2013 5 Series Sedans

Bold within table indicates new feature for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Comfort & convenience (cont.)	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Leatherette upholstery	S	–	–	–
Dakota leather upholstery	ZPP/OPT	S	S	S
Nappa leather upholstery	OPT ¹¹	OPT ¹¹	OPT	OPT ¹¹
Extended Merino leather upholstery	NA	Z11	Z11	Z11
High-gloss Dark Ash wood interior trim	S	S	S	S
Light Ash wood interior trim	NC	NC	NC	NC
Anthracite wood interior trim	NC	NC	NC	NC
Brushed Aluminum interior trim	NC	NC	NC	NC
Aluminum Hexagon interior trim	ZMP	ZMP	ZMP	NA
BMW Individual interior trims, choice of three	P1	P1	P1	P1
Ceramic controls	OPT	OPT	ZEC /OPT	OPT
Power windows with key-off operation, 1-touch open/close & anti-trapping function	S	S	S	S
Dual-zone automatic climate control with left/right temperature & air-distribution controls, automatic recirculation control, misting control, bi-directional solar sensor, 5 intensity settings, activated-charcoal interior air filtration, Heat at Rest, ALL-function & other features	S	S	S	–
Automatic ventilation function for use in parked vehicle	S	S	S	S
Automatic air conditioning for use in parked vehicle	NA	NA	NA	S
4-zone automatic climate control with full left/right temperature & air-distribution controls front & rear, additional air outlets in B-pillars, draft-free air delivery, plus all features of standard dual-zone system	NA	NA	NA	S
Anthracite-color headliner	ZMP	ZMP	ZMP	ZSP
Alcantara headliner, Anthracite or upholstery color	NA	Z11	Z11	Z11
2-way power Contour moonroof with 1-touch opening & closing, anti-trapping function, opening from remote, power-operated interior shade	S	S	S	S
iDrive system with 7.0-in. (diagonal) high-resolution control display, direct-select radio, CD & phone ¹² menus + Menu, Back & Option keys, 6 Programmable Memory keys, On-board Computer & other functions	S	S	S	S
Navigation system with 10.2-in. (diagonal) high-resolution control display, additional direct-select Navigation menu key, enhanced Voice Command, Real Time Traffic Information, expanded On-board Computer functions, automatic ventilation & many other features	ZTP /OPT	ZTP /OPT	S	S
Head-up Display	ZTP	ZTP	ZEC	ZTP
Extended instrument cluster	ZTP	ZTP	ZEC	S
AM/FM/HD/CD/MP3 audio system with 12 speakers, Radio Data System (RDS), in-dash single-disc CD player, auxiliary audio input & FM diversity antenna system; includes front coaxial center-fill speaker & 2 subwoofers	S	S	S	S

11 – Requires Luxury Seating Package or Multi-Contour front seats.

12 – Phone controls active when approved mobile device is paired with Bluetooth interface.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable
ZEC – Executive Package

Z11 – BMW Individual Composition (P1 option)
ZLS – Luxury Seating Package
ZMP – M Sport Package
ZSP – Sport Package
ZTP – Technology Package

Standard & optional features

2013 5 Series Sedans

Bold within table indicates new feature for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Comfort & convenience (cont.)				
Logic7 audio system with 16 speakers, Dirac Live Sound Processing, Surround Sound; includes upgraded audio power & componentry, all features of standard system	OPT	OPT	ZEC	OPT
Bang & Olufsen premium audio system with 16 speakers, Dirac Dimensions™ acoustic signal processing, Surround Sound, all-aluminum speaker grilles; front centerfill midrange & tweeter retract when system is off; includes upgraded audio power & componentry, all features of standard system	OPT	OPT	OPT ¹²	OPT
80-GB hard drive providing data storage for Navigation, audio system, phonebook & Voice Command; ripping capability from CD & DVD players	ZTP/OPT ¹³	ZTP/OPT ¹³	S	S
iPod/USB Adapter	S	S	S	S
BMW Apps including Smartphone Integration	ZTP/OPT	ZTP/OPT	ZEC/OPT	ZTP/OPT
New-generation Rear Seat Entertainment with dual monitors	OPT ¹⁴	OPT ¹⁴	OPT	OPT
Satellite Radio with 1-year subscription	ZPP	ZPP	ZEC	ZPP
Enhanced Bluetooth & USB connectivity	S	S	S	S
Power outlets in front console, glove compartment, passenger's footwell, rear of center console & trunk	S	S	S	S
Seatback storage compartments	S	S	S	S
Split folding rear seats	S	S	S	NA
Power rear-window & manual rear door-window sunshades	OPT	OPT	OPT	OPT
Floor mats, front & rear	S	S	S	S
Fully finished trunk with inside trunk release, 2 tiedowns	S	S	S	S
Automatic trunk opening & closing	ZPP	ZPP	ZEC	ZPP
Safety & security				
Dynamic Stability Control (DSC), including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, electronic limited-slip differential	S	S	S	S
Night Vision with Pedestrian Detection	OPT ¹⁵	OPT ¹⁵	OPT ¹⁵	OPT ¹⁵
Rear-view camera	ZDA/OPT ²	ZDA/OPT ²	S	ZDA/OPT ²
Side- & Top-view cameras (Surround View)	ZDA	ZDA	ZDA	ZDA
Automatic High Beams	OPT	OPT	OPT	OPT
Lane Departure Warning	ZDB	ZDB	ZDB	ZDB
Active Blind Spot Detection	ZDA	ZDA	ZDA	ZDA
Speed Limit Info	ZDB	ZDB	ZDB	ZDB
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags with variable venting	S	S	S	S

2 – Requires Park Distance Control.
12 – Available as upgrade to Executive Package.
13 – Included with Navigation option.

14 – Requires Premium Package or leather upholstery + Navigation.
15 – Requires Cold Weather Package.

S – Standard
OPT – Optional
NA – Not available

ZDA – Driver Assistance Package
ZDB – Driver Assistance Plus
ZEC – Executive Package
ZPP – Premium Package
ZTP – Technology Package

Standard & optional features

2013 5 Series Sedans

Bold within table indicates new feature for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Safety & security (cont.)	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Active head restraints, front seats	S	S	S	S
Safety belts at all seating positions: Front – with automatic tensioners, 2-stage adaptive force limiters & belt stoppers Rear outboard – with force limiters & belt stoppers	S	S	S	S
LATCH attachments in rear seat for installation of child restraint seats	S	S	S	S
Interlocking door anchoring system for side impacts	S	S	S	S
Front- & rear-seat Head Protection System	S	S	S	S
Front-seat side-impact airbags	S	S	S	S
Active Knee Protection for driver & front passenger	S	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S	S
Post-impact safety measures: Unlocking of central locking system	S	S	S	S
Switch-on of hazard flashers	S	S	S	S
Switch-on of interior lighting	S	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S	S
BMW Assist, including Enhanced Automatic Collision Notification, SOS button, Enhanced Roadside Assistance, TeleService ¹⁶ , BMW Assist Safety Plan ¹⁶	S	S	S	S
Central locking system with selective unlocking	S	S	S	S
Coded Driveaway Protection	S	S	S	S
Pathway Lighting ¹⁷	S	S	S	S
Alarm system with operation from remote, interior motion detector	S	S	S	S

16 – Requires BMW Assist annual fee after 4th year. 17 – Duration adjustable via iDrive.

S – Standard

Technical specifications

2013 5 Series Sedans

Bold within table indicates new specification for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

General	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Curb weight, lb.:				
Manual transmission	NA	4068 [NA]	4365 [NA]	NA
Automatic transmission	3814 [4001]	4090 [4233]	4365 [4519]	4398
Weight distribution, front/rear, %:				
Manual transmission	NA	50.9/49.1 [NA]	52.5/47.5 [NA]	NA
Automatic transmission	49.4/50.6 [50.1/49.9]	50.9/49.1 [52.9/47.1]	52.5/47.5 [53.9/46.1]	49.1/50.9
Wheelbase, in.	116.9 ¹			
Track, front/rear, in.	63.0/64.1 ^{1,2}			
Length, in.	193.1 ¹			
Width, in.	73.2 ¹			
Height, in.	57.6 ¹			
Accommodations	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Seating capacity, persons	5 ¹			
Shoulder room, front/rear, in.	58.3/56.2 ¹			
Head room, front/rear, in.	39.1/38.0 ¹			
Leg room, front/rear, in.	41.4/36.1 ¹			
EPA passenger volume, cu ft.	101.5 ¹			
EPA cargo volume, cu ft.	14.0 ^{3,4}			10.0
Body	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Type	4-door sedan ¹			
Aerodynamic drag coefficient	0.28 [0.29]	0.29 [0.30]	0.30	0.28
EPA size classification	Compact ¹			
Engine & electrical	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Engine type	DOHC inline 16-valve 4-cylinder, aluminum construction with arc-electroplated steel cylinder surfaces, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁵ variable intake- & exhaust-valve timing	DOHC inline 24-valve 6-cylinder, aluminum construction with iron cylinder liners cast into block, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁵ variable intake- & exhaust-valve timing	DOHC (4-cam) 32-valve V-8, direct fuel injection with piezo injectors, twin single-scroll turbochargers, Double VANOS ⁵ variable intake- & exhaust-valve timing	DOHC inline 24-valve 6-cylinder, aluminum construction with iron cylinder liners cast into block, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁵ variable intake- & exhaust-valve timing
Bore x stroke, mm/in.	84.0 x 90.1/3.31 x 3.55	84.0 x 89.6/3.31 x 3.53	89.0 x 88.3/3.50 x 3.48	84.0 x 89.6/3.31 x 3.53

1 – Specification applies to all models.

2 – With standard wheels.

3 – Specification applies to 528i, 535i & 550i models.

4 – In 528i, 535i & 550i models, cargo volume can be expanded via folding rear seats. Official BMW cargo volume is 18.4 cu ft.

5 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

NA – Not available

Technical specifications

2013 5 Series Sedans

Bold within table indicates new specification for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Engine & electrical (cont.)	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Displacement, cc/cu in.	1997/122	2979/182	4395/268	2979/182
Compression ratio	10.7:1	10.2:1	10.0:1	10.2:1
Power @ rpm, hp	240 @ 5000-6500	300 @ 5800	400 @ 5500-6400	300 @ 5800
Torque @ rpm, lb-ft.	260 @ 1250-4800	300 @ 1300-5000	450 @ 1750-4500	300 @ 1300-5000
Engine-management system	Motronic MEVD 17.2.4 with knock control, Valvetronic, direct fuel injection, variable valve timing, engine cooling & other functions included in control strategy	Motronic MEVD 17.2 with knock control, Valvetronic, direct fuel injection, variable valve timing, engine cooling & other functions included in control strategy	Motronic MSD 85 with knock control, direct fuel injection, variable valve timing, engine cooling & other functions included in control strategy	MEVD 17.2.6. + Hybrid Intelligent Energy Management
Fuel requirement	Premium unleaded ¹			
Electric motor	–	–	–	3-phase synchronous
Power, hp maximum	–	–	–	55
Torque, lb-ft. (available from rest)	–	–	–	155
Maximum system power, hp	–	–	–	335
Maximum system torque, lb-ft.	–	–	–	330
Fuel capacity, U.S. gal.	18.5 ¹			
Vehicle battery capacity, amp-hr.	Lead-acid/90 ³			Low-voltage system supplied from high-voltage system
Starting battery, type/amp-hr.	–	–	–	Absorbent glass-mat (AGM)/50
Alternator output, amp./watt	210/2940	210/2940	220/3080	200/2800
High-voltage hybrid electrical system: battery type/volts/amp-hr./kW-hr.	–	–	–	Lithium-ion/ 317/442/0.6

Drivetrain	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Drive system	Front engine/rear-wheel drive [all-wheel drive] ³			Rear-wheel drive
Manual transmission	NA	Type K [NA]	Type G [NA]	NA
Ratios: 1st	–	4.11:1	5.08:1	–
2nd	–	2.32:1	2.80:1	–
3rd	–	1.54:1	1.78:1	–
4th	–	1.18:1	1.26:1	–
5th	–	1.00:1	1.00:1	–
6th	–	0.85:1	0.84:1	–
Reverse	–	3.73:1	4.61:1	–
Final drive ratio	–	3.23:1	3.08:1	–

1 – Specification applies to all models.

3 – Specification applies to 528i, 535i & 550i models.

NA – Not available

– – Not applicable

Technical specifications

2013 5 Series Sedans

Bold within table indicates new specification for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Drivetrain (cont.)	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
8-speed automatic transmission	8 HP 45	8 HP 45	8 HP 70	8 HP 70h
Ratios: 1st	4.71:1 ¹			
2nd	3.14:1 ¹			
3rd	2.11:1 ¹			
4th	1.67:1 ¹			
5th	1.28:1 ¹			
6th	1.00:1 ¹			
7th	0.84:1 ¹			
8th	0.67:1 ¹			
Reverse	3.30:1	3.30:1	3.32:1	3.32:1
Final drive ratio	3.38:1	3.08:1	2.81:1 [3.08:1]	2.93:1
Chassis	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Body/frame construction	Unitized all-steel structure with aluminum hood, front spring towers & doors ¹			
Front suspension	Multi-link double-wishbone system: upper & lower lateral links (double-pivot lower links) & steering knuckle of aluminum on RWD models; coil springs, anti-roll bar ¹			
Rear suspension	5-link Integral V suspension with aluminum upper & lower links & wheel carriers; coil springs, anti-roll bar ¹			
Suspension options	Dynamic Damping Control (ZSP, ZMP, ZDH or stand-alone all models; Active Roll Stabilization (ZDH all 535i & 550i); sport suspension (ZMP 535i & 550i RWD only)			
Servotronic steering system (standard)	Rack & pinion, vehicle-speed-sensitive electric [hydraulic] power assist ¹			
Integral Active Steering (optional)	Rack & pinion front steering, vehicle-speed-sensitive ratio & electric assist; vehicle-speed-sensitive rear-wheel steering up to 2.5° via servo motor & spindles ⁶			
Overall ratio: standard steering	Mechanically variable; mean ratio is 17.1:1 ¹			
Integral Active Steering	Electronically variable over wide range ⁶			

1 – Specification applies to all models.

6 – Specification applies to 528i, 535i & 550i RWD models only.

ZDH – Dynamic Handling Package
ZMP – M Sport Package
ZSP – Sport Package

Technical specifications

2013 5 Series Sedans

Bold within table indicates new specification for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Chassis (cont.)	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Turns lock-to-lock: standard steering	3.0 ¹			
Integral Active Steering, min.	2.1 ⁷			
Turning circle, ft.: standard steering	39.2 ¹			
Integral Active Steering, min.	37.6 ⁶			
Brakes	4-wheel ventilated discs with lightweight aluminum/cast-iron rotors & aluminum calipers ¹			
Diameter front, mm/in.	330/13.0	348/13.7	348/13.7	348/13.7
Diameter rear, mm/in.	330/13.0	330/13.0	345/13.6	330/13.0
Alloy wheels: Standard	17 x 8.0	18 x 8.0	18 x 8.0	18 x 8.0
M Sport Package	18 x 8.0 front/18 x 9.0 rear [18 x 8.0]	19 x 8.5 front/19 x 9.0 rear [19 x 8.5]	19 x 8.5 front/19 x 9.0 rear [19 x 8.5]	NA
BMW Individual Composition	-	19 x 8.5 front/19 x 9.0 rear [19 x 8.5]	19 x 8.5 front/19 x 9.0 rear [19 x 8.5]	-
All-season run-flat tires ⁷ (standard)	225/55R-17	245/45R-18	245/45R-18	245/45R-18
Performance run-flat tires ⁷ : M Sport Package	225/45R-18 front/275/40R-18 rear [Note 8]	245/40R-19 front / 275/35R-19 rear [Note 9]	245/40R-19 front / 275/35R-19 rear [Note 9]	
BMW Individual Composition	-	245/40R-19 front/275/35R-19 rear [note 9]	245/40R-19 front/275/35R-19 rear [note 9]	-
Stability-enhancement system	Dynamic Stability Control (DSC); includes Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, electronic limited-slip differential			

1 – Specification applies to all models.

6 – Specification applies to 528i, 535i & 550i FWD models only.

7 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 5 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

8 – xDrive ZMP: all-season tires, same-size 225/45R-18.

9 – xDrive Z11 & ZMP: all-season tires, same-size 225/40R-19.

NA – Not available

— – Not applicable

Technical specifications

2013 5 Series Sedans

Bold within table indicates new specification for 2013.

[Bracketed] data are for xDrive model where it differs from rear-wheel-drive model.

Performance & efficiency data	528i [xDrive] Sedan	535i [xDrive] Sedan	550i [xDrive] Sedan	ActiveHybrid 5
Acceleration, 0-60 mph, sec. ¹⁰ :				
Manual transmission	–	5.7 [–]	5.0 [–]	–
Automatic transmission	6.2 [6.3]	5.7 [5.6]	5.0 [4.7]	5.7
Top speed, mph:				
Standard	130 ¹			
Sport or M Sport Package	150 or 155 ¹			
EPA estimated MPG, city/highway/ combined:				
Manual transmission	–	20/30/33 [–]	15/22/17 [–]	–
Automatic transmission	24/34/28 [22/33/26]	20/30/24 [21/30/24]	17/25/20 [16/24/19]	23/30/26

1 – Specification applies to all models.
10 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle, road and environmental conditions; testing procedures and driving style. These

results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

NA – Not available
– – Not applicable

2013 3 Series Sedans:

After a debut accompanied by many accolades, the new 3 Series adds customer choices via all-wheel-drive models and an ActiveHybrid.

A year ago, BMW launched the 6th generation of “the core of BMW’s core” – an all-new edition of the signature 3 Series. In the established pattern, the new generation appeared first as two 4-door Sedan models: the 4-cylinder, 240-hp 328i and the 6-cylinder, 300-hp 335i, both powered by TwinPower Turbo engines delivering a remarkable combination of performance and efficiency. More models would be forthcoming, it was already known; the first round of additional new-gen 3s arrives for 2013, with production starts less than a year after the generational debut.

But first, after the reception the new 3 got:

In its May 23, '12 issue, Switzerland’s authoritative *Automobil Revue* elaborated: “For BMW, replacing the 3 Series is a crucial affair, because this car is the company’s uninterrupted sales champion. The new one must be right.

“Compared to the previous generation, the new Sedans have grown by 3.7 in. overall, 1.9 in. in wheelbase. This benefits passengers, especially in the rear via greater leg room. But the Bavarians’ basic concept has not changed: front engine, rear-wheel drive, and the resulting balanced weight distribution.”

Jumping to the end of AR’s first test, the conclusion was “With the new 3, BMW has set the bar higher with regard to driving pleasure without at all diminishing these cars’ all-around practicality ...the right combination for keep-

ing this Series the best-seller from the House of BMW.”

In an 8-car comparison, *Motor Trend’s* May '12 issue delivered a supporting opinion from this side of the Atlantic. Declaring the 328i Sport Line winner over Buick Regal GS, Infiniti G25, Acura TSX V-6, Lexus IS 250, Audi A4 2.0 Quattro, Mercedes-Benz C250 and Volvo S60 T5, the U.S. magazine declared the 328i’s 1st place “not just a win – it’s a massacre....In full, glaring, retina-searing contrast, this BMW wins the competition because it does everything better than the rest.”

For 2013, the initial Sedan models receive a round of detail touches. The more significant news is the addition of xDrive AWD¹ versions of the 328i and 335i models; and the first offering of ActiveHybrid powertrain technology in this Series. As they are still relatively new, here’s a recap of what was new about the 3 Series Sedans when they made their 2012 debut:

Concept and vehicle character

- **An all-new vehicle**, true to 3 Series visual, engineering and size traditions but significantly advancing the concept in terms of design and technical excellence.
- **Roomier**, especially in the back seat. The 3 Series isn’t a stretch-out luxury sedan; BMW offers those in the 7 Series and the 5 Series fits in between. But the new 3 shows that the format can be enlarged enough to provide more

comfort for rear passengers and cargo without edging into the medium-size class. The F30, as this platform is coded, is still compact, trim, agile.

- **More convenient, more luxurious.** New amenities include even more elegant interior design, standard iDrive and Bluetooth/USB connectivity, Keyless Go, improved cup-holders, bottle holders in the front doors, expanded climate-control functions, exciting new colors and materials, an auto-opening trunklid and many others.
- **Even more efficient.** The 3 Series has never been extravagant with resources. Yet BMW’s engineers and designers combined the new space and luxury with meaningful advances in efficiency: an especially fuel-efficient 328i engine, an 8-speed automatic transmission, automatic start/stop of the engine for stop-and-go driving, new Driving Dynamics Control with ECO PRO mode, electric power steering, Brake Energy Regeneration and subtly smoother aerodynamics.
- **Even greater agility.** Once again, BMW demonstrates that with careful evolution, greater comfort can be achieved even in a more agile vehicle. Systematic, targeted evolution of the Series’ acclaimed suspension system delivers both.
- **Further development of safety** via enhanced structural engineering.

Details of the new generation

General

- Essentially all-new, next-generation vehicles
- Wheelbase increased by 1.9 in. for greater riding comfort, increased rear-seat leg room and more cargo space
- Tracks up 1.2 in. front/1.7 in. rear for greater cornering power
- Length x width x height 182.5 x 71.3 x 56.3 in., vs. 178.8 x 71.5 x 55.9
- Curb weights minimally changed, despite the greater space plus advances in many areas of vehicle attributes

The Lines

- Strategy for offering customer choices in exterior and interior design, materials, overall vehicle character
- In addition to base models, each model could be specified in any of three Lines:
 - Sport
 - Luxury
 - Sport.

The Lines may not be mixed; their content is fixed, except that there are Line-specific detail choices and a wheel/tire upgrade option that is the same for all Lines.

Exterior design & function

- All-new body with side crease and hood contours similar to 5 Series, new “recessed” look to kidney grilles, LED taillights
- Xenon Adaptive headlights (standard 335i, optional 328i) add LED accent strip at top; position/parking lights and Daytime Running Lamps via LED luminous rings continue

1 – All-wheel drive.

- LED turn signals in exterior mirrors, replacing former flashers on front flanks
- Newly available Parking Assistant; rear-, side- and top-view cameras
- New wheel designs throughout; standard designs specific to each Line

Performance & efficiency

- All-new 328i engine, 4-cylinder unit with same power as previous 6-cylinder, greater torque, significantly higher fuel economy
- All models have Twin Scroll turbocharging, direct fuel injection, Valvetronic variable intake-valve lift – BMW's Twin-Power Turbo concept
- Largest practical diameters of exhaust pipes, for reduced back pressure
- Automatic Go – no key slot in dash, remote fob need only be inside vehicle to start
- Automatic engine start/stop for reduced fuel consumption in traffic; function display in tachometer
- 8-speed automatic transmission; enhances performance and fuel efficiency
- E-shift for automatic transmission, new to 3 Series
- Driving Dynamics Control – new to 3, includes ECO PRO mode for especially efficient driving
- More rigid front-end structure, for even more responsive handling
- Hood release operates entirely from inside vehicle (primary release 1st pull, secondary 2nd pull)
- Expanded use of lightweight steels in structure minimizes vehicle weight increase (or al-

lows modest decrease), enhancing both performance and efficiency

- Underbody fairing expanded for smoother airflow under vehicle, hence improved aerodynamics and higher fuel efficiency at highway speeds
- Suspension system evolved for greater agility and riding comfort; significantly greater tracks for even more confident cornering
- Electric power steering, also enhances fuel efficiency; Servotronic vehicle-speed-sensitive power assist also new
- “+1” standard wheel diameters: 328i 17-in. vs. previous 16-in.; 335i 18-in. vs. 17

Comfort & convenience

- Subjectively greater feeling of space for driver and front passenger; free-standing placement of iDrive control display contributes to this
- Greater front head room without moonroof, +1.9 in.; with moonroof +0.9 in.
- Increased steering-wheel adjustment range: 1.6 in. vertical/2.4 in. longitudinal, vs. previous 1.6/1.6
- 4-dial instrument cluster with all-new graphics, new phone and Driving Dynamics function indications in central digital display
- Front cupholders repositioned from dash to center console; greater stability
- Each front door includes holder for 1-liter beverage bottle
- Expanded storage spaces within reach of driver
- Further optimization of engine mounts for reduced interior sound level

- Rear-seat leg room +0.5 in.; head room +2.1 in. without moonroof, +0.3 in. with
- Easier entry/egress for rear passengers: wider door opening angle, greater opening width and height, more space between rear and front seats
- 40/20/40 split of folding rear seats, vs. 60/40 before
- Trunk volume increased by 2.9 cu ft.; folding rear seats expand effective cargo space (standard for '13)

Safety & security

- Front-end structure engineered for highest (5-star) ratings in U.S. and Euro NCAP crash tests
- “Force paths” newly engineered for even better distribution of crash-impact forces throughout body structure

Packages & options²

- Continuing packages, though with new content: Premium, Cold Weather
- New packages: Driver Assistance, Driver Assistance Plus, Dynamic Handling, Lighting, Technology
- Discontinued packages: Convenience, Value, Sport (replaced by Sport Line), M Sport (replaced by M Sport Line)
- New package contents, not previously offered in 3 Series:
 - Adaptive M Suspension, Variable Sport Steering (Dynamic Handling)
 - Heated rear seats (Cold Weather)
 - Rear-, side- and top-view cameras, Active Blind Spot Detection (Driver Assistance)
 - Lane Departure Warning, Speed Limit Info (Driver Assistance Plus)
 - Head-up Display (Technology)

- New stand-alone options:
 - Automatic and manual transmissions both listed as options in ordering system
 - Parking Assistant
 - Rear-view camera
- Changed stand-alone options:
 - Navigation option no longer includes iDrive, as iDrive is now standard
 - Anti-theft alarm system now standard on 335i, remains optional on 328i

What's new for 2013³

As of 7/12 production:

New models

- 328i xDrive – AWD version of 328i
- 335i xDrive – AWD version of 335i
- ActiveHybrid 3 – with BMW's new Full Hybrid 2.0 powertrain⁴

New standard equipment

- BMW Universal Transceiver, all models
- Auto-dimming interior and exterior mirrors, power-folding exterior mirrors, all models
- 8-way power front seats + driver's-seat/exterior-mirror memory, 328i models (already standard in 335i)
- Auto tilt-down of right exterior mirror for parking, 328i models (already standard in 335i)
- 40/20/40 split folding rear seats, all models

Changes shared with other Series

- Climate controls: “snowflake” symbol changed to “A/C”
- “CD” key at iDrive controller changed to “Media”

2 – As of model year 2013, but compared to previous generation in 2011.

3 – Compared to 2012.

4 – For brevity, Active Hybrid 3 will be referred to usually as AH3.

Revised Lines, packages & stand-alone options

Lines:

- M Sport Line added – includes 18-in. BMW M wheels (performance tires for RWD, all-season for xDrive models); sport front seats, specific interior trim, sport suspension (non-hybrid RWD models only), aerodynamic exterior treatment, Shadowline exterior trim, M sport steering wheel, Anthracite-color headliner
- Sport – new choice of upgrade all-season or performance tires; Fine Line Anthracite interior trim newly available; Adaptive M Suspension moved to new Dynamic Handling Package.
- Modern – Black Dakota leather with Dark Oyster piping now comes with all-black upper dash and steering wheel; interior trim changes from Pearl to Dark Pearl

Packages:

- Premium – deletes power front seats and mirror tilt-down (328i), auto-dimming mirrors (both carryover models); adds Satellite Radio with 1-year subscription (both carryover models)
- Dynamic Handling – new package; includes Adaptive M Suspension and Variable Sport Steering, both formerly stand-alone

- Lighting – new package, 328i models only; includes Adaptive Xenon headlights
- Technology – adds Online Information Services, Smart-phone Integration, BMW Assist, Enhanced Bluetooth and USB interfaces, BMW Apps
- Driver Assistance – adds Park Distance Control plus rear-, side- and top-view cameras (these features formerly in Parking Package, which is discontinued)
- Driver Assistance Plus – new package; includes Lane Departure Warning with new Forward Collision Warning, Speed Limit Info
- Premium Sound – discontinued; Harman Kardon audio system now stand-alone, Satellite Radio moved to Premium

Stand-alone options:

- Dark Walnut interior trim for 328i models, no Line required (standard in 335i and AH3)
- Active Cruise Control with Stop & Go, all models except AH3

Metallic exterior colors:

- Orion Silver, not available with M Sport Line
- Estoril Blue, available only with M Sport Line

3 Series Sedan models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 410-421.

328i Sedan

Only one model year after its debut as the all-new “entry” model, the 328i benefits from further refinement, expanded standard equipment, an available M Sport Line and detail updates to the innovative Lines. It’s as exciting as in 2012 – brimming with fresh and innovative style, engineering, technology, efficiency and driving pleasure. The 328i’s key features and attributes include:

Exterior design & function

- Front & rear body-color bumpers, air intakes and other details in Line-specific designs
- Air Curtain configuration of front bumper/spoiler
- Halogen free-form headlights
- Automatic headlight control
- Front foglights
- LED turn signals in exterior mirrors
- Rain-sensing windshield wipers
- Heated windshield-washer jets
- Ground lighting at door handles
- Welcome Light
- LED taillights
- Adaptive brakelights

Performance & efficiency

- 2.0-liter DOHC 16-valve inline 4-cylinder engine with aluminum construction, twin-scroll turbocharger, direct fuel injection, Valvetronic variable intake-valve lift and Double VANOS⁵ variable intake- and exhaust-valve timing, 240 hp/255 lb-ft., 0-60 mph in 5.7 sec. manual transmission/5.8 sec. automatic, EPA combined rating 26 mpg with manual or automatic
- Comfort Go starting (no ignition slot)
- Automatic start/stop function for engine

- 8-speed STEPTRONIC automatic or 6-speed manual transmission
- Double-pivot strut-type front suspension with aluminum components
- 5-link rear suspension
- Vehicle-speed-sensitive, energy-saving electric power steering
- Driving Dynamics Control – Comfort and Sport settings for engine response and steering assist; additional setting (Sport+) switches Dynamic Stability Control to Dynamic Traction Control mode. In vehicle so equipped, these settings also apply to automatic transmission and Adaptive M Suspension. ECO PRO mode for optimum fuel efficiency.
- 4-wheel ventilated disc brakes
- Brake Energy Regeneration
- 17 x 7.5 alloy wheels, Star Spoke design #393
- 225/50R-17 performance all-season tires
- Dynamic Stability Control
- Tire Pressure Monitor

Comfort & convenience

- Vehicle & Key memory with Personal Profile
- Multi-function remote control
- BMW Universal Transceiver
- Dual power/heated, power-folding exterior mirrors
- Auto tilt-down of right exterior mirror for reversing
- Auto-dimming interior and exterior mirrors
- Leather-wrapped tilt/telescopic steering wheel with fingertip cruise, audio and phone controls
- Dynamic cruise control

5 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

3 Series Sedan models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 410-421.

- 8-way power front seats + driver's-seat/exterior-mirror memory
- Comprehensive lighting amenities, including Ambiance Lighting
- Nets on front-seat backrests
- Accessory power outlets in center console rear
- Condition-Based Service system
- Leatherette upholstery
- Silver Matte interior trim
- Power windows with key-off operation, 1-touch open/close and anti-trapping function
- Dual-zone automatic climate control
- iDrive control system with direct-select menu keys and 8 Programmable Memory Keys
- AM/FM/HD/CD/MP3 audio system with Radio Data System, 9 speakers
- Bluetooth mobile-device interface & USB connectivity
- Cupholders, 2 front + 2 rear
- 40/20/40 split folding rear seats
- Floor mats, front and rear
- LED-illuminated trunk with net and retaining strap on right side, versatile net, two bag hooks, organizer tray in under-floor compartment

Safety & security

- Dual-airbag Supplementary Restraint System
- Front safety belts with automatic tensioners, force limiters and belt stoppers
- Front- and rear-seat Head Protection System
- Front-seat side-impact airbags
- Height-adjustable front-seat head restraints
- Front-seat Active Knee Protection
- Pathway Lighting
- Coded Driveaway Protection

Lines

- Sport, M Sport, Luxury and Modern Lines – see **The Lines – esthetics & features**

Packages & options

- Available packages:
 - Premium (Comfort Access keyless entry, Dakota leather upholstery, 4-way power front-seat lumbar support, 2-way power moonroof, Satellite Radio with 1-year subscription)
 - Driver Assistance (Park Distance Control, rear-view camera, side- and top-view cameras, Lane Departure Warning, Active Blind Spot Detection)
 - Driver Assistance Plus (Lane Departure Warning with Forward Collision Warning, Speed Limit Info)
 - Dynamic Handling (Adaptive M Suspension, Variable Sport Steering)
 - Lighting (Xenon Adaptive headlights)
 - Technology (Navigation system, Head-up Display, extended instrument display, BMW Assist, Enhanced Bluetooth and USB connectivity, BMS Apps, Smartphone Integration)
 - Cold Weather (retractable headlight cleaning system, heated steering wheel, heated front and rear seats, 40/20/40 split folding rear seats)
- Stand-alone options:
 - 6-speed manual transmission
 - Sport automatic transmission
 - Active Cruise Control
 - Automatic High Beams
 - Parking Assistant
 - Park Distance Control
 - Rear-view camera

- Heated front seats
- Dakota leather upholstery
- Dark Burl Walnut interior trim
- 2-way power moonroof
- Navigation system
- Harman Kardon surround-sound audio system
- Power rear-window and manual rear side-window sunshades
- BMW Apps
- BMW Assist + Enhanced Bluetooth/USB connectivity
- Anti-theft alarm system

328i xDrive Sedan

Newly for 2013, both regular Sedan models (not the ActiveHybrid) are offered in xDrive form, enhancing their bad-weather traction with BMW's excellent AWD system. Each model, the 328i xDrive here and the 335i xDrive, have the same equipment profile as their RWD⁶ counterparts except that sport suspension and performance tires are not standard with their Sport or M Sport Lines. Acceleration and EPA mileage are affected slightly; the 328i xDrive is available only with automatic transmission. The xDrive's distinctions from the RWD model are:

- Newest generation of xDrive system
- DSC system adds Hill Descent Control
- Front suspension all-steel, vs. 328i's aluminum components
- EPA highway mileage 1 mpg lower than RWD model, but combined EPA mileage same
- No sport suspension, same-size wheels and all-season tires in Sport and M Sport Lines
- xDrive badge on trunklid

335i Sedan

As the upmarket RWD model, the 335i embodies higher performance, esthetic distinctions and a wide range of added value and features over the 328i. Here's how it differs:

- Xenon Adaptive headlights with luminous rings as position/parking lights and Daytime Running Lamps, LED accents, cornering lights
- Exhaust outlets at left and right side of vehicle, vs. left side on 328i
- TwinPower Turbo 6-cylinder engine, technology similar to that of 328i engine but 6 cylinders vs. 4, 3.0 liters vs. 2.0; 300 hp/300 lb-ft./23 mpg combined EPA rating with manual transmission, 26 mpg with automatic
- 18 x 8.0 alloy wheels, Star Spoke design #396
- 225/45R-18 performance all-season run-flat tires⁷
- Additional standard features:
 - 2-way power moonroof
 - Dark Burl Walnut interior trim
 - Pearl-gloss decorative accents on instrument panel
 - Anti-theft alarm system

6 – Rear-wheel drive.

7 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

3 Series Sedan models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 410-421.

- Packages and options as for 328i, except:
 - Premium Package deletes moonroof, because standard on 335i
 - No Lighting Package, as its contents are standard
 - Stand-alone options omitted because features are standard: moonroof, wood interior trim, alarm system

335i xDrive Sedan

This model's distinctions from its RWD 335i counterpart are parallel to those of the 328i xDrive vs. 328i, except that the 335i xDrive is available with manual transmission. (In Online Ordering, it does default to automatic.) Additionally:

- 0-60-mph acceleration is significantly quicker than for RWD model – 4.8 sec. vs. 5.1 with automatic transmission, 5.1 sec. vs. 5.4 with manual
- EPA combined mileage ratings differ as follows: RWD model manual/automatic 23/26, xDrive 23/24

ActiveHybrid 3

BMW now offers its new Full Hybrid 2.0 power concept in three Series – 7, 5 and 3. Of these the AH3 is the most attainable, most compact and likely the one with the highest fuel economy (25 mpg city, 33 highway, 28 combined). Except for its hybrid powertrain, its equipment profile is essentially like that of the combustion-engine, RWD 335i. Here's how it does differ from that more familiar performance model:

Exterior design & function

- Satin Aluminum exterior trim – matte-finish side-window black framing, vs. 335i's matte black
- ActiveHybrid 3 badge on C-pillars and trunklid

Performance & efficiency

- New-generation full-hybrid system combines 300-hp TwinPower Turbo 6-cylinder engine (as in 335i models) with 55-hp electric motor integrated into special version of 8-speed automatic transmission (manual transmission not available); maximum system power 335 hp
- Compact lithium-ion high-voltage battery pack, carried under trunk floor (allows folding rear seats, which are standard in this model as in other 3 Series Sedans)
- Cargo capacity reduced approximately 19% (by European measurement standards)
- All-electric driving at speeds up to 47 mph in ECO PRO mode; all-electric range of 2.5 miles at 22-mph average speed
- Hybrid-specific auto start-stop function; shuts off engine when vehicle is stopped as on pure combustion-engine models, adds "coasting" mode that shuts off engine during deceleration (in ECO PRO mode, up to 100 mph)
- Brake Energy Regeneration specially engineered to maximize regeneration in hybrid system
- Intelligent Energy Management System, integrated with available Navigation system, enables proactive analysis of driving conditions to conserve fuel
- Dynamic Stability Control with special hybrid functions

- Driving Dynamics Control with special hybrid functions, especially in ECO PRO mode
- Special instrumentation with hybrid-specific functions: high-resolution extension of instrument cluster, 640 x 160 pixels, graphic display of current fuel economy in tachometer, specific Check Control messages, Condition-Based Service readouts. (This instrumentation is included with optional Navigation system in other models.)

Comfort & convenience

- Air conditioning can be activated remotely, at up to about 100 feet

Lines, packages & options

- Optional wheel design (Streamline #419) unique to AH3; otherwise, wheel options same as RWD 335i
- M sport suspension not included in Sport and M Sport Lines (RWD 335i: is included)
- Active Cruise Control not offered

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

Exterior design & function

The look: dynamics, sleekness, precision

The new 3 Series Sedans present a fresh interpretation of BMW's iconic compact sports sedans. Incorporating typical BMW proportions – short front overhang, elongated hood, set-back greenhouse, long wheelbase relative to overall length – the new shape creates a feeling of motion even when the vehicle is stationary. Crisp lines traversing taut surfaces dominate the overall look and are a clear expression of – again typical BMW – sporting flair.

At the front: fresh face, LED lighting technology. With its traditional “kidneys” grille (two symmetrical halves), the front end is almost as horizontal in character as those of sports cars like Z4 and Z8. In recent years, the kidneys have been a forwardly prominent centerpiece and clearly separated from the headlights. In the new 3, they remain the centerpiece, but there is now a connection, a flow, from the grilles to the headlights. The grilles are so shaped that they appear to be recessed into the front-end surfaces and, as the outward chrome surface projects back into the vehicle, the front lighting unit narrows down to meet it.

Headlight technology still shows model distinctions. On 328i models, both low (outboard) and high beams (inboard) are halogen. Xenon Adaptive headlights – standard on 335i and ActiveHybrid 3, optional on 328i models – add style and function via LED luminous rings, accent strips across the top, position/

parking lights and turn signals.

Further distinctions are offered by the four Lines. Though the full-width lower opening is shaped the same with the Sport, Luxury and Modern Lines, materials, colors and design details of the opening's inner surfaces are quite distinct; the M Sport Line has a completely different bumper/spoiler design. See **The lines – esthetics & features table** on page 400.

In profile: In a thoughtfully composed blend of tradition and new, the profile is familiar, yet the roofline's flow into the rear deck is sleeker and smoother – while adding head room. Visible here, as at the front, are dual character lines, one flowing forward from the windowsills, the other from the A-pillars as on other recently introduced BMW Series. Another contemporary BMW signature is the line starting behind the front wheelwells and flowing all the way into the taillights. Finally, a prominent ridge at the bottoms of the doors lends a feeling of strength. Note that this restrained set of character lines does not create the convoluted side appearance so evident in many competitive models.

There is a specific standard wheel design for each Line, always in 18-in. same-size dimensions with 225/45 tires⁷ for Sport, Luxury and Modern Lines. The M Sport Line comes with 18-in. equipment in differentiated front/rear sizes for RWD models, same-size for xDrives with differentiated optional. 335i and AH3 models offer upgrade 19-inchers in differentiated front/rear sizes. Standard wheels are 17-in. same-size on 328i models and

18-in. on 335i/AH3 models, with two distinctive Star Spoke designs for AH3.

At the rear. Again, a masterful blend of traditional and new: BMW's signature L-form taillights appear in a new, wider form reaching well into the trunklid and featuring LED technology for the taillight function. (Brakelights and turn signals are via bulbs.) The trunklid top edge is an integral spoiler, notably prominent in the profile view too. A feeling of lowness and width testify to the new 3's innate sportiness, while a corner crease picks up the lower body line's flow.

Aerodynamics: detail evolution serves EfficiencyDynamics

Though the measured drag coefficients (C_D) are unchanged, real-world aerodynamic efficiency is enhanced by –

- Air Curtain flow from the front spoiler into the front wheelwells, reducing turbulence
- extensive underbody fairing, under the engine compartment and along the “tunnel” that accommodates the driveline and exhaust system
- refined lower lips at the front spoiler's outer extremities
- underbody fairing at the differential
- refined antenna-fin shape at rear of roof
- evolved shape of rear wheelwells: larger radius, smoother airflow
- the integrated trunklid spoiler.

Altogether, though there are variations among the various engine types to be offered in the F3x 3 Series, if you put one on a lift, you will observe an impressive extent of underbody fairing that signifies the BMW

engineers' intense attention to aerodynamics.

Performance & efficiency

N20 2.0-liter DOHC 16-valve TwinPower Turbo 4-cylinder engine with Valvetronic (328i models)

This new-generation 328i engine offers highly fuel-efficient yet also lively performance, while leaving the role of higher-performance alternative to the 335i models with their 6-cylinder engine. Its key features and attributes are:

- **4 cylinders** – first 4-cylinder BMW engine offered in the U.S. since 1998; applies BMW's latest engine technology to achieving a new level of fuel efficiency while maintaining typical BMW performance.
- **Valvetronic variable intake-valve lift**, replacing the traditional throttle and enhancing power, efficiency and response to the driver's demands. A distinctive BMW engine feature.
- **Twin Scroll turbocharger**, providing a hearty performance boost in combination with Valvetronic. Another distinctive BMW engine feature.
- **Direct fuel injection** contributing to both performance and efficiency.
- **Twin balance shafts**, BMW's first application of a feature that lends a 4-cylinder engine smoothness approaching that of more cylinders.

7 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

"Bottom lines" for the customer: torque, power, performance, fuel efficiency. Here we compare to the naturally aspirated⁸ 6-cylinder of the previous 328i: So: Thanks mainly to the more

	2011 328i Sedan	2012-13 328i Sedan
Power @ rpm, hp	230 @ 6500	240 @ 5000-6000
Torque @ rpm, lb.-ft.	200 @ 2750	255 @ 1250-4800
0-60 mph, sec., manual/automatic	6.3/6.9	5.7/5.8
EPA mileage, city/highway/combined:		
Manual	18/28/22	22/34/26
Automatic	18/28/22	23/33/26
Engine weight, lb.	355	324
Vehicle curb weight, lb., man./auto.	3362/3428	3360/3410
Weight distribution, front/rear, %:		
Manual	50.5/49.5	49.4/50.6
Automatic	51.1/48.9	50.0/50.0

abundant torque, delivered over a wider rpm range as is typical of BMW's turbo engines, the new 328i Sedan can out-accelerate its lively predecessor. Clearly, fuel efficiency is also a benefit of the new engine. So is weight distribution, which is affected by the 4-cylinder engine's more rearward center of gravity.

For full details on this advanced engine, see BMW features.

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (335i models & ActiveHybrid3)

Upon its 2011 debut, this engine was a major evolution of the previously introduced N54 twin-turbo 6-cylinder engine. The N55 achieved the same 300-hp/300-lb.-ft. performance via the following principal changes:

- A single Twin Scroll turbo-charger instead of the N54's twin single-scroll turbos.
- Valvetronic variable intake-valve lift, as in the previous N52 engine and (now) N20 4-cylinder. This was the first time BMW combined Valve-

tronic and turbocharging.

- A different type of direct fuel injection, operated via solenoids instead of the N54's piezo injectors.

By now the N55 is familiar, delivering its 300/300 performance in the 1, 3 and 5 Series, X1, X3, X5 and X6; and 315 hp/330 lb.-ft. in the 6 and 7 Series.

The N20 4-cylinder and N55 6-cylinder share power concept and major engineering attributes listed above, but differ in their block and cylinder construction. And with its inherent smoothness, the 6-cylinder engine does not have either the balance shafts or the centrifugally compensated flywheel.

With its 300 lb.-ft. of torque available all the way from a low 1300 to a high 5000 rpm, and power output peaking at 300 hp @ 5800 rpm, the 6-cylinder endows 335i models with an appropriate performance increment over the 328i 4-cylinder: 335i RWD model achieves 0-60 mph in 5.4 sec. with manual transmission, 5.1 with automatic, vs. 5.7/5.8 for the 328i.

Though this engine is essentially as it was in the '12 335i, current 335i models benefit from the new auto start/stop function, refined aerodynamics and other refinements such as the 8-speed automatic. As a result, the manual RWD version earns impressive EPA ratings of 20 mpg city (up 1 mpg over '11), 30 highway (+2) and 23 combined (+1). Naturally the automatic version makes even bigger gains, with 23/33/26 mpg, up from the previous 19/28/22!

Full Hybrid 2.0 power system (ActiveHybrid 3)

The ActiveHybrid 3 features BMW's new Full Hybrid 2.0 power system, first seen in the ActiveHybrid 5 in '12 and now also powering the ActiveHybrid 7. Here this advanced system is at its most agile and fuel-efficient, thrusting the trim AH3 from rest to 60 mph in a spectacular 5.2 sec. and delivering equally impressive EPA ratings of 25 mpg city/33 mpg highway/28 mpg combined. For a detailed presentation, see the 5 Series section of Fast Facts 2012, or the BMW features section of this edition.

8-speed STEPTRONIC automatic transmission (all models)

Having already appeared in other models, this brilliant automatic made its 3 Series debut with these new-generation Sedans. And in a departure from past BMW practice, in the Online Ordering system, both transmissions are listed as options. (The 328i xDrive and AH3 come only with automatic.)

With either engine (328i, 335i), this ultimate automatic brings smooth shifting, sportiness

and efficiency to a new level of perfection. Compared to the previous 6-speed, the 8-speed's "taller" cruising gears further reduce fuel consumption and carbon-dioxide emissions while promoting quietness. Its wider spread of ratios from lowest to highest gear enhances acceleration and response across the range of driving speeds.

This aspect of the new 3 Series, too, belongs to the BMW Efficient-Dynamics rubric: the 8-speed transmission plays a significant role in the remarkable EPA mileage ratings of the new models. For further details on this ultimate powertrain achievement, see BMW features.

6-speed manual transmission (328i RWD & 335i models)

In the 328i this is the recently developed Type I-35-Turbo. "350" signifies its 350-Newton-meters torque capacity, which approximates the N20 engine's 255 lb.-ft. More than ever, this unit features especially high mechanical efficiency.

335i models continue with the Type K 6-speed manual, also a recent development. K is designed to accommodate BMW's "middle" engines' torque output while being more compact and lighter than the Type G of BMW's most powerful models. It incorporates internal refinements for optimized efficiency, ease and precision of shifting, and quiet operation.

8 - In a "naturally aspirated" engine, air is drawn into the engine by the pistons' downward, or "suction," stroke. By contrast, a supercharger or turbocharger compresses and supplies the engine's air in what is known as "forced induction."

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

Driving Dynamics Control with ECO PRO mode (all models)

The Driving Dynamics Control, familiar from other models, appears here for the first time in the 3 Series. As in its other applications, DDC provides the driver multiple choices of vehicle dynamics. Settings with an asterisk (*) apply only to vehicles with M Adaptive Suspension, also new to the 3 Series.

Comfort – normal settings for engine response, suspension* and Dynamic Stability Control (DSC).

Comfort+ – mode with enhanced comfort.

Sport – with three “sub-choices,” programmable within iDrive on a menu that pops up when the driver selects Sport with the console control. Once this choice is made, it is the one activated when Sport is selected with the DDC:

- **Sporty driving with optimized suspension** – sporty engine and suspension*, DSC normal
- **Optimized suspension** – sporty suspension*, normal engine and DSC
- **Sporty driving** – sporty engine, normal suspension* and DSC.

Sport + – engine and suspension* settings as in Sport, plus DSC with reduced intervention (Dynamic Traction Control setting).

Given the 3 Series’ expressly sporty character, some of these differences are calibrated for especially crisp effect; one is an immediate change in engine torque when changed from Comfort to Sport. Changes in the displayed settings also contribute to this perceptibility of the change from one mode to the other.

Additionally, as in the other Series applications, there’s a DSC switch (with graphic labeling) that operates in the usual way: short push for reduced DSC intervention, longer push deactivates DSC except ABS.

Upshift indicator

In vehicles with manual transmission, this indicates in the central digital display when for best fuel efficiency, the driver should upshift to the next higher gear. An up-arrow and the gear to be selected are shown.

The principle here is: If the engine can provide the necessary power for a certain driving condition (such as a constant speed or a certain level of acceleration), it can do so more efficiently in a higher gear – i.e. 4th instead of 3rd, 5th instead of 4th, etc. There is no benefit to being in a gear that runs the engine at a higher rpm than necessary.

Suspension system: meticulous evolution of an acclaimed concept

As most auto-aware people know, the 3 Series is the recognized paragon of sports-sedan road manners. In its June ‘12 issue, *Road & Track* raved that “On turn-in, the 328i’s wheel writhes as a direct conduit to the tread blocks, the chassis takes a set like Djokovic anticipating the return of serve, and the gearbox drops two cogs for a meat-of-the-powerband corner exit.”

Double-pivot strut-type front suspension

Retaining the established system, which features two lower arms combined with the spring/shock-absorber struts, BMW engineers gave it their best

evolutionary efforts. The goal: to achieve a more refined ride, while at the same time enhancing these cars’ legendary agility. This involved:

- **Aluminum components:** forged-aluminum lower arms and wheel carriers⁹. Additionally, brake calipers and shields are of aluminum. All these components are unsprung weight, meaning they move up and down directly with road irregularities. Making them of aluminum (instead of steel) makes them do so with suppleness, keeping touch with the road even when it’s rough. Benefit: riding comfort and handling/agility.
- **Newly refined rubber bushings.** Further development of these critical elements’ elastokinematic behavior contributes (again) to both riding comfort and handling precision. New is triple-path transfer of dynamic forces into the vehicle structure, a highly sophisticated factor for seemingly (but not) simple rubber elements.
- **Reduced-friction balljoints and wheel bearings.** More detail refinement of an outstanding system. Reducing the friction in suspension components helps them get closer to the ideal alliance of comfort and precision.
- **Wider track.** Up 1.2 in.; always a positive influence on handling ability. Yet the new 3s are no wider overall.
- **All this plus improved crash behavior.** Any new BMW model is evolved toward greater crash safety. The front subframe (which carries the suspension, engine and other major systems) plays a role in

this, forming a greater part of the energy-absorbing scheme of the vehicle’s front end. Its role in keeping road noise out of the body structure has also been enhanced.

5-link rear suspension

This system, too, is retained in its essence while being refined in detail:

- **Fine-tuning of springs, bushings and bearings,** parallel to what was done at the front. In particular, the wheel bearings’ running friction has been reduced.
- **Aerodynamic fairing** just ahead of each side’s suspension links, to reduce aerodynamic lift of the vehicle, thus improving stability at speed. Attention to detail!
- **Wider track.** Up 1.7 in., even more so than at the front.

This is not the same 5-link system as in the 5, 6 and 7 Series; instead, it is specifically engineered for the 3 Series. It has been retained because it incorporates –

- Not only the exceptionally wide track, but also very widely spaced mounting points of its subframe to the main structure. In turn, this makes for excellent system stability plus effective noise suppression, rear-seat space and a wide loading area for the trunk.
- A highly rigid subframe, which itself also contributes to system stability – namely consistent suspension operation that supports the 3 Series’ remarkable combination of handling agility and riding comfort.

9 – On xDrive models, these components are of forged steel for extra strength to accommodate power-transmission forces.

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

M Sport suspension

The classic M Sport suspension, included with the Sport and M Sport Lines of RWD 328i and 335i models, tunes the brilliant F30 suspension system more toward sporty handling, a bit less toward a comfortable ride, in the traditional manner: firmer springs and shock absorbers and a 10-mm/0.4-in. lowering of the vehicle all around.

First time on 3 Series:

Adaptive M Suspension

Electronically controlled suspension is an established feature on BMW's larger Series, M models, Z4 and Sports Activity models; it's new to the 3 Series. Now available via the Dynamic Handling Package, the version here is Adaptive M Suspension, which is also offered on Z4s. Appropriate: like the Z4, the 3 Series is an especially sporty vehicle line, right from the tires up.

All versions of BMW's electronically controlled suspension systems are described in detail in **BMW features** under their specific version names.

Electronic limited-slip differential

As a function of the Dynamic Stability Control system, this sporty feature first appeared on the 1 and 3 Series, and is now standard on most BMW automobile models. Engaged when the driver purposely de-activates DSC, it simulates a traditional mechanical limited-slip differential: by selectively applying the inside rear wheel's brake during cornering to hinder wheelspin and thus transmit a higher proportion of the driving torque to the outside wheel. As that wheel

has more traction, this enhances the car's cornering capability.

Not intended for driving on public roads.

Steering systems

Two major evolutions occur in the new 3 Series' steering system. One is the transition to electric assist (EPS = electric power steering), the other the offering of optional Variable Sport Steering.

Standard steering. The 3 Series' steering attributes are legendary – quick, precise, perfectly reflecting what's happening at the tire-to-road interface, a key element of the joy of driving these vehicles. "If the definition of good steering is that which allows the driver to place the car exactly where desired, the 335i's still got it," opined *Car and Driver* in its April '12 issue. "Its clarity is undimmed by the switch to electric assist..."

In developing the new Series, BMW engineers wanted to reduce the steering's power requirement. Until now, 3 Series assist has been purely hydraulic: an engine-driven hydraulic pump, running (and thus consuming a bit of engine power) all the time.

The challenge was to reduce this power draw, and thus fuel consumption, while maintaining the legendary, indeed brand-defining, attributes.

The EPS mechanism is an integral element of the front subframe's rigidity. Yet this very strength, which implies rigidity that could exacerbate vibration and harshness, was countered by the engineers in their detail development of mountings and bushings. For precise, direct application of the assist to the

rack-and-pinion steering gear, the servo motor that delivers the assist is mounted parallel to, and adjacent to, the gear.

Additionally, and brand-new to the 3 Series:

Servotronic varies steering assist according to vehicle speed, with maximum assist in parking and minimum at highway speed. This is ideal for around-town driving ease, yet precision and road feedback at speed. Demonstrate to your prospects how BMW has achieved the seemingly impossible: making a celebrated steering system even better – and more energy-efficient too.

Variable ratio as well. As in the 5, 6 and 7 Series, a variable ratio – the number of degrees the steering wheel must be turned for each degree of steering angle at the wheels – is newly part of the 3 Series' standard steering. The overall ratio varies from 15.1:1 at the straight-ahead position to 10.4:1 at the outer locks.

Variable Sport Steering, now part of the Dynamic Handling Package for all models, features a more widely variable ratio. It is not Active Steering, which electromechanically varies the ratio according to vehicle speed. Instead, VSS varies the ratio via distinct profiling of the rack and pinion's gear teeth.

The ratio is at its maximum ("slowest") of 14.5:1 with the steering wheel in its straight-ahead position. Slightly quicker than the standard 15.1:1, this moderate ratio promotes a feeling of stability. Then, as the driver turns the steering wheel outward to round a curve, turn a city corner, do a U-turn or

make a parking maneuver, the ratio progressively decreases to a minimum ratio of a very quick 7.7:1 with the steering wheel turned 100° in either direction. From this point out to the locks – i.e. the greatest steering angle – this "quick" ratio is maintained. The result is less turning of the steering wheel for these maneuvers – thus greater agility and ease of maneuvering. And this option is significantly less costly than the Active Steering offered in BMW's higher-line models. Described in more detail in **BMW features**, VSS is also offered on the X3.

4-wheel ventilated disc brakes

Like their predecessors, indeed all current BMW models, the new 3s come standard with 4-wheel ventilated disc brakes amply dimensioned to match braking power with performance power. Advanced braking features also include:

- Weight-saving aluminum/cast-iron composite front brake rotors, which not only reduce unsprung weight but enhance front/rear weight distribution. See **BMW features** for more on this concept and its benefits.
- Start-off Assistant, briefly holding the brakes to prevent rollback after the driver releases the pedal to start off from a standstill
- Geomet coating of brake rotors (discs) to minimize rusting
- The entire range of supplementary braking features listed in **BMW features** under **Dynamic Stability Control**.

Yet any listing of braking features as such fails to capture

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

the magic of how BMW brakes respond to the driver's foot on the brake pedal. More to the point is how BMW evolves an important brand value that elicits comments like this from *Car and Driver's* 10BestCars awards (January '12), to which the 3 Series was named for the 21st consecutive year: "You don't notice the seats, the steering, the suspension, or the brakes because everything feels natural. Everything feels right."

Brake Energy Regeneration (all models)

The 3 Series Sedans join most other current BMW models in adopting this meaningful element of BMW's EfficientDynamics initiative as a standard feature.

Conventionally, a car's alternator runs continuously and thus charging is always available. With Brake Energy Regeneration, it charges only when the vehicle is decelerating or braking; otherwise, it freewheels, drawing virtually no power from the engine. An electronically controlled clutch, similar to that used with the air-conditioning compressor, engages and disengages the alternator.

The Brake Energy Regeneration of non-hybrid models is explained in detail in **BMW features**. A more elaborate system of regenerative braking appears in the AH3; this is described under **BMW Full Hybrid 2.0 power system**, also in **BMW features**.

A more efficient differential

In making vehicles more fuel-efficient, every little bit counts. The differential is a relatively small, but essential element of

any motor vehicle's transmission of power from the engine to the wheels. A rear-wheel-drive vehicle has a single differential between the rear wheels, turning the power flow 90° and out to the wheels; it also allows a speed differential (hence the name) between the outer and inner wheels when rounding curves.

The 3 Series rear differential gains greater efficiency via –

- new, lower-friction metals and construction details
- improved lubrication
- a "lighter" (lower-viscosity) oil.

Wheels and tires: 17- or 18-in. standard, 18- or 19-in. available; evolved run-flat tires across the board (all models)

Like most current BMWs, all 3 Series models come standard with run-flat tires. Compared to their predecessors, all models feature "+1" standard equipment: 17-in. on 328i, vs. 16-in. before; 18-in. on 335i models, vs. 17 before; 18-in. also on AH3, Sport, Luxury and Modern Lines come standard with the 18-in. size – all with performance all-season tires.

With the M Sport Line, RWD models get 18-in. wheels and performance tires in front/rear differentiated sizes; xDrive models get same-size 18-in. wheels and performance all-seasons, but the 18-in. front/rear differentiated equipment is available as an upgrade. 19-in. wheels and performance tires in front/rear differentiated sizes are available as an upgrade to all Lines on 335i/AH3 models in two styles: one for Sport, Luxury and Modern, the other for M Sport.

Beyond this, two important types of evolution are represented in the 3 Series' tires, whether performance all-season (so-called because of the newly standard "V" speed rating) or the "summer" performance tires that are available as upgrades to the three Lines. These are:

- **Better riding comfort.** Having previously sacrificed some riding comfort for their run-flat capabilities, they are now essentially equal to "conventional" tires in terms of how they deal with road irregularities.

- **Lower rolling resistance,** achieved via optimization of the various tire elements – tread, internal belts, sidewalls, shoulders, overall carcass – in terms of their material mixes and production processes. Thanks to this, the tires' "rolling resistance" – energy they consume as they roll – has been reduced about 15%. This is significant in terms of vehicle fuel efficiency.

The table below shows the available wheel-and-tire combinations.

Model & version	Wheel size & design	Run-flat tires ⁷
328i standard ¹⁰	17 x 7.5 Star Spoke #393	225/50R-17 performance all-season
335i ¹⁰ , AH3 standard	18 x 8.0 Star Spoke #396	225/45R-18 performance all-season
AH3 Sport, Luxury & Modern Lines upgrade	18 x 8.0 Streamline #419	↑
Lines ¹¹ :		
Sport Line standard	18 x 8.0 Double Spoke #397	↑
Luxury Line standard	18 x 8.0 Multi-Spoke #416	↑
Modern Line standard	18 x 8.0 Turbine #415	↑
M Sport Line, xDrive models	18 x 8.0 M Double Spoke #400M	↑
M Sport Line, RWD models; M Sport Line upgrade, xDrive models	18 x 8.0 front/18 x 8.5 rear M Double Spoke #400M	225/45R-18 front / 255/40R-18 rear performance
Sport, Luxury & Modern Lines upgrade, 335i models & AH3	19 x 8.0 front/19 x 8.5 rear Double Spoke #401	225/40R-19 front / 255/35R-19 rear performance
M Sport Line upgrade, 335i models & AH3	19 x 8.0 front/19 x 8.5 rear M Double Spoke #403M	↑

7 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

10 – Including xDrive model.

11 – All models unless otherwise noted.

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

Comfort & convenience

Like the exterior, the new 3 Series interior is at once all-new and typically BMW. And of course contemporary, exciting, thoroughly functional and ergonomic, innovative in its use of materials and technologies, and representing true progress. Increased rear-seat space is an important functional aspect; greater cargo space and utility are another. Finally, the four Lines each offer our customers a distinct interior theme.

The driver's workplace: always a 3 Series strength, now better than ever

In the BMW tradition, the instrument cluster, dash, center stack and console are configured in a driver-oriented way. The basic elements are:

- **Driving** – the area directly in front of the driver, dominated by a new 4-dial instrument cluster, leather-wrapped steering wheel with multi-function controls and available shift paddles, and controls grouped to be accessible only (or primarily) to the driver. Not in front of the driver, but an essential control in its traditional 3 Series form: the pull-up handbrake. The E-Shift automatic-transmission selector makes its 3 Series debut, and the Lighting Control Center to the left of the steering column is expanded to include newly available Driver Assistance Systems.
- **Comfort/infotainment** – center stack and console, dominated by audio and climate controls but also offering eight programmable memory keys; new

cupholders (formerly in dash), closable storage compartment with accessory power outlet, and the now-standard iDrive control with direct-select menu keys. Farther back are the padded center armrest and, below it, a spacious and lighted center compartment containing the also newly standard iPod/USB input connections.

- **iDrive** – newly standard, positioned in a free-standing panel similar to that in the 6 Series. 6.5-in. (diagonal) standard size, 8.8-in. with optional Navigation or standard in AH3.

Steering wheels: four styles, all 3-spoke

Sporty 3-spoke, leather-wrapped steering wheels have become BMW's standard; the 3 Series continues this "new tradition." The standard wheel, with a 375-mm/14.8-in. rim, carries multi-function controls on its cross-spoke: cruise on the left; audio, phone and Voice Command at right.

Next up is the Sport wheel, included in Sport, Luxury and Modern Lines. Carrying the same multi-function controls, this wheel enables sportier steering via a more compact rim (369 mm/14.5 in.) with thumb rests, and looks sportier too thanks to galvanic trim. With the Sport Line, red stitching provides an added accent.

Sportiest is the M Sport wheel, included with the M Sport Line: Unlike the others, it has a round center, accented by a slender galvanic "spider." Though dimensioned similarly to the Sport wheel, it has stitching in the famous M colors and adds an

M logo where the bottom spoke meets the rim.

An extra measure of sportiness is available via the optional Sport automatic transmission, which includes partially galvanic-finished shift paddles; this is available in combination with the Sport or M Sport Line.

All wheel styles include expanded adjustability: up from 40 to 60 mm (2.4 in.) longitudinally, still 40 mm (1.6 in.) vertically. In keeping with the 3 Series sporty/elemental character, the adjustment remains manual.

The new instrument cluster

Wider than before, the cluster goes from a 2- to a 4-dial configuration, devoting one to the fuel gauge and adding an oil-temperature gauge "by popular demand," one might say. The momentary fuel-economy readout remains at the bottom of the tachometer, adding the blue Brake Energy Regeneration extension and a READY-OFF indication at the left to assure the driver that, when the engine is shut off by the Automatic Engine Start/Stop function, the vehicle is ready to go. Additionally, ECO PRO appears in the tachometer face when that mode is selected. In the AH3, this readout band is all-blue and divided into CHARGE and POWER segments.

As in all recent BMW models, a central digital display sits between the speedometer and tachometer dials, reading out information like On-Board Computer (ambient temperature, cumulative fuel economy, date and time), main/trip odometers and Condition-Based Service reminders. An extended display,

extended to the right and overlapping the tachometer, presents an expanded range of information; this is included in 328i and 335i models with the optional Head-up Display, and standard in the AH3.

Upholstery, colors and contours

In the standard interior upholstery-and-colors scheme, the upper dash surfaces are a new, 3 Series-specific leatherette grain in Black or, with Modern Line, Dark Oyster. The lower surfaces appear in a choice of four colors: Black, Venetian Beige, Oyster or Saddle Brown, depending upon the chosen upholstery color.

Here too, the surface is a new, 3-specific grain. The console is clad in Black, Venetian Beige or Oyster according to the interior color.

Two new features mark the upper dash: the free-standing iDrive display, and a centerfill audio speaker positioned forward of it. Then, in another fresh design detail, there's a contour "swinging" asymmetrically down from the right side of the center stack to the console. Once at the console, this contour joins with a spear-like stretch of the chosen trim material containing the iDrive controller and its menu keys. Door panels are in the lower color, which is also the upholstery color.

Abundant storage possibilities

Storage spaces are more extensive than ever. The lockable glove compartment's door is "damped" to open smoothly – this adds tactile quality. Inside, there's a USB port to facilitate the standard Mobile Profile capa-

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

bility. The console compartment, whose lid is the center armrest, is spacious and illuminated. And on the driver's side, there's a small additional compartment, unless the vehicle is equipped with the Driver Assistance Package.

There's more, much more. For details, see "interior storage provisions" in **standard & optional features**.

Upholstery: innovative colors and materials, many choices

The new 3 follows BMW's time-honored practice of standard leatherette upholstery in two colors – Black and a new-to-3-Series Venetian Beige also found in the 5 Series. But there's an extra choice here: Black with Red Highlights, the only leatherette color for, and available only with, the Sport Line.

Dakota remains the leather choice, and among the Lines there's a range of choices never before seen in the 3 Series:

- Available only in "base" models, thus not with any of the Lines –
 - Venetian Beige
 - Black
- Available only with Sport Line –
 - Black with red piping
 - Everest Gray with black piping
 - Coral Red with black piping
- Available only with Modern Line –
 - Oyster with Dark Oyster piping. This combination gets an all-black upper dash and steering wheel for '13.
- Available only with Luxury Line –
 - Saddle Brown with exclusive stitching and black contrasts
 - Venetian Beige with exclusive stitching and beige contrasts
 - Black with exclusive stitching.

With the Luxury Line upholstery

styles, the color distribution varies widely between the Saddle Brown and Venetian Beige schemes, showing BMW's usual meticulous attention to color matching and contrasting. For example, with Saddle Brown, Black appears in a variety of places where Venetian Beige stays monochromatic; and the upper areas (pillars, headliner, sun visors) are Oyster or Everest Gray depending on the upholstery color.

Interior trim: just as varied as the upholsteries

Like the upholsteries, interior trim takes on wider variety than before, mainly because of the Lines. So let's begin with the main interior trims that go with the three Lines:

- **High-gloss Black** – Sport Line. A bold, unconventional material that goes well with the Sport Line's character.
- **Brushed Aluminum** – traditional sporty/technical character; alternate to High-gloss Black in Sport Line, or to Dark Pearl in Luxury Line.
- **Aluminum Hexagon** – standard in M Sport Line.
- **Dark Burl Walnut** – alternate in M Sport Line, a traditional BMW look.
- **Anthracite wood** – Available in Luxury, Sport and Modern Lines. A contemporary gray-tone wood.
- **Burl Walnut wood with inlays** – a more traditional and luxurious alternate to the Luxury Line's Anthracite wood.
- **Dark Pearl** – Modern Line, with a different application scheme from other main trims, on the dash, door pulls and center console. **Brushed Aluminum**

may be specified as an alternate, appearing in the more usual places on dash, doors and console.

- **Fine Line Pure textured wood** – brashiest of the woods, medium-brown in tone and with a grain you feel as well as see. Modern Line only.

Then the "accent" or "finisher" materials, which are in addition to the main trims:

- **Pearl finisher** – standard with Modern Line, appearing as a dash accent. Also in non-Line 335i models.
- **Pearl-gloss Chrome finisher** – as accent on Luxury or M Sport Line dash.
- **Coral Red Matte or High-gloss Black finisher** – appearing as a thin, sleek accent on the Sport and M Sport Line dash. Goes with the steering wheel's red stitching. Standard and alternate with Sport Line.
- **Estoril Blue Matte finisher** – available in M Sport Line interior, except with Coral Red/Dark upholstery.

And then, available in the "standard" models, not the Lines:

- **Silver matte** – on the 328i's dash, door pulls and center console.
- **Dark Burl Walnut** – same areas in 335i models and A43 (standard) or 328i models (extra cost).

Climate control with new capabilities

With its dual-zone (separate left/right) temperature settings, 3 Series climate control was already outstanding. Newly, it allows the driver and front passenger separately to override automatic operation and choose their own air-distribution settings:

footwells, face-level and defroster selectors are provided for both sides. Other new enhancements include:

- more compact system configuration made space for two new cupholders at the front of the console
- new coolant circuit makes air conditioning more efficient, especially in the ECO PRO mode
- more efficient heater operation; auxiliary coolant pump no longer necessary
- bi-directional solar sensor improved for more sensitive left/right inclusion of sun load in its temperature control; enhances dual-zone effect
- extremely compact defroster tubing made room for available Head-up Display
- improved airflow to rear passenger area.

Continuing features include:

- automatic or manual recirculation control
- misting control
- activated-charcoal ventilation microfilter
- temperature- and volume-controlled rear air outlets (at aft end of center console).

In the back seats: more space, more amenities

To the 3 Series' legendary attributes – world-leading handling, sporty yet comfortable ride, beautifully worked-out ergonomics and controls – BMW has added greater room and more extensive amenities for the rear-seat passengers:

- 0.5 in. more rear leg room
- 0.4 in. more rear head room with moonroof
- Easier entry/egress for rear passengers: 5.5" wider door opening angle, greater opening

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

width and height, greater space between rear and front seats.

If all this sounds a bit modest, customers should try it for themselves. A half-inch more leg room and about the same in head room (0.4 in.) can indeed make a difference. If it's easier to get in and out, and it is, so much the better. BMW's center armrest, which folds down to a few inches above the seat surface, frees extra space for passengers' legs.

Finally, and reflecting the increased usability of the rear compartment, heated rear seats are available for the first time in the 3 Series (Cold Weather Package).

Now standard: 40/20/40 split folding rear seats

Previously included in the Cold Weather Package, this delightfully versatile folding scheme is now standard in all 3 Series Sedans, including the AH3. Each 40% outboard section provides adequate seating for a passenger, while the 20% center section (which includes a fold-down armrest) provides through-loading for skis, snowboards and the like.

Larger, more usable trunk

Cargo capacity for 328i and 335i models is 13.0 cubic feet, up about 8% from the predecessor Sedans. Official EPA cargo capacity for the AH3 is not yet available, but according to European measurements it is approximately 19% less as the underfloor battery compartment effectively raises the trunk floor somewhat.

In less numerical but perhaps more meaningful terms, in the 328i and 335i models there is room that's sufficient for:

- 1 Samsonite F'Lite large + 1 medium + 1 small
- 3 golfbags.

Beyond this, the new models' trunk is easier to load, thanks to a wider and taller opening when the lid is up. A lid that automatically rises open once released adds further convenience.

(With the optional Comfort Access, the new Smart Opener makes opening even easier: By merely "waving" a foot beneath the rear bumper in a certain manner, users can open the trunk and load cargo without first setting it down.)

Aside from official or technical cargo data, the trunk sides are flat and regular; there's a deep oddments tray at the left. Usability also benefits greatly from a panoply of amenities:

- Tilt-up floor for easier loading of underfloor storage compartment (in the AH3, batteries occupy this space)
- Organizer in underfloor compartment (all except AH3)
- Floor net with integrated pocket for smaller objects
- 2 fixed and 2 retractable tie-downs
- Storage-tray net
- Net at left side
- Elastic strap at right
- Hooks at sides
- Multi-use, unattached net
- Accessory power outlet.

Safety & security

In a general sense, occupant safety has been enhanced via:

- A front-end structure engineered to achieve 5-star ratings in U.S. and Euro NCAP crash tests
- "Force paths" newly engi-

neered for even better distribution of crash-impact forces throughout the body structure.

In the extensive details of its safety design, engineering and details, otherwise the new 3 Series exemplifies the high standards that are maintained throughout the BMW line. Described in more detail in the **safety & security** section of **BMW features**, in the new 3 Series these include –

Active safety

- Suspension, steering and brakes that communicate road conditions accurately to the driver, and respond precisely to the driver's commands
- Ergonomically correct and efficient controls, with excellent tactile feel
- Excellent outward vision for the driver
- Comprehensive Dynamic Stability Control system
- Xenon Adaptive Headlights, including Adaptive Control to help driver see around curves at road speed, and Cornering Lights providing illumination to the sides in city driving and parking; optional 328i models, standard 335i and AH3
- Front foglights, standard on all models
- Automatic High Beams, a stand-alone option on all models
- Adaptive brakelights, with greater light intensity under heavy braking
- Run-flat tires, rendering it unnecessary to change tires at roadside

Passive safety

- Energy-absorbing front, rear and side structure

- Automatic front safety-belt tensioners, force limiters and belt stoppers
- 2-stage front-impact airbags
- Front-seat side-impact airbags
- Front- and rear-seat Head Protection System
- Front Active Knee Protection
- Advanced Crash Safety Management for managing the extensive safety systems
- Battery Safety Terminal, disconnecting the alternator, fuel pump and starter in case of serious crash impact

Security

- Central locking system
- Coded Driveaway Protection for theft deterrence
- Alarm system, standard on 335i models and AH3.

New safety-related options

With the new generation come safety-enhancing systems and features, familiar from other Series but new to the 3:

- **Active Blind Spot Detection** – alerting driver to vehicles traveling in the blind spots, for example the C-pillars. Included in Driver Assistance Package.
- **Rear-view camera** – assisting with rearward vision to reduce risk in backing up. Included in Driver Assistance Package.
- **Side- and top-view cameras** – assisting with vision to the sides and around the vehicle for various maneuvers. Also in Driver Assistance Package.
- **Lane Departure Warning** – alerting driver to unintentional drifting out of lane. Included in new Driver Assistance Plus.

Details on these advanced systems are to be found in **BMW features**.

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

The Lines – aesthetics & features

Content applies to all models unless otherwise noted. Luxury and Modern Lines require Premium Package. Contents of Lines cannot be mixed.

Exterior	Standard	Sport Line	M Sport Line	Luxury Line	Modern Line
Color selection	2 standard, 10 metallics	↔	1 standard, 5 metallics including Estoril Blue	Same as standard	↔
Shape of front bumper/spoiler ensemble	Standard, full-width lower air intake	↔	Unique M ensemble with 3 separate air intakes	Same as standard	↔
Air-intake screening	Black grid	↔	↔	↔	↔
Trim, air-intake center	–	Thin grid, gloss black	–	Linear chrome strip	Linear matte-chrome strip
Trim, air-intake sides	–	Aluminum look, single strip w/ wedge profile	–	Chrome, double strip	Chrome, double strip, 3-dimensional shape
Kidney grilles	Chrome frames, 16 matte-black slats	Chrome frames, 16 gloss-black slats	Chrome frames, 14 gloss-black slats	Chrome frames & slats, 16 slats	Chrome frames, 22 matte-chrome slats
Welcome Light	White	Color switch, white or cool white	White	↔	↔
Mirrors	Body-color	Black	Standard body-color	Standard body-color	↔
Side-window trim	Matte black	High-gloss Shadowline	↔	High-gloss Shadowline + chrome	High-gloss Shadowline
B-pillars	Matte black	High-gloss Shadowline	↔	↔	↔
Side sills	Standard	↔	Unique M sills	Same as standard	↔
Remote control	Black w/ matte-silver buttons	Black w/ red trim	Black w/ blue trim	Black w/ pearl-gloss chrome trim	Oyster w/ pearl-gloss chrome trim
Rear-bumper center	Body-color	High-gloss black	High-gloss Shadow	Chrome	Matte aluminum
Dual exhaust tips (328i left, 335i & AH3 left/right)	Chrome	Black chrome	Chrome	Chrome	Matte chrome
Interior	Standard	Sport Line	M Sport Line	Luxury Line	Modern Line
Front doorsill script	BMW	BMW Sport	BMW M logo/colors	BMW Luxury	BMW Modern
Ambiance lighting	Classic orange	Add color switch, classic orange or cool white	Classic orange	Add color switch, classic orange or cool white	↔
Steering wheel	Standard 3-spoke	Sport w/ red stitching	M Sport with M logo & galvanic trim	Sport, standard design & colors	Sport, Dark Oyster color
Front seats	Standard seats	Sport seats	↔	Standard seats	↔
Instrument cluster	Standard BMW style, white on black	Specific graphics, chrono dials w/ red rims	M-specific graphics, chrono dials w/ red rims	Standard	Specific graphics, Oyster, chrono scales outboard
Climate/audio controls	Standard style	Chrome-framed	Pearl-gray chrome-framed	↔	↔
Upholstery: standard	Leatherette Black or Venetian Beige	Leatherette Black/ Red piping	Leatherette Black or Venetian Beige	Dakota leather w/ special seam pattern & stitching; Black, Saddle Brown or Venetian Beige	Dakota leather w/ special seam pattern & contrasting piping; Oyster/Dark Oyster or Black/Dark Oyster

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

The Lines – aesthetics & features

Interior (cont.)	Standard	Sport Line	M Sport Line	Luxury Line	Modern Line
Upholstery: optional	Dakota leather Black, Venetian Beige or Dark Oyster/Black	Dakota leather Black w/ red stitching & piping, Everest Gray/Black or Coral Red/Black	Dakota leather Black, Coral Red/Black or Venetian Beige	–	–
Interior trim: standard	328i Silver Matte, 335i & AH3 Dark Burl Walnut	High-gloss Black	Aluminum Hexagon	Fine Line Anthracite	Pearl
optional	328i Dark Burl Walnut	Brushed Aluminum or Anthracite wood	Dark Burl Walnut	Burl Walnut trim w/inlays	Brushed Aluminum or Fine Line Pure wood
Accents: standard	–	Coral Red Matte	Estoril Blue Matte ¹	Pearl-gloss chrome ²	↔
optional	–	High-gloss Black or Pearl-gloss chrome	High-gloss Black or Pearl-gloss chrome	–	–
Headliner	Knit cloth, Everest Gray or Oyster	Anthracite color	↔	Standard colors	↔
Other details	See Standard & Optional Features table	Short manual-transmission shift lever	Short manual-transmission shift lever & M driver's footrest ³	Chrome strip on center console	Oyster/Dark Oyster – Dark Oyster dash; Black/Dark Oyster – Black upper dash
Performance	Standard	Sport Line	M Sport Line	Luxury Line	Modern Line
Top-speed limiter	Standard (130 mph)	Increased (155 mph)	↔	Standard	↔
Suspension: standard	Standard suspension	Sport	Sport	Standard suspension	↔
optional	Dynamic Handling Package	↔	↔	↔	↔
Wheels: standard	Star Spoke same-size: 328i 17-in. #393, 335 & AH3 18-in. Star Spoke #396	18-in. Double Spoke #397 same-size	M Double Spoke #400M: RWD 18-in. diff. F/R xDrive models 18-in. same-size	18-in. Multi-Spoke #416 same-size	18-in. Turbine #415 same-size
Lines upgrade	–	335i & AH3 only: 19-in. Double Spoke #401 diff. F/R	xDrive models 18-in. #400M diff. F/R; 335i & AH3 only: 19-in. Double Spoke #403M diff. F/R	335i & AH3 only: 19-in. Double Spoke #401 diff. F/R	↔
Tires ^{4,5} : standard	328i: 17-in. all-season 335i & AH3: 18-in. all-season	18-in. all-season	RWD 328i-335i-AH3 18-in. performance; xDrive 18-in. all-season	18-in. all-season	↔
Line upgrade	–	335i ⁶ & AH3 only: 19-in. performance	↔	↔	↔

1 – Not available with Coral Red/Black leather.

2 – Standard in 335i & AH3.

3 – Only with Black or Coral Red/Black leather.

4 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire

and wheel. Performance tires are not recommended for driving in snow and ice conditions.

5 – All-season tires on 3 Series Sedans are actually performance all-seasons,

rated for higher speeds than pure all-seasons. For wheel and tire sizes, see table on page 393.

6 – Including xDrive model.

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

Packages & options

Packages

Premium Package

(all models, code ZPP)

This popular package continues, with evolved contents:

All models:

- **Comfort Access keyless entry** – newly including the Smart Opener trunk feature, whereby the remote-carrying user need only wave a foot under the rear bumper. Code 322.
- **4-way power lumbar support** on both front seats, code 488
- **Dakota leather upholstery** – available in 2 standard colors (Black and Venetian Beige). 7 further schemes available within the Lines. See The Lines – esthetics & features for details on these. Codes LC.
- **Satellite Radio with 1-year subscription**, code 655

328i models only:

- **2-way power moonroof** – power tilt/slide, manual interior sunshade. Code 403.

Technology Package

(all models, code ZTP)

This new package brings the Head-up Display to the 3 Series for the first time. Contents are identical for all models except AH3:

All models:

- **Navigation system**, adding GPS Navigation and other functions to the standard iDrive control system; code 609.
- **Head-up Display**, the new-generation, full-color, 3-dimensional-effect system; code 610. See BMW features.
- **BMW Apps**, code 6NR
- **Smartphone Integration**, code 6NF

- **BMW Assist plus Enhanced Bluetooth/USB connectivity**, code 6NL.

All models except AH3:

- **Instrument cluster with extended functions**, code 6WA. In this high-resolution (640 x 160 pixels) extension of the central digital/icon display, the following functions and read-outs are added:
 - Integrated graphic readout of current fuel economy
 - Navigation instructions
 - Check Control and Service Interval information
 - Extended lists, for example phonebook.

This instrumentation is standard in the AH3.

Driver Assistance Package (all models, code ZDA)

Via this package, two proven active-safety systems come to the 3 Series for the first time. Additionally, a full complement of exterior mirrors is included. Contents are identical for all models:

- **Active Blind Spot Detection**, code 5AG. Also described in BMW features.
- **Park Distance Control** front and rear, code 508. The familiar “beeping” indication as the vehicle approaches other vehicles or objects during parking maneuvers.
- **Rear-view camera**, usefully augmenting Park Distance Control; code 3AG. Described in BMW features.
- **Side- and top-view cameras**, code 5DL. Also described under exterior cameras in BMW features.

Driver Assistance Plus

(all models, code ZDB; requires Driver Assistance Package plus Navigation or Technology Package)

New for '13, this group augments the Driver Assistance Package with two additional features; it too is identical for all models:

- **Lane Departure Warning**, code 5AD. In this new version, LDW adds **Forward Collision Warning**, which employs a forward-facing camera to detect vehicles ahead and warn the driver of a close approach that could become a collision.
- **Speed Limit Info**, code 8TH. Via the same camera used by Lane Departure Warning, captures current speed-limit and other signage, such as “no passing,” and shows it on the iDrive display.

Dynamic Handling Package (all models, code ZDH)

This new-for-'13 package combines two previously stand-alone options that clearly live up to its name:

- **Adaptive M Suspension**, code 2VF). The standard 3 Series suspension is of course expertly laid out, sprung and fine-tuned; in standard form it strikes an even finer balance of qualities than its auspicious predecessor, handling more precisely and responsively yet also riding more comfortably. Even beyond this progress in standard form, BMW's proven electronically controlled suspension system further refines the handling-and-comfort balance. Adaptive M Suspension employs electronically controlled shock absorbers, with Comfort, Comfort+ and

Sport settings selected by the console-mounted Driving Dynamics Control.

Like the M sport suspension that's standard with the Sport and M Sport Lines of RWD models, this option also lowers the vehicle by 10 mm/0.4 in. to further enhance handling. Because Adaptive M Suspension serves the same purpose though in a more sophisticated way, the M sport suspension that comes with the Sport and M Sport Lines is deleted on vehicles equipped with either of those Lines and ZDH. For further details on this optional system, see BMW features.

- **Variable Sport Steering**, code 2VL. Adds a more widely variable ratio – the number of degrees the steering wheel must be turned for each degree of steering angle at the wheels – to the standard variable power assist. It is not Active Steering, which electromechanically varies the ratio according to vehicle speed. Instead, VSS varies the ratio via distinct profiling of the rack and pinion's gear teeth. It is described earlier in this section.

Lighting Package

(328i models only, code ZLP; standard 335i & AH3 models)

Besides Xenon headlights' brighter and whiter forward illumination, this option also adds –

- **Adaptive steering** of the headlights at road speeds to help the driver “see around” curves
- **Dynamic auto-leveling** of the headlights to reduce glare to oncoming motorists
- **LED luminous rings** as position/parking lights, Daytime Running Lamps

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

- LED accents above the headlights
- Cornering lights for illumination to the sides in low-speed turns and reversing.

Cold Weather Package

(all models, code ZCW)

In the new models this ever-popular package adds something never before offered in this Series: heated rear seats. Content is identical for both models:

- Retractable headlight cleaning system, code 502
- Heated steering wheel, code 248
- Heated front and rear seats, codes 494 and 496.

Stand-alone options

Automatic or manual transmission

(automatic all RWD models except AH3, code 205; manual 328i RWD & both 335i models only, code ZMT)

For the models that offer a choice of transmission, both are listed as stand-alone options in the ordering system. The 335i xDrive model defaults to automatic. Both transmissions are described briefly under **performance & efficiency**, in more detail in **BMW features**.

Sport automatic transmission with shift paddles

(all models, code 2TB; requires Sport or M Sport Line)

Basic features of BMW's Sport automatics include steering-wheel shift paddles, sportier programming and three driver-selected settings for shift characteristics. Described in **BMW features**. This option entails a modest extra cost.

Active Cruise Control with Stop & Go, Frontal Collision Warning

(all models except AH3, code 5DF)

Though known from other Series, this is a new option for the 3 Series in 2013. For details, see **BMW features**. 3 Series Coupes and Convertibles continue to offer a different ACC system, code 541 without Stop & Go.

Park Distance Control

(all models, code 508)

Watching over both ends of the vehicle, PDC is included in the Parking Package but also available as this stand-alone option.

Rear-view camera

(all models, code 3AG; requires Technology Package or Park Distance Control)

Whereas the rear-, side- and top-view cameras are included in the Driver Assistance Package, this stand-alone option enables the customer to specify only the rear-view camera.

Parking Assistant

(all RWD models, code 5DP; requires Driver Assistance Package or Park Distance Control)

One of BMW's newest, highest-tech options, yet modestly priced. Via ultrasound sensors, its system recognizes spaces down to about 4 feet longer than their vehicles; measures their width and length as the vehicle drives by; and indicates their suitability in the iDrive display. Having pulled up next to the vehicle ahead, the driver activates the system; it maneuvers the vehicle into place as the driver operates the accelerator and brakes. Described in detail in **BMW features**.

Automatic High Beams

(all models, code 5AC)

Offered as a stand-alone without combination requirement.

Metallic paint

(all models, paint codes)

The beauty of all BMW metallic paintwork – indeed, of all BMW paintwork – needs no introduction. Compared to predecessor Sedans, new 3 Series colors include Melbourne Red, Glacier Silver, Imperial Blue, Orion Silver, Mineral White, Sparking Bronze, Mineral Gray, Liquid Blue and Estoril Blue.

Dakota leather upholstery

(all models, codes LC)

In addition to being in the Premium Package, and required with the Luxury and Modern Lines (via the Premium Package), Dakota leather is available on this stand-alone basis in the standard two colors: Black and Venetian Beige.

2-way power moonroof

(328i models only, code 403)

Standard on 335i and AH3 models, this popular feature continues as part of the Premium Package or this stand-alone option for both 328i models.

Navigation system

(all models, code 609)

In addition to being part of the Technology Package, this popular and sophisticated system is offered as a stand-alone option. With all models except the AH3, the option includes the Instrument cluster with extended functions (6WA); this is standard on the AH3 and is described under **Technology Package**.

Harman Kardon Surround Sound audio system

(all models, code 688)

In '12, this outstanding system was part of a Premium Sound Package that included Satellite Radio. Now the Harman-Kardon system is a stand-alone and Satellite Radio is in the Premium Package.

Compared to the standard (and excellent) 9-speaker audio system with 205 watts of audio power, this premium system adds 5 midrange speakers and 2 tweeters for a total of 16 – 3 more than in the previous Harman Kardon system. All midrange and tweeters employ high-caliber aluminum-membrane technology; audio power is 600 watts. Other plus-features include:

- Digital Sound Processing (DSP) in 7.2 Logic7 technology from Auravox, adjustable on the iDrive display
- Vehicle-speed-dependent volume compensation of bass frequencies
- Surround Sound simulation
- Hexagonal metallic speaker screens to minimize damping and sympathetic resonances.

Speakers are as follows (additional speakers over standard system are indicated by *)

- 1 centerfill midrange, 100 mm, center of dash
- 1 centerfill tweeter, 25 mm, center of dash*
- 2 midrange, 100 mm, in front doors
- 2 tweeters, 25 mm, in front doors
- 2 midrange, 100 mm, in rear doors
- 2 tweeters, 25 mm, in rear doors*
- 2 midrange, 100 mm, in rear shelf*

3 Series Sedan key features

Except as noted, all current 3 Series Sedan models offer the following features:

- 2 tweeters, 25 mm, in rear shelf*
- 2 subwoofers, 210 mm, under front seats.

Heated front seats

(all models, code 494)

Available as part of the Cold Weather Package or this option.

Dark Burl Walnut interior trim (328i models, code 4AB)

Newly available in these models at extra cost over the standard Silver Matte, this elegant wood continues as standard in 335i models and, newly, the AH3.

Interior sunshades

(all models, codes 415+417)

These shades provide relief from intense sunlight without interfering with the driver's vision to the rear and right-rear side. They consist of a power-operated rear-window shade and convenient manual shades on the rear door windows.

BMW Apps

(all models, code 6NR; includes Smartphone Integration, requires Technology Package or Navigation system)

BMW Apps are included in the Technology Package, and also offered as this stand-alone. See **BMW features** for a description.

BMW Assist plus enhanced Bluetooth and USB interfaces (all models, code 6NL)

With the newly standard Bluetooth and USB interfaces, this option adds BMW Assist with its 4-year BMW Assist Safety Services subscription, plus other enhancements:

- Viewing of data from user's mobile device on the iDrive control display by selecting "office" from the menu (Mobile Office)
- Viewing of contact photos from user's mobile device on control display
- At any time two mobile phones and one audio player may be paired via Bluetooth. Album covers from the audio source can be viewed.
- 1-wire USB connection gives faster data access from an iPhone.
- User can update multi-media and telephony settings via the USB interface.
- No extra Y-cable is needed for use of iPod or iPhone.

Anti-theft alarm system

(328i models only, code 302)
Standard on 335i models and AH3, the alarm is a stand-alone for the 328i models.

BMW center-installed accessories

Among the many accessories available for the 2012 3 Series Sedans are:

- M Performance engine and chassis equipment:
 - Exhaust system for 335i models, including 80-mm chrome outlets
 - Complete brake system – larger cross-drilled/grooved discs, with multi-piston fixed calipers in choice of red, orange or yellow
 - 20-in. forged Double Spoke #405M alloy wheels, high-gloss turned/Orbit Gray finish, + Pirelli P Zero performance tires
- Complete wheel and tire sets, other designs and sizes
- Wheel locks
- Tire valve-stem caps with BMW lettering or logo
- Tire Mobility Kit and tire sealer kit
- Mud flaps
- M Performance exterior design:
 - All-black kidney grilles, high-gloss finish
 - Carbon-fiber mirror caps
 - Sport stripes, traversing hood, roof and trunklid; choice of black or white
 - Carbon-fiber rear spoiler

- Roof and storage systems
- License-plate frames
- Car covers, outdoor and indoor types
- UV sunshade
- M Performance interior design:
 - Sport steering wheel, Alcantara-covered + red stripe at 12 o'clock position
 - Carbon-fiber manual shift knob or E-shift lever
 - Carbon-fiber and Alcantara interior trim, 7-piece set
- Floor mats, all-weather
- Snap-in adaptor with USB interface for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- Snap-in adapter for BMW Apps and various media
- Connection and charging cables of various types
- BMW USB memory stick in style of vehicle remote
- BMW Bluetooth headset and speaker
- CD/DVD storage sleeve
- Cool bag
- BMW umbrella with LED light
- LED hand lamp

For details and a complete listing, see the **Accessories** listing for 2012 3 Series Sedans on bmwusa.com.

Standard & optional features

2013 3 Series Sedans

Bold within table indicates new feature for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model. This listing applies to base models; features included in Lines are shown in **The Lines**, pages 400-403.

Exterior design & function	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Front & rear body-color bumpers, air intakes & other details in Line-specific designs	S	S	S
Air Curtain configuration of front bumper/spoiler	S	S	S
Aerodynamically optimized underbody fairing & wheelwell configuration	S	S	S
Halogen free-form headlights	S	–	–
Xenon Adaptive headlights with luminous rings as position/parking lights & Daytime Running Lamps, LED accents, dynamic auto-leveling, cornering lights	ZLP	S	S
Automatic High Beams	OPT	OPT	OPT
Automatic headlight control	S	S	S
Retractable high-intensity headlight cleaning system	ZCW	ZCW	ZCW
Front foglights	S	S	S
Cornering lights	ZLP	S	S
LED taillights (some functions of rear light clusters via conventional bulbs)	S	S	S
LED turn signals in exterior mirrors	S	S	S
Matte-black vertical grille slats	S	S	S
Rain-sensing windshield wipers & heated washer jets	S	S	S
Power-folding exterior mirrors	S	S	S
Metallic paint	OPT	OPT	OPT
Satin-aluminum exterior trim	NA	NA	S
Park Distance Control, front & rear with graphic display	ZDA/OPT	ZDA/OPT	ZDA/OPT
Parking Assistant	OPT ¹	OPT ¹	OPT ¹
Rear-view camera	ZDA/OPT¹	ZDA/OPT¹	ZDA/OPT¹
Side- & top-view cameras (Surround View)	ZDA	ZDA	ZDA
Ground lighting at door handles & entry/exit lights in doors	S	S	S
Welcome Light	S	S	S
Adaptive brakelights	S	S	S
Chrome exhaust outlets:			
Round, dual, on left side	S	–	–
Round, on left & right sides	–	S	Matte chrome

1 – Requires Driver Assistance Package or Park Distance Control.

S – Standard
OPT – Optional
NA – Not available

– – Not applicable
ZCW – Cold Weather Package

ZDA – Driver Assistance Package
ZLP – Lighting Package

Standard & optional features

2013 3 Series Sedans

Bold within table indicates new feature for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model. This listing applies to base models; features included in Lines are shown in **The Lines**, pages 400-403.

Performance & efficiency	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
2.0-liter TwinPower Turbo 4-cylinder engine	S	–	–
3.0-liter TwinPower Turbo 6-cylinder engine	–	S	S
Engine features:			
Aluminum construction	S	S	S
Cylinder technology	Arc-electroplated steel coating	Iron liners, cast into block	Iron liners, cast into block
High Precision direct fuel injection	S	S	S
Valvetronic variable intake-valve lift	S	S	S
Double VANOS ² steplessly variable valve timing	S	S	S
Twin-scroll turbocharger	S	S	S
Dual balance shafts	S	–	–
Electronically controlled engine cooling	S	S	S
Electric coolant pump	S	S	S
Volume-controlled oil pump	S	S	S
Electronic sensing of oil level & condition	S	S	S
Exhaust system	Single	Single	Single
Automatic engine start/stop with function display in tachometer	S	S	S
8-speed STEPTRONIC automatic transmission with Adaptive Transmission Control, E-shift, selectable Comfort, Sport & Manual modes	S	S	–
8-speed Sport automatic transmission with sportier programming, rpm matching on downshifts & steering-wheel shift paddles	OPT ³	OPT ³	NA
8-speed automatic transmission with integrated electric motor/generator, electric oil pump, decoupling clutch & start-off clutch element (no torque converter)	–	–	S
6-speed manual transmission	NC [NA]	NC	NA
Upshift indicator for manual transmission	S [-]	S	NA
Double-pivot-type front suspension	S	S	S
Aluminum front suspension components	S [NA]	S [NA]	S
5-link rear suspension	S	S	S
Front & rear anti-roll (stabilizer) bars	S	S	S
Twin-tube gas-pressure absorbers	S	S	S
Adaptive M Suspension	ZDH	ZDH	ZDH
Servotronic vehicle-speed-sensitive variable-assist electric power steering	S	S	S
Variable Sport Steering: variable-ratio, vehicle-speed-sensitive variable-assist electric power steering	ZDH	ZDH	ZDH
4-wheel ventilated disc brakes with composite front rotors	S	S	S

2 – VANOS = Variable NOckenwellen Steuerung = variable camshaft control, or variable valve timing. 3 – Requires Sport or M Sport Line.

S – Standard
OPT – Optional
NC – No extra cost

NA – Not available
– – Not applicable
ZDH – Dynamic Handling Package

Standard & optional features

2013 3 Series Sedans

Bold within table indicates new feature for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model. This listing applies to base models; features included in Lines are shown in **The Lines**, pages 400-403.

Performance & efficiency (cont.)	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Brake Energy Regeneration with function indicator in tachometer	S	S	S
Driving Dynamics Control – 3 modes for engine response, transmission shift characteristics ⁴ & steering assist (Comfort, Sport & ECO PRO); 3 modes for Adaptive M Suspension (Comfort, Comfort+ & Sport); additional mode switches DSC to DTC (Sport+)	S	S	S
Start-up Assistant	S	S	S
xDrive fulltime all-wheel drive system, electronically controlled with variable front/rear torque split & traction control	– [S]	– [S]	–
Dynamic Stability Control with Dynamic Traction Control, electronic limited-slip differential	S	S	S
17 x 7.5 alloy wheels, Star Spoke #393	S	–	–
18 x 8.0 alloy wheels: Star Spoke #396	NA	S	S
Streamline #419	NA	NA	OPT ⁵
225/50R-17 performance all-season run-flat tires	S	–	–
225/45R-18 performance all-season run-flat tires ⁶	NA	S	S
Tire Pressure Monitor	S	S	S
Comfort & convenience	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Vehicle & Key Memory with Personal Profile user-specific settings	S	S	S
Mobile Profile for export or import of user settings to or from another so-equipped vehicle	S	S	S
Multi-function remote control	S	S	S
Comfort Access keyless entry with foot-triggered trunklid release	ZPP	ZPP	ZPP
3-position door checks	S	S	S
Dual power/heated exterior mirrors	S	S	S
High-gloss black-finished doorsill trims: With BMW lettering	S	S	–
With ActiveHybrid 3 lettering (front only)	–	–	S
Auto-dimming interior & exterior mirrors, power-folding exterior mirrors	S	S	S
Automatic tilt-down of right exterior mirror for visibility of low obstructions when backing up	S	S	S
BMW Universal Transceiver (3-function garage-door opener)	S	S	S
Interior lighting amenities: Fade-in/fade-out operation of interior lights	S	S	S
Separately switchable left/right front & rear reading lights, front via LED	S	S	S

4 – Requires automatic transmission.

5 – Not available in combination with M Sport Line. Require ZAS (all-season tires) or ZPT (performance tires); ZPT requires Sport Line.

6 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire

and wheel. Performance tires are not recommended for driving in snow and ice conditions.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable
ZPP – Premium Package

Standard & optional features

2013 3 Series Sedans

Bold within table indicates new feature for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model. This listing applies to base models; features included in Lines are shown in **The Lines**, pages 400-403.

Comfort & convenience (cont.)	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
LED-illuminated visor vanity mirrors	S	S	S
Ambiance lighting of front center stack & console, front footwells, rear of console, door panels & handles	S	S	S
Leather-wrapped tilt/telescopic steering wheel with fingertip cruise, audio & phone controls	S	S	S
Heated steering wheel	ZCW	ZCW	ZCW
Traditional pull-up handbrake	S	S	S
4-dial instrument cluster with high-resolution central display, auto start-stop indication in tachometer	S	S	S
Check Control vehicle monitor system, information displayed in main instrument cluster	S	S	S
Dynamic cruise control	S	S	S
Active cruise control with Stop-&Go function & Frontal Collision Warning System	OPT⁷	OPT⁷	NA
Integrated owner's manual via iDrive	S	S	S
Speed Limit Info	ZDB	ZDB	ZDB
Condition-Based Service system	S	S	S
8-way power front seats	S	S	S
Memory system for driver's seat & exterior mirrors, 2 settings per user	S	S	S
4-way front-seat power lumbar support	ZPP	ZPP	ZPP
Heated front seats	ZCW/OPT	ZCW/OPT	ZCW/OPT
Leatherette upholstery	S	S	S
Dakota leather upholstery	ZPP/OPT	ZPP/OPT	ZPP/OPT
Silver Matte interior trim	S	-	-
Dark Burl Walnut interior trim	OPT	S	S
Power windows with key-off operation, 1-touch open/close& anti-trapping function	S	S	S
Dual-zone automatic climate control with left/right temperature & air-distribution controls, automatic recirculation control, misting control, bi-directional solar sensor, temperature- & volume-controlled rear air outlets, activated-charcoal microfilter ventilation & other features	S	S	S
2-way power moonroof with 1-touch opening & closing for tilt & slide motions, opening from remote, sliding interior sunshade	ZPP/OPT	S	S
iDrive system with free-standing 6.6-in. (diagonal) high-resolution control display, direct-select radio, media & phone ⁸ menus + Menu, Back & Option keys; 8 Programmable Memory keys, On-board Computer & other functions	S	S	-
iDrive system with free-standing 8.8-in. (diagonal) high-resolution display, Hybrid-specific menu + key, otherwise as above	-	-	S

7 - Not available in combination with M Sport Line or manual transmission; adds extended central display.

8 - Phone controls active when approved mobile device is paired with Bluetooth interface.

S - Standard
OPT - Optional
NA - Not available
- - Not applicable

ZCW - Cold Weather Package
ZDB - Driver Assistance Plus
ZPP - Premium Package

Standard & optional features

2013 3 Series Sedans

Bold within table indicates new feature for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model. This listing applies to base models; features included in Lines are shown in **The Lines**, pages 400-403.

Comfort & convenience (cont.)	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
iDrive system with free-standing 8.8-in. (diagonal) high-resolution control display, GPS Navigation & additional direct-select Navigation menu key, enhanced Voice Command, enhanced Real Time Traffic Information, expanded On-board Computer functions, automatic ventilation & many other features	ZTP/OPT	ZTP/OPT	ZTP/OPT
Head-up Display	ZTP	ZTP	ZTP
Extended central display in instrument cluster	ZTP	ZTP	S
AM/FM/HD/CD/MP3 audio system with 9 speakers including Radio Data System (RDS), in-dash single-disc CD player, double tuner via iDrive, auxiliary audio input & FM diversity antenna system; includes front coaxial centerfill speaker & 2 subwoofers; 205-watt/7-channel amplification, many other features	S	S	S
Harman-Kardon Surround Sound premium audio system with 16 speakers (midrange & tweeters aluminum-membrane, Auravox equalization, 600-watt/9-channel amplification)	OPT	OPT	OPT
80-GB hard drive providing data storage for Navigation, audio system, phonebook & Voice Command; ripping capability from CD & DVD players	ZTP/OPT ⁹	ZTP/OPT ⁹	ZTP/OPT ⁹
iPod/USB Adapter	S	S	S
Bluetooth mobile-device interface & USB connectivity	S	S	S
Enhanced Bluetooth mobile-device interface & USB functionality, high-capacity phonebook download & other features (Combox Controller)	ZTP/OPT¹⁰	ZTP/OPT¹⁰	ZTP/OPT¹⁰
BMW Apps including Smartphone Integration	ZTP/OPT¹¹	ZTP/OPT¹¹	ZTP/OPT¹¹
Satellite Radio with 1-year subscription	ZPP	ZPP	ZPP
Cupholders, 2 front in console + 2 rear in center armrest	S	S	S
Bottle holders in front doors (1-liter)	S	S	S
Power outlets in center console front & rear, passenger footwell	S	S	S
Interior storage provisions: Open – compartments at front & rear of center console, above front cupholders (removable), in front & rear doors, nets on front-seat backrests	S	S	S
Closed – dash glovebox, under front center armrest with Aux-In, iPod/USB Adapter, compartment on driver's side	S	S	S
Heated rear seats	ZCW	ZCW	ZCW
40/20/40 split folding rear seats	S	S	S
Power rear-window & manual rear door-window sunshades	OPT	OPT	OPT
Floor mats, front & rear	S	S	S
Fully finished, LED-illuminated trunk with inside trunk release, storage tray, smooth sides for optimum loading capacity, 2 fixed & 2 retractable tiedowns, tilt-up floor for easier loading, underfloor storage compartment with organizer (328i & 335i only), floor net, storage-tray net, net at left side, strap at right side, hooks at sides, portable multi-use net, power outlet	S	S	S

9 – Included with Navigation option.
10 – Included with BMW Assist option.

11 – Requires Technology Package & BMW Assist.

S – Standard
OPT – Optional

ZCW – Cold Weather Package
ZTP – Technology Package

Standard & optional features

2013 3 Series Sedans

Bold within table indicates new feature for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model. This listing applies to base models; features included in Lines are shown in **The Lines**, pages 400-403.

Safety & security	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Dynamic Stability Control (DSC), including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, electronic limited-slip differential	S	S	S
Rear-view camera	ZDA/OPT ¹	ZDA/OPT ¹	ZDA/OPT ¹
Side- & top-view cameras (Surround View)	ZDA	ZDA	ZDA
Lane Departure Warning with Forward Collision Warning	ZDB ¹²	ZDB ¹²	ZDB ¹²
Active Blind Spot Detection	ZDA	ZDA	ZDA
Speed Limit Info	ZDB	ZDB	ZDB
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags with variable venting	S	S	S
Safety belts at all seating positions:	S	S	S
Front – with automatic tensioners, force limiters & belt stoppers			
Rear outboard – with force limiters & belt stoppers			
LATCH attachments in rear seat for installation of child restraint seats	S	S	S
Front- & rear-seat Head Protection System	S	S	S
Front-seat side-impact airbags	S	S	S
Active Knee Protection for driver & front passenger	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S
Post-impact safety measures:			
Unlocking of central locking system	S	S	S
Switch-on of hazard flashers	S	S	S
Switch-on of interior lighting	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S
BMW Assist, including Enhanced Automatic Collision Notification, SOS button, Enhanced Roadside Assistance, TeleService ¹³ , BMW Assist Safety Plan ¹³	ZTP/OPT	ZTP/OPT	ZTP/OPT
Central locking system with selective unlocking	S	S	S
Coded Driveaway Protection	S	S	S
Pathway Lighting ¹⁴	S	S	S
Alarm system with operation from remote, interior motion detector	OPT	S	S

1 – Requires Driver Assistance Package or Park Distance Control.

13 – Requires BMW Assist annual fee after 4th year.

12 – Requires Driver Assistance Package & Technology Package or Navigation.

14 – Duration adjustable via iDrive.

S – Standard
OPT – Optional
ZDA – Driver Assistance Package

ZDB – Driver Assistance Plus
ZTP – Technology Package

Technical specifications

2013 3 Series Sedans

Bold within table indicates new specification for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model.

General		328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Curb weight, lb.:				
Manual transmission		3360 [NA]	3545 [3695]	NA
Automatic transmission		3410 [3595]	3555 [3710]	3825
Weight distribution, front/rear, %:				
Manual transmission		49.4/50.6	51.1/48.9 [52.2/47.8]	NA
Automatic transmission		50.0/50.0 [51.3/48.7]	51.5/48.5 [52.8/47.2]	49.9/50.1
Wheelbase, in.		110.6 ¹		
Track, front/rear, in.		60.3/61.9 ^{1, 2}		
Length, in.		182.5 ¹		
Width, in.		71.3 ¹		
Height, in.		56.3 ¹		
Accommodations		328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Seating capacity, persons		5 ¹		
Shoulder room, front/rear, in.		55.1/55.1 ¹		
Head room, front/rear, in.:				
Without moonroof		40.3/37.7	–	
With moonroof		39.5/37.4 ¹		
Leg room, front/rear, in.		42.0/35.1 ¹		
EPA passenger volume, cu ft.		96.2		
EPA cargo volume, cu ft.		13.0 ^{3, 4}		10.5 (est.)³
Body		328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Type		4-door Sedan ¹		
Aerodynamic drag coefficient		0.29	0.30	0.29
EPA size classification		Compact ¹		

1 – Specification applies to all models.
2 – With standard wheels.

3 – Expandable via folding rear seats.

4 – Specification applies to 328i & 335i models.

NA – Not available
– – Not applicable

Technical specifications

2013 3 Series Sedans

Bold within table indicates new specification for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model.

Engine & electrical	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Engine type	DOHC inline 16-valve 4-cylinder, aluminum construction with arc-electroplated steel cylinder surfaces, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁶ variable intake- & exhaust-valve timing	DOHC inline 24-valve 6-cylinder, aluminum construction with iron cylinder liners cast into block, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁶ variable intake- & exhaust-valve timing ⁵	
Bore x stroke, mm/in.	84.0 x 90.1/3.31 x 3.55	84.0 x 89.6/3.31 x 3.53 ⁵	
Displacement, cc/cu in.	1997/122	2979/182 ⁵	
Compression ratio	10.7:1	10.2:1 ⁵	
Power @ rpm, hp	240 @ 5000-6000	300 @ 5800 ⁵	
Torque @ rpm, lb-ft.	255 @ 1250-4800	300 @ 1300-5000 ⁵	
Engine-management system	Motronic MEVD 17.2.4 with knock control, Valvetronic, variable valve timing, engine cooling & other functions included in control strategy ¹	Motronic MEVD 17.2.5	Hybrid Intelligent Energy Management
Fuel requirement	Premium unleaded ¹		
Electric motor			3-phase synchronous
Power, hp maximum	–	–	55
Torque, lb-ft. (available from rest)	–	–	155
Maximum system power, hp			335
Maximum system torque, lb-ft.	–	–	330
Fuel capacity, U.S. gal.	15.8 ¹		
Vehicle battery type/capacity, amp-hr.	Lead-acid/90 ⁴		Low-voltage system supplied from high-voltage system
Starting battery, type/amp-hr.	–	–	Absorbent glass-mat (AGM)/50
Alternator output rating, amp./W	170/2380	210/2940	200/2800⁷
High-voltage hybrid electrical system: battery type/volts/amp-hr./kW-hr.	–	–	Lithium-ion/ 317/442/0.6

1 – Specification applies to all models.

4 – Specification applies to 328i & 335i models.

5 – Specification applies to 335i & Active-

Hybrid 3 models.

6 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

7 – This is the starter/alternator unit that provides fast restarts in the hybrid auto start/stop function.

– – Not applicable

Technical specifications

2013 3 Series Sedans

Bold within table indicates new specification for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model.

Drivetrain	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Drive system	Front engine/ rear-wheel drive ¹ [all-wheel drive ⁴]		
Manual transmission	6-speed, Type I-350-Turbo [NA]	6-speed, Type K	NA
Ratios: 1st	3.68:1 [-]	4.11:1	–
2nd	2.06:1 [-]	2.32:1	–
3rd	1.31:1 [-]	1.54:1	–
4th	1.00:1 [-]	1.18:1	–
5th	0.81:1 [-]	1.00:1	–
6th	0.68:1 [-]	0.85:1	–
Reverse	3.35:1 [-]	3.73:1	–
Final drive ratio	3.91:1 [-]	3.23:1	–
Automatic transmission	8-speed, Type 8 HP 45 ⁴		8-speed, Type 8 HP 70H
Ratios: 1st	4.71:1 ¹		
2nd	3.14:1 ¹		
3rd	2.11:1 ¹		
4th	1.67:1 ¹		
5th	1.28:1 ¹		
6th	1.00:1 ¹		
7th	0.84:1 ¹		
8th	0.67:1 ¹		
Reverse	3.30:1 ⁵		3.32:1
Final drive ratio	3.15:1 ⁵		2.81:1
Chassis	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Body/frame construction	Unitized all-steel structure ¹		
Front suspension	Struts, double-pivot lower arms, coil springs, twin-tube gas-pressure shock absorbers, anti-roll bar ¹ (RWD models: aluminum lower arms & wheel carriers)		
Rear suspension	5-link system, coil springs, twin-tube gas-pressure shock absorbers, anti-roll bar ¹		
Front & rear suspension:	Sport & M Sport Line, RWD 328i & 335i models only: sport suspension calibration Dynamic Handling Package all models: Adaptive M Suspension		

1 – Specification applies to all models.

4 – Specification applies to 328i & 335i models.

5 – Specification applies to 335i & ActiveHybrid 3 models.

– – Not applicable

Technical specifications

2013 3 Series Sedans

Bold within table indicates new specification for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model.

Chassis (cont.)	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Servotronic steering system (std.)	Rack & pinion, vehicle-speed-sensitive electric power assist ¹		
Variable Sport Steering (Dynamic Handling Package)	Rack & pinion, vehicle-speed-sensitive electric power assist & mechanically variable ratio ¹		
Overall ratio:			
Standard steering, max./min.	15.1–10.4:1 ¹		
Variable Sport Steering, max./min.	14.5–7.7:1 ¹		
Turns lock-to-lock:			
Standard steering	2.8 ¹		
Variable Sport Steering	2.2 ¹		
Turning circle, ft.	37.1 [38.4] ⁴		37.1
Brakes	4-wheel ventilated discs, vacuum-assisted ¹		
Diameter x thickness F, mm/in.	312 x 24/12.3 x 0.94	340 x 30/13.4 x 1.18 ⁵	
Diameter x thickness R, mm/in.	300 x 20/11.8 x 0.79	330 x 20/13.0 x 0.79 ⁵	
Alloy wheels:			
Standard	17 x 7.5	18 x 8.0 ⁵	
Sport, Luxury & Modern Lines:			
Standard	18 x 8.0 ¹		
335i & AH3 models upgrade	19 x 8.0 front/19 x 8.5 rear ¹		
M Sport Line:			
All RWD models standard	18 x 8.0 front/18 x 8.5 rear		
xDrive models standard	18 x 8.0		
xDrive models upgrade	18 x 8.0 front/18x 8.5 rear		
335i & AH3 models upgrade	19 x 8.0 front/19 x 8.5 rear		

1 – Specification applies to all models.
4 – Specification applies to 328i & 335i models.

5 – Specification applies to 335i & Active-Hybrid 3 models.

F – Front
R – Rear

Technical specifications

2013 3 Series Sedans

Bold within table indicates new specification for 2013. xDrive and ActiveHybrid models are new for 2013. [Bracketed] information is for xDrive model where it differs from rear-wheel-drive model.

Chassis (cont.)	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Performance all-season run-flat tires: Standard	225/50R-17	225/45R-18 ⁵	
Sport, Luxury & Modern Lines: standard	225/45R-18 ^{1,8}		
335i & AH3 models upgrade	225/40R-19 front / 255/35R-19 rear ⁸		
M Sport Line: All RWD models standard	225/45R-18 front / 255/40R-18 rear ⁸		
xDrive models standard	225/45R-18 ⁸		
xDrive models upgrade	225/45R-18 front / 255/40R-18 rear ⁸		
335i & AH3 models upgrade	225/40R-19 front / 255/35R-19 rear ⁸		
Stability-enhancement system	Dynamic Stability Control (DSC); includes Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, electronic limited-slip differential		
Performance & efficiency data	328i [xDrive] Sedan	335i [xDrive] Sedan	ActiveHybrid 3
Acceleration, 0-60 mph, sec. ⁹ : Manual transmission	5.7 [-]	5.4 [5.1]	–
Automatic transmission	5.8 [5.7]	5.1 [4.8]	5.2
Top speed, mph: Standard	130 ¹		
With increased limiter	155 ¹		
EPA estimated MPG, city/highway/combined: Manual transmission	22/34/26 [-]	20/30/23 [20/28/23]	–
Automatic transmission	23/33/26 [22/33/26]	23/33/26 [20/30/24]	25/33/28

1 – Specification applies to all models.
5 – Specification applies to 335i & ActiveHybrid 3 models.

8 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

9 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle; road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

– – Not applicable

2013 3 Series Coupes & Convertibles

Evergreen in their appeal, these classically sporty BMWs present detail refinements for the new model year.

The 3 Series continues as the very heart of the BMW persona, ever evolving with new technology, new features, new options and new models.

Since the all-new 3 Series Sedans (F30) made their debut in '12, the sporty 3 Series Coupes and Convertibles have continued in their familiar E92-93 generation. The Coupes (E92) and Convertibles (E93) received an extensive Life Cycle Impulse update (LCI) in '11, proving how the appeal of BMW's creations remains fresh and compelling as they are updated and refined over their years of production. In its January '12 issue, *Car and Driver* documented this by once again naming the 3 Series to its 10Best Cars roster – the 21st such honor in a row, the longest string of any car and applying equally to the E92-93 Coupes and Convertibles.

As the following summary reveals, model year 2013 brings a modest updating of standard and optional equipment:

What's new for 2013

As of 7/12 production:

New standard equipment

All models:

- Smoker's Package returns, placing a convenient accessory power outlet at the forward end of the center console

Revised standard equipment

- Rearranged icons on adjusting controls of manual front seats (328i Coupes only)

Revised packages and options

All models:

- Premium Package revised; eliminates BMW Assist (now stand-alone), Bluetooth (now standard)
- M Sport Package returns to previous ZMP designation after package was revised and renamed ZM2 in mid-2011. No change in package contents from 2012.
- Premium Sound Package, consisting of Harman Kardon premium audio system and Satellite Radio
- Value Packages discontinued
- Priority 1 options discontinued

Changes shared with other Series

- xDrive badge moved from front flank to trunklid (xDrive models only)
- Climate controls: "snowflake" symbol changed to "A/C," AUC (automatic recirculation) supplemented by "M" (manual) setting, lower control adds "OFF" label
- "CD" key at iDrive controller changed to "Media" (with Navigation/iDrive option)

3 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 462-479.

328i Coupe

"Basic" Coupe model, powered by the advanced and unique N52 magnesium/aluminum 6-cylinder engine. A 4-seater cabin configuration with front-to-rear center console emphasizes its innate sportiness. With this model, the 3 Series Coupe confirms its traditional status as a "classic" BMW, with smooth and sonorous performance, rear-wheel drive, a choice of precise 6-speed manual or responsive automatic transmission, unparalleled chassis engineering, and elegant esthetics outside and in; it is truly a "gourmet" sports automobile in the traditional BMW manner.

Exterior design & function

- 2-door Coupe with classic proportions, elegant lines and details, choice of three standard colors and nine optional metallics
- Xenon Adaptive lights with luminous rings, dynamic auto-leveling, cornering lights
- Automatic headlight control
- Rain-sensing windshield wipers
- Dual power/heated exterior mirrors
- Ground lighting via illumination at door handles
- Welcome Light: Upon unlocking vehicle, activation for 20 seconds of front luminous rings, taillights, license-plate lights, ground lighting and interior lights
- Adaptive brakelights
- Matte-chrome exhaust tips

Performance & efficiency

- 3.0-liter DOHC inline 6-cylinder engine with magnesium/aluminum composite construction, Valvetronic variable intake-valve

lift, Double VANOS¹ variable intake- and exhaust-valve timing; 230 hp/200 lb-ft., 22 mpg combined EPA rating with manual or automatic transmission

- Choice of 6-speed manual or (at no extra cost) STEPTRONIC automatic transmission
- Sport suspension system consisting of aluminum double-pivot strut-type front suspension and 5-link rear suspension
- Engine-speed-sensitive variable-assist rack-and-pinion power steering
- 4-wheel ventilated disc brakes with non-asbestos organic pads
- 17 x 8.0 alloy wheels, V Spoke design #339
- 225/45R-17 all-season tires²
- Dynamic Stability Control
- Tire Pressure Monitor

Comfort & convenience

- Vehicle & Key Memory
- Tilt/telescopic leather-wrapped steering wheel with multi-function controls
- Dynamic cruise control
- Dual power/heated exterior mirrors
- 6-way adjustable front seats
- Belt presenters for driver and front passengers, bring safety belt forward for convenient fastening
- Leatherette upholstery
- Dark Burl Walnut wood interior trim

1 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

3 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 462-479.

- Power door windows with 1-touch open/close
- Center console extends front to rear; divides rear seats to create 4-passenger configuration; includes three storage compartments, rear climate-control air outlets, rear footwell lighting
- Ambiance Lighting: doors and rear side panels illuminated from top
- Closeable compartments in doors, configured for coins, CDs and sunglasses
- Automatic climate control with separate left/right controls
- Anti-theft AM/FM/HD/CD/MP3 audio system with 8 speakers including 2 subwoofers, Radio Data System (RDS), auxiliary audio input and other features
- Bluetooth mobile-device interface
- USB connectivity
- iPod/USB Adapter
- Split folding rear seats

Safety & security

- Dual-airbag Supplementary Restraint System
- Front & outboard rear safety belts with automatic tensioners and force limiters
- Front- and rear-seat Head Protection System
- Front-seat Active head restraints
- Front-seat side-impact airbags
- Coded Driveway Protection
- Anti-theft alarm system

Packages & options

- Available packages:
 - Premium (Dakota leather upholstery, BMW Universal Transceiver, auto-dimming interior and exterior mirrors, power-folding exterior mirrors, digital compass in interior mirror, 8-way power

- front seats + 4-way power front-seat lumbar support, driver's-seat + exterior-mirrors memory, 2-way power moonroof)
- M Sport (18-in. wheels with performance tires² in differentiated front/rear sizes, increased top-speed limiter, M aerodynamic body treatment, Shadowline exterior trim, specific exterior color selection, gloss-chrome exhaust tips, M doorsill trims, M Sport steering wheel, short shift lever with manual transmission or shift paddles with automatic, M driver's footrest, Aero leather handbrake grip, 10-way front sport seats with power-adjustable backrest width, Anthracite-color headliner)
- Convenience (Park Distance Control front/rear, Comfort Access keyless entry, power rear sunshade)
- Premium Sound (13-speaker Harman Kardon surround-sound audio system, Satellite Radio with 1-year subscription)
- Cold Weather (retractable headlight cleaning system, heated front seats, ski bag)
- Stand-alone options:
 - 6-speed STEPTRONIC automatic transmission
 - Park Distance Control front/rear
 - Metallic paint
 - Comfort Access keyless entry
 - Active Cruise Control
 - Automatic High Beams (require Premium Package)
 - 8-way power front seats
 - Heated front seats
 - Heated steering wheel
 - Dakota leather upholstery

- Fine Line Aluminum, Light Burl Walnut or Bamboo Anthracite interior trim (no-cost options)
- Dark Aluminum Glacier Silver interior trim (no-cost option, requires M Sport Package)
- 2-way power moonroof
- GPS Navigation and iDrive system with direct-select keys, enhanced Voice Command, Programmable Memory Keys and Real Time Traffic Information; also adds BMW Assist and Enhanced Bluetooth mobile-device interface
- Satellite Radio + 1-year subscription
- BMW Apps + Smartphone Integration
- BMW Assist + Enhanced Bluetooth mobile-device interface
- Power rear sunshade

328i xDrive Coupe

Powered by same 230-hp engine and equipped essentially like 328i Coupe, but gains all-wheel traction via xDrive system. Compared to RWD³ 328i model, this model's points of differentiation include:

- xDrive all-wheel drive system
- DSC system adds Hill Descent Control
- Heavier-duty manual transmission
- Front suspension and sub-frame in steel, vs. 328i's aluminum; aluminum thrust plate added for enhanced strength
- Standard suspension calibration, not sport
- Performance and fuel efficiency somewhat affected by additional weight and mechanism of AWD⁴ system, steel front suspension

- Packages and options as RWD 328i Coupe, except M Sport Package specifies 17-in. wheels with all-season tires², same size front/rear; deletes increased top-speed limiter. Extra-cost upgrade to 18-in. equipment as in 328i Coupe package, includes increased top-speed limiter.

335i Coupe

Upscale 3 Series model featuring N55 TwinPower Turbo engine, plus numerous distinctions in drivetrain, chassis, exterior details and interior features. Contents of optional M Sport and Premium Packages also differ from those of 328i. Key differentiation from 328i Coupe includes:

- 3.0-liter DOHC 24-valve inline 6-cylinder engine with aluminum construction, twin-scroll turbocharger, direct fuel injection, Valvetronic variable intake-valve lift and Double VANOS¹ variable valve timing; 300 hp/300 lb-ft. torque/22 mpg EPA combined rating with manual transmission, 21 mpg with automatic.
- Manual transmission has higher torque capacity, different ratios (Type K, also differs from 328i xDrive transmission)
- Heavier-duty automatic transmission
- Larger brake dimensions front and rear

- 1 - VANOS = Variable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.
- 2 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.
- 3 - Rear-wheel drive.
- 4 - All-wheel drive.

3 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 462-479.

- Same standard 17-in. wheel and tire dimensions and speed rating, but different wheel design
- Side-window framing in black with satin-aluminum trim, vs. black
- Dual matte-chrome exhaust tips, one each on left and right sides of vehicle, 80-mm diameter; vs. dual 72-mm pipes with matte-chrome tips on left side
- Power front seats with driver's-seat/exterior-mirror memory, auto mirror tilt-down: standard, vs. optional (Premium Package or stand-alone)
- Standard 2-way power moonroof, vs. optional (Premium Package or stand-alone)
- Underfloor storage compartment deleted
- Options and packages as 328i Coupe, except:
 - Premium Package lower-priced because power seats and moonroof are standard
 - M Sport Package wheels and tires² same 18-in. dimensions as for 328i, but different (M) design
 - 19-in. wheels and performance tires in differentiated front/rear sizes², available as M Sport Package upgrade. 19-in. wheels/tires not available on 328i Coupe.
 - Active Steering available

335i xDrive Coupe

This most powerful AWD Coupe differs from 335i Coupe in essentially same way as 328i xDrive Coupe from its RWD counterpart, plus these particulars:

- M Sport Package specifies 17-in. same-size wheels and all-season tires as for 328i xDrive, but with different (M) wheel design

- Upgrade wheels and performance tires in differentiated front/rear sizes, available with M Sport Package, are same 18-in. equipment as RWD M Sport Package.
- Does not offer 19-in. wheel/tire option or Active Steering

335is Coupe

Sets a performance crown atop the 3 Series with an N54 twin-turbo engine delivering 20 hp and 32 lb-ft. more output than its 335i counterpart. (This engine is entirely distinct from that of the 335i models.) An Overboost function raises peak torque even higher for brief bursts of acceleration, as outlined below along with the "is" model's other points of differentiation from the "i".

- 3.0-liter DOHC 24-valve inline 6-cylinder engine with aluminum construction, twin turbochargers, direct fuel injection via piezo injectors, and Double VANOS¹ variable valve timing; 320 hp/332 lb-ft. torque/21 mpg EPA combined rating with manual transmission, 19 mpg with available 7-speed Double-Clutch Transmission. Overboost function increases peak torque to a stunning 370 lb-ft. for up to 7 sec., providing extra oomph for passing
- Other engine modifications include auxiliary radiator, uprated cooling fan and oil cooler, and exhaust tuning that emphasizes this engine's spectacular performance character. Identifying script just "BMW" on airbox cover.
- 6-speed manual transmission is Type G, BMW's highest-capacity manual, vs. Type K in 335i models

- Instead of 328i/335i models' 6-speed torque-converter automatic transmission, offers 7-speed Double-Clutch Transmission for maximum performance: 0-60 mph comes up in just 5.0 sec. – 0.1 sec. quicker than 6-speed manual and fully 0.5 sec. quicker than 335i's 6-speed automatic.
- Short shift lever, included with M Sport Package in 335i, is standard with manual transmission
- Standard 18-in. wheels, Double Spoke design #313 with Ferric Gray finish and performance tires² (same sizes as 18-in. performance equipment on other models)
- Distinctive front bumper/spoiler ensemble, similar to Z4; three air-intake sections, with honeycomb screens
- Foglights omitted to achieve largest possible air-intake area in front spoiler
- High-gloss black grille surrounds with chrome-faced vertical slats
- High-gloss Shadowline side-window trim
- M exterior mirrors, all-black Shadowline with no body color
- Uniquely sculpted side sills
- Distinctive rear bumper/apron ensemble, with black diffuser section
- Black exhaust tips
- "335is" script on front flanks, trunklid, tachometer face, right end of dash
- M doorsill trims
- Standard Glacier Aluminum Dark interior trim – diamond pattern
- Aluminum/rubber M footrest, aluminum-trimmed pedals
- Standard M Sport steering wheel

- M shift knob for manual transmission
- Gray instrument faces with red numerals
- Standard sport front seats (power as in 335i)
- Standard Anthracite-color headliner
- Packages and options as 335i Coupe, except –
 - No M Sport Package, as most content standard
 - 19-in. wheels/tires as stand-alone option; same sizes² as 19-in. 335i M Sport Package upgrade but different wheel design
 - No optional interior trims
 - Moonroof can be deleted

328i Convertible

BMW's sophisticated retracting hardtop expresses itself in a graceful and uncompromised design whether the top is raised or lowered. Like RWD Coupes, the Convertible is offered in 328i, 335i and 335is models with 328i as the most accessible. Points of differentiation from 328i Coupe counterpart are:

- Power retracting hardtop, fully automatic. Lowers in just 22 seconds, including the side windows; raises in 23 sec.
- Special structural underbody reinforcements: V-braces added at front and rear
- Performance and fuel economy affected by greater weight of Convertible

1 – VANOS = VArIable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

3 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 462-479.

- Standard 10-way power front seats with power head-restraint/shoulder-belt height, vs. Coupe's standard 8-way power seats
- Rear side windows open, include 1-touch opening; vs. Coupe's fixed windows
- Variable AM/FM antenna position, hardtop raised/lowered
- 1-piece folding rear backrest; converts rear seat into additional cargo space, with hooks for grocery bags. Split folding rear seats not available.
- Storage compartment behind rear backrest
- Through-loading system for longer objects
- Variable trunk space with top up/down
- Front seat-integrated safety belts; belt presenters not necessary
- Side-impact airbags deploy upward to provide head protection, vs. Coupe's Head Protection System deployed from A-pillar and roof
- Auto-deploying Rollover Protection System
- Active Knee Protection for front occupants
- Options and packages as for 328i Coupe, except:
 - Leather upholstery with Sun Reflective Technology reduces solar heating of leather; this treatment not available in closed-body models (Premium Package or stand-alone option)
 - M Sport Package adds sport suspension, as not standard
 - Convenience Package deletes rear-window sunshade
- Cold Weather Package – where Coupe's package includes a ski bag, through-loading system with larger cargo bag is standard in Convertible
- Comfort Access keyless entry includes Comfort Loading (intermediate hardtop position for easy trunk loading) and other specific Convertible features
- Optional Harman-Kardon audio system has 11 speakers, vs. Coupe's 13
- Stand-alone power rear-window sunshade not available

335i Convertible

Combines retractable hardtop with turbocharged performance and correspondingly more powerful brakes. Higher level of standard equipment. Key points of differentiation from 328i Convertible include:

- 3.0-liter DOHC 24-valve inline 6-cylinder engine with aluminum construction, twin-scroll turbocharger, direct fuel injection, Valvetronic variable intake-valve lift and Double VANOS¹ variable valve timing; 300 hp/300 lb-ft. torque/22 mpg EPA combined rating with manual transmission, 21 mpg with automatic.
- Same transmission choices as 328i Convertible, but –
 - Manual transmission has higher torque capacity, different ratios (Type K, also differs from 328i xDrive transmission)
 - Heavier-duty automatic transmission, with different ratios
- Larger brake dimensions front and rear

- Same standard wheel and tire dimensions and speed rating, but different wheel design
- Dual matte-chrome exhaust tips, one each on left and right sides of vehicle, 80-mm diameter; vs. smaller-diameter pipes with matte-chrome tips on left side
- Underfloor storage compartment deleted
- Options and packages as 328i Convertible, except:
 - M Sport Package – 18-in. wheels and performance tires² in differentiated front/rear sizes, same dimensions as for 328i but different wheel design
 - 19-in. wheels and performance tires in differentiated front/rear sizes², available as upgrade to M Sport Package. 19-in. wheels/tires not available on 328i Convertible.
 - Active Steering available

335is Convertible

The 335is Convertible offers essentially the same performance and esthetic contrasts as 335is Coupe: 320-hp twin-turbo engine with Overboost, available 7-speed DCT, standard 18-in. wheel/tire equipment and optional 19-in., and most of the exterior and interior distinctions. Unlike 335is Coupe, Convertible does retain front foglights. Anthracite-color headliner is not available for the Convertible's retractable hardtop; nor is there a moonroof delete option as a moonroof is not part of the hardtop.

1 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

3 Series key features

Except as noted, all current 3 Series Coupe & Convertible models offer the following features:

Exterior design & function

3 Series design strategy

This Series expresses BMW's tradition of compact, dynamic, elegant Coupes and Convertibles. (The even longer tradition of sports sedans is now represented by the 328i and 335i Sedans.) Here are some highlights of the Coupe and Convertible designs:

At the front

Expressing a key BMW tradition are the "kidney" grilles, harmoniously set into the front end. In this view, one also notes the exterior mirrors, whose generous dimensions maximize the driver's rearward view.

All models have chrome vertical grille slats. Lighting clusters are shaped specifically for these 2-door variants, as is the entire impact-absorbing front bumper/airscoop ensemble. The hood's character lines emanate from the outboard top grille corners, visually elongating the hood.

- **Standard Xenon Adaptive headlights** on all Coupe and Convertible models
- **Dynamic auto-leveling** not only levels the headlights every 25 seconds to compensate for loads carried in the vehicle, but also responds to transient conditions such as braking or acceleration.
- **Cornering lights.** Adaptive headlights "steer" the headlights themselves and operate at all speeds in response to steering angle, vehicle speed and yaw rate. Cornering lights, also standard on the Coupes and Convertibles, provide an angled beam at each front corner to assist in situations of low speed and large steering angles. For backing up, the

cornering lights illuminate at both sides.

- **Welcome Light.** When the user unlocks the vehicle (by pressing the remote's Unlock button, or with available Comfort Access by pulling the door handle), not only interior lights but also luminous rings, front turn signals, ground lighting, taillights and license-plate lights illuminate. All dim out after 20 seconds.

In profile

Coupes. An altogether sporty silhouette; the roofline is graceful, beginning its rearward slope at about the position of a tall front occupant's head. Black/aluminum side-window surrounds are standard on all Coupes except 335is, which has high-gloss Shadowline finish here.

In this view, there's weight-saving technology: as on the 6 Series, the front side panels are of high-tech plastic. Because of these panels and other measures, the Coupe body shell weighs some 20 lb. less than it would with steel panels.

Convertibles. Stowing a 4-seater's long hardtop within a well-proportioned body is a challenge for engineers and designers. BMW mastered it with a 3-piece hardtop whose linkage folds it compactly enough to fit into an aft end as attractive as that of the Coupes, yet also distinct enough to proclaim a different body style.

With the top retracted, this is as exciting a Convertible as there ever was: the wedge shape is clear, the side windows' graceful slope complements it nicely

when raised, and the rear deck is little higher than that of the Coupes. All in all, it's a masterful achievement – stylistically and functionally.

At the rear

Coupes. The taillights wrap far into the body sides and have an inverted version of BMW's traditional L-form. A discreet spoiler lip punctuates the trunklid. Exhaust outlets are differentiated between the 328i and 335i/is models: two 60-mm/2.36-in. tips on the former's left side, one 80-mm/3.15-in. tip on each side on the latter.

Convertibles. This aspect of the Convertibles is theirs alone, with a more discrete trunkline as both necessary for the top's folding geometry and a stylistic element. Taillight design and a similarly contoured license-plate recess mark the family resemblance to the Coupes, while the 3rd brake light appears here in the trunklid rather than above the rear window.

Advanced corrosion-proofing and paint processes

With this 3 Series, BMW further developed its rustproofing and paint processes. The enhancements include:

- **Body shell virtually fully galvanized**, for enhanced corrosion resistance. Standing behind this claim is BMW's Rust-Perforation Warranty, protecting customers for 12 years/unlimited mileage.
- **Pre-paint preparation further improved.** Bodies are cleaned and prepared for priming in a 12-zone process.
- **Rotation dipping** is used in both pre-paint preparation

and primer application. This improves the cleaning process, and means that primers and corrosion-proofing coats reach even more fully into the body's nooks and crannies.

All this contributes to BMW's philosophy of lasting beauty.

Performance & efficiency

N52 3.0-liter DOHC 24-valve inline 6-cylinder engine with Valvetronic (328i models)

These models are powered by the amazing N52 engine, whose engineering features include –

- **Valvetronic variable valve lift**, replacing the traditional throttle and enhancing power, efficiency and response to the driver's demands. The N52 was BMW's first 6-cylinder engine with this advanced system.
- **Magnesium/aluminum composite construction**, saving weight and thus also contributing to enhanced performance and efficiency.
- **Electric coolant pump**, requiring less power, promoting fast engine warmup and making the engine more compact. Contributes to efficiency.
- **Variable-volume oil pump**, also requiring less power and enhancing lubrication; thus contributes to performance and efficiency.

This wonderfully smooth and sonorous engine delivers 230 hp @ 6500 rpm and 200 lb-ft. of torque at 2750 rpm. The relatively low torque peaking speed and strong torque value make for a robust response to the driver's accelerator foot. This comes

3 Series key features

Except as noted, all current 3 Series Coupe & Convertible models offer the following features:

through in strong 0-60-mph acceleration times and remarkably favorable EPA mileage:

328i models – Coupe 0-60 times 6.2 manual/6.8 automatic, Convertible 6.7/7.2. Combined EPA mileage 20-22 mpg.

328i xDrive models – Coupe 0-60 times 6.8/7.0, combined EPA ratings 19-20 mpg. Convertibles aren't offered with xDrive.

For more extensive details on the N52 engine, see **BMW features**.

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline

6-cylinder engine with Valvetronic (335i models)

This brilliant turbo unit continues in all 335i models and features the following highlights:

- **A single Twin Scroll turbocharger** providing pressurized air to the engine
- **Valvetronic variable valve lift.** This was the first engine in which BMW combined Valvetronic and turbocharging; since its introduction, this has been extended to two of BMW's V-8 engines.

There are numerous other advanced, fascinating and highly rational engineering features in this engine; for details see **BMW features**. Suffice it here to note that it develops a robust 300 hp/300 lb-ft. torque, and actually matches or tops 328i EPA mileage ratings in some of these models. Some highlights of its performance and efficiency:

- **335i Coupe** – 0-60 mph in 5.3 sec. with manual transmission, 5.5 sec. with automatic; EPA combined ratings 21-22 mpg. 335i xDrive 0-60 times are slightly quicker thanks to

enhanced traction; combined xDrive EPA ratings 21-23 mpg

- **335i Convertible** – 0-60 in 5.5 sec. manual, 5.7 automatic; EPA ratings same as Coupe.

N54 engine: twin turbocharging, piezo direct fuel injection, high compression ratio and other standout attributes (335is models)

Alongside development of the N55, the twin-turbo N54 was further refined.

The N54 engine is quite distinct from the N55. Its distinguishing features include –

- **Twin turbocharging** via two single-scroll turbos vs. the N55's single twin-scroll
- **Overboost function**, allowing higher turbo boost for brief periods (up to 7 sec.) to achieve dramatic midrange acceleration. One could think of this as a sort of "passing gear."
- **Special exhaust system** for an extra-sporty sound
- **Conventional valvetronic** (thus fixed valve lift) vs. the N55's Valvetronic
- **Piezo injectors** for the direct fuel injection, providing an extra measure of precision for this higher-performance engine. The N55 engine's injectors are solenoid-controlled.
- **320 hp @ 5900 rpm** and **332 lb-ft. torque @ 1500 rpm**, vs. the N55's 300 hp @ 5800 and 300 lb-ft. @ 1200-5000 rpm.

This version of a highly acclaimed engine powers the two 335is models to an even higher level of turbo performance than even their 335i counterparts:

335is Coupe – 0-60 in 5.1 sec. with 6-speed manual transmission, 5.0 sec. with 7-speed

DCT; this compares to the 335i Coupe's 5.3 with manual, 5.5 with 6-speed automatic. A reduction in fuel economy accompanies the performance increase: 21 mpg EPA combined for the manual (vs. 335i's 22), 19 mpg for the DCT (vs. 335i automatic's 21) because the twin-turbo engine has been more specifically tuned for high performance.

335is Convertible – 0-60 in 5.2 sec. with either transmission, vs. 5.5/5.7 for the 335i. The fuel-economy comparison is parallel to that of the Coupe.

Summary: The N55 engine matches the original N54 version in performance, makes notable progress in fuel efficiency, and does it all with simplified engineering. The enhanced N54 takes performance to another level and adds new excitement. In its March '11 issue, *Road & Track* magazine reported that "you quickly noticed the added power and throatiness of the exhaust." *Roundel* (April '10) called it "an outstanding ride, everything BMW stands for."

6-speed manual transmission (standard all models)

335is models use the **Type G** transmission, a heavy-duty unit also found in 5 Series V-8 models, M5 and M3. 328i xDrive models employ the **Type H** unit. The **RWD** 328i models have a somewhat lighter-duty version, called **Type I**, that weighs about 10% less than Type H and has even higher mechanical efficiency, contributing to fuel economy. BMW's engineers developed the **Type K** 6-speed manual gearbox specifically to accommodate BMW's "middle" engines' torque

output while being more compact and lighter than the Type G. This appears in all 335i models.

As BMW's newest manual transmission, the Type K is described in some detail in **BMW features**.

6-speed STEPTRONIC automatic transmission (optional all except 335is models)

The 6-speed automatic is available with optional steering-wheel shift paddles in combination with the M Sport Package; these are described in **options & packages**. For information on BMW's automatic transmissions, see **BMW features**.

Double-pivot front suspension

The 3 Series employs this typically BMW type of front suspension, featuring two lower arms working in combination with the spring/shock-absorber strut. These two lower arms are the reason for its name "double-pivot."

By employing two lower arms, this system provides several fundamental advantages:

- **Small positive steering offset**, for best steering feel and control under all road conditions. Though the two arms don't actually intersect, if you extend their axes to a point where they do intersect, you find a "virtual pivot point" that is ideal for achieving this result. Steering offset is the "lever arm" through which road forces act on the suspension system.
- **Large steering caster**, for outstanding stability in straight-line driving and excellent steering return action coming out of curves.
- **Space for large brakes**, by virtue of the arrangement of the two lower arms.

3 Series key features

Except as noted, all current 3 Series Coupe & Convertible models offer the following features:

Further advantages are found in the details:

- The trailing (forward) lower arm has a rubber/hydraulic cushion, which provides the most effective “compliance” for reducing road shock and thus improving riding comfort.
- The transverse (rearward) lower arm is cushioned by a finely tuned rubber element that fosters direct and precise response to the steering wheel in curves and corners.

On the RWD models (328i/335i/335is), there is extensive aluminum componentry for low unsprung weight. This improves the suspension’s response to bumps and other road irregularities; it can markedly enhance riding comfort and, on any irregular road surface, handling as well. Aluminum components on each side include –

- Both lower arms (forged aluminum)
- Steering knuckle (also forged)
- Brake caliper (not part of suspension, but part of unsprung weight as it moves up and down with the wheel)
- Brake shield (stamped piece; also not part of suspension, but part of unsprung weight).

In addition, the subframe that carries the front suspension on RWD models is of aluminum, as is the steering rack on all models; these are not unsprung components, but do contribute to overall weight reduction – and being up front, also to the “typical BMW” near-50/50 weight distribution of RWD models⁵. This subframe adds rigidity, enhances steering precision and is also an integral element in the vehicle’s management of energy in a frontal crash.

Because an AWD vehicle’s front suspension must handle engine torque as well as cornering and braking forces, 3 Series vehicles with xDrive substitute steel for aluminum in most front-suspension components for additional robustness.

5-link rear suspension

This system could be described as a double-A-arm system⁶ with an additional lateral track rod; the upper and lower A-arms actually consist of two links each, their vertical positions differing. (This is similar to the front suspension’s dual lower arms.) Its advantages are extensive:

- As at the front, there is a virtual pivot point for each pair of links, giving the engineers similar freedom in optimizing the system’s geometry for very precise handling, especially insensitive to road disturbances.
- Under cornering forces, the system controls geometry to achieve great agility while also ensuring predictable, stable handling.
- A wide and rigid basis on which the rear tires are “planted” on the road. The lateral links are extremely rigid too, as is the subframe.
- All links connect to the subframe, none directly to the body structure. This further reduces any effects of road irregularities on passenger comfort, and improves handling precision as well.
- Here too, a large and elaborate subframe contributes to energy management in a rear-end crash.

Observant “gearheads” may note that the 5, 6 and 7 Series also have a 5-link rear suspension

system. But the two systems differ. Whereas the larger Series’ “5th element” is a so-called Integral link, essentially vertical and connecting the upper and lower forward lateral arms, the 5th element here is an additional lateral link. Each serves to optimize suspension geometry in a highly sophisticated way, appropriate to the size and weight class of these different-size Series.

Steering: evolution standard, revolution optional

The 3 Series’ engine-speed-sensitive variable-assist power rack-and-pinion steering system is universally praised; an auto magazine once described it as “nearly telepathic.” This standard system continues, evolved to keep the 3 Series at the head of its pack as a driver’s car.

The “revolution” here is the optional Active Steering, offered as a stand-alone option on the 335is and RWD 335i models and incorporating evolutionary refinements. For details, see **BMW features**.

4-wheel ventilated disc brakes: generous dimensions, advanced technology

All 3 Series brake systems feature ventilated cast-iron rotors and (as another contribution to balanced weight distribution) aluminum calipers at the front. Here are some details:

328i models. The front brakes’ diameter is 312 mm/12.3 in.; that of the rear is 300/11.6, also a generous dimension.

335i/335is models. To go with these models’ additional performance and weight, their front brakes are enlarged to 348mm/13.7 in.; the rear discs are 336/13.2.

xDrive: BMW’s “intelligent” all-wheel drive system (all xDrive models)

xDrive provides a widely, steplessly and fast-acting variable torque split between the front and rear wheels and has many advantages for both traction and handling. See **BMW features**.

Wide selection of wheel designs; all-season or performance tires, all run-flats

Maintaining a BMW tradition, each model offers more than one wheel-and-tire combination. 17-in. wheels are standard on 328i and 335i, 18-in. on 335is models.

328i and 335i RWD Coupes’ and Convertibles’ M Sport Package include 18-in. differentiated performance equipment; 335i models also offer a 19-in. package upgrade. Both 335is models (Coupe and Convertible) come standard with 18-in. performance equipment and offer a stand-alone 19-in. upgrade. xDrive Coupe models’ M Sport Package specifies 17-in. same-size/all-season tires, plus a differentiated/performance upgrade like the RWD equipment.

Every current 3 Series model comes with BMW’s run-flat tires, described in **BMW features**.

The table on the next page summarizes all available combinations.

5 – AWD models naturally have a higher percentage of their weight on the front wheels than their RWD counterparts, but their weight distribution is within BMW’s philosophy of outstanding balance.

6 – “Double A-arm” refers to the classic system of two A-shaped lateral arms, one upper and one lower, determining suspension geometry. This principle also appears in the X5, X6, 5, 6 and 7 Series front suspension, and is sometimes referred to as “double-wishbone.”

3 Series key features

Except as noted, all current 3 Series Coupe & Convertible models offer the following features:

Model & version	Wheel size & design/code	Run-flat tires ²
328i all Coupe & Convertible standard	17 x 8.0 V Spoke #338 2K5	225/45R-17 all-season
335i all Coupe & Convertible standard	17 x 8.0 Star Spoke #339 2DF	↑
328i xDrive Coupe M Sport Package	17 x 8.0 Star Spoke #340 2DG	↑
335i xDrive Coupe M Sport Package	17 x 8.0 M Double Spoke #194M 2PK	↑
328i RWD Coupe & Convertible M Sport Package, 328i xDrive Coupe M Sport Package upgrade	18 x 8.0 front/18 x 8.5 rear V Spoke #152 2H8	225/40R-18 front / 255/35R-18 rear performance
335i RWD Coupe & Convertible M Sport Package, 335i xDrive Coupe M Sport Package upgrade	18 x 8.0 front/18 x 8.5 rear M Star Spoke #193M 2MF	↑
335is Coupe & Convertible standard	18 x 8.0 front/18 x 8.5 rear Double Spoke #313 Z13	↑
335i RWD Coupe & 335i Convertible M Sport Package upgrade	19 x 8.0 front/19 x 9.0 rear Star Spoke #230 2R4	225/35R-19 front / 255/30R-19 rear performance
335is Coupe & Convertible optional	19 x 8.0 front/19 x 9.0 rear Double Spoke #313 2B6	↑

Comfort & convenience

Interior design: refined elegance, enhanced functionality

Driving pleasure has always been the central focus of the 3 Series; the current 3 takes this traditional emphasis to more sophisticated levels of elegance and functionality than ever.

The most central informational element remains BMW's traditional pair of round analog instruments, the speedometer and tachometer with their white numerals on black dials.

Like the exterior, the 3's interior design presents a visually fascinating interplay of convex and concave surfaces. The instrument panel has a predominantly horizontal format with a larger expanse of the selected trim material (wood is standard in all but 335is models but there are many choices). Leatherette upholstery, standard in all but the 335i/s Convertibles, comes in Black or Cream Beige. Colors for the Dakota leather upholstery, optional in all but the 335i/s Convertibles,

are Gray/Black, Oyster/Black, Coral Red/Black, Saddle Brown, Cream Beige and Black.

A sharp eye will notice that the two front door panels differ in design: On the passenger side there's a sloped/curved vertical door pull; on the driver's side, where the main power-window controls are grouped on the armrest, the door pull is integrated into that armrest for access to the window controls.

There is a large pull-out bin below each door's armrest: Its forward portion is configured for sunglasses; its rear section can function as a coinholder. At the extreme rear of each door is an open storage space. The selected trim material appears here as a long, curved strip alongside the armrest. An especially elegant touch is that Ambiance Lighting streams down from under the door ledge.

The primary front cupholders are on the dash, above the glove compartment; but there is also a recess in the center

console compartment that can be used as one. The center console sweeps cleanly back to a standard center armrest, below which there is a climate-controlled storage compartment.

Easing entrance and exit to rear seats

Entering and exiting a 2-door vehicle's rear seats requires a bit more effort than those of a 4-door model; passengers must release and fold forward the front seats' backrests, then enter through a relatively narrow passageway.

A thoughtful feature of the Coupes' front seats is that their releases are at a very convenient spot at the backrests' top outboard corners. An entering passenger grasps this release and pulls it upward; the higher position gives good leverage, reducing the physical effort of folding the backrest over.

BMW provides forward movement of the front seats to widen the entryway. Called the **easy-entry** feature, this function is

powered in all Coupe models with power front seats and all Convertibles; the seat motors forward when the release lever is raised, then returns to its previously set position when the backrest is returned to its normal position. In 328i Coupes with their standard manual seats, easy-entry is manual but easy to use.

Sophisticated concept: the Convertible's retractable hardtop

Retractable hardtops appear on a number of 2-seaters; the Z4 is a 2-seater with retractable hardtop. For the 3 Series, BMW created a retractable hardtop for a full 4-seat convertible, a greater challenge than a 2-seater. As described in **exterior design & function**, BMW has accomplished this with style and grace.

² - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 6 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

3 Series key features

Except as noted, all current 3 Series Coupe & Convertible models offer the following features:

Yet this car offers the all-weather comfort and anti-theft traits of a closed coupe, combined with the open-air joys of a convertible. It fairly brims with attractive, convincing, even fascinating features and attributes. The attention to detail in its design and engineering is remarkable:

- Lowers in just 22 sec., raises in 23 sec.
- Can be lowered or raised inside some garages, reaching a maximum height of 67.3 in. That's lower than a BMW X5.
- Remote lowering with optional Comfort Access.
- Comfort loading, also with optional Comfort Access.
- Quiet, precise operation.
- Can be stopped at any point during lowering or raising by again pressing the interior button (on console) or remote.
- Water drainage when retracted after rain: carefully designed to channel the water away, so that the top can be raised or lowered when wet.
- AM/FM antenna in rear window, active when top is raised.
- Elegant kinematics
- Attractive finisher panel just behind rear seats, analogous to the cover for a folded soft-top
- Trimmed like a coupe, with body-color longitudinal strips and matte-aluminum trim around the side windows
- Full headliner without visible crossbows, just like a coupe inside
- Large side and rear windows for excellent outward vision.

The 3-piece hardtop is operated by 8 hydraulic cylinders; an electric drive secures it to the windshield. The three pieces fold

and stack compactly, in straightforward motions, into the trunk, whose lid (including the "cover") opens rearward for this process. Storage space underneath the finisher panel is accessible through a center opening.

Convertibles are usually heavier than their closed-body counterparts; the retractable hardtop is heavier than a softtop. Against this one disadvantage, the retractable hardtop has many inherent advantages:

- **Greater rigidity** with the top up, making this car almost as rigid as the Coupe model, enhances its BMW-typical driving dynamics and riding comfort.
- **Reduced wind noise** compared to a raised softtop, approaching that of a closed body.
- **Improved aerodynamics.** With raised top, the Convertible achieves an aerodynamic drag coefficient (C_d) of 0.30 (328i) or 0.31 (335i/s), little different from its Coupe counterparts. In turn this is reflected in its performance and fuel efficiency at higher speeds.

Coupes: belt presenters for convenient "buckle-up"

Unlike some competitors, 3 Series Coupes have a B-pillar; this allows placing the front belts' upper anchor points at a favorable height for an effective belt fit on the driver and front passenger. But because a 2-door car's doors are long, reaching back for the belt can be awkward. The Coupes' safety-belt presenter addresses this issue neatly and ergonomically.

Clearly integrated into the ledge of each rear side window, the presenter emerges –

- when the driver closes the left door after entering (with Comfort Access: key inside vehicle, start button activated)
- when passenger seat is occupied and door is closed – and moves (electrically) 13.8 in. forward. This puts the buckle tongue where the occupant can grasp it without turning around. As soon as the occupant clicks the tongue into the belt latch, the presenter motors back to its normal recessed position. In case the occupant doesn't fasten his or her belt – as for example when sitting in the car but not driving – the presenter retracts after one minute or if the vehicle reaches a speed of about 4 mph. (The system's actual logic is more complex than this, but this is an adequate description.)

The Convertibles have front safety belts that, being fully mounted onto the seats themselves, are out of the way for rear passengers' entry and exit.

Control strategy: an overview

The 3 Series offers buyers a choice of with or without iDrive; the optional Navigation System comes with a second hood over a central iDrive control display. Elements of the control layout include:

- Tilt/telescopic steering wheel
- Console shift lever, controlling the choice of manual, automatic or (in 335is models) Double-Clutch transmission
- Traditional pull-up handbrake
- Seat controls on the seats' outboard edges, except the manual fore-aft adjuster on vehicles without power seats (328i Coupe standard), at the inboard front edge.

- Power-window controls for all windows on the driver's door
- Driver orientation of the control center, at a "light" (3°) orientation of the center dash area toward the driver.

The instrument cluster

The analog speedometer and tachometer are side-by-side, with the fuel gauge at the bottom of the speedometer and an analog oil-temperature display (335i) or fuel-economy readout (328i) at the bottom of the tachometer. 335is models have special graphics, with gray faces, red numerals and (on the tachometer) "335is" script.

Additional features include:

- Condition-Based Service indications (required service, miles to service, inspection dates) in the central display between speedometer and tachometer.
- Via a rotating disc behind the speedometer face, a pointer at the dial's periphery indicates the cruise control's set speed.
- Active Cruise Control if present.

3-spoke steering wheel standard in all models

Both 3-spoke wheel styles (standard sport, and M Sport) have leather-wrapped rims and multi-function controls on the steering-wheel face. Included here are –

- Audio volume
- Audio presets
- Air recirculation
- Make/end phone call (with available Bluetooth interface)
- Voice Command (with iDrive/Navigation option)
- Entertainment-system mode.

The M sport wheel replaces the air-recirculation and entertainment-mode keys with two freely

3 Series key features

Except as noted, all current 3 Series Coupe & Convertible models offer the following features:

programmable keys.

Both wheels are 369 mm/14.5 in. in diameter and have a relatively thick padded rim. The **sport wheel**, standard in all but 335is models, includes galvanic trim on its spokes and textured leather on its rim. The **M sport wheel** features an M logo and other distinctive touches, including rim sections of perforated leather; it comes with the M Sport Package on all but the 335is models, where it is standard.

iDrive system

These 3 Series models are one of three BMW groups offering vehicles with or without iDrive (others are 1 Series, X1 and Z4). Without iDrive there is a single hood over the main instrument cluster, and all functions are operated either by hard controls or via the audio display. With the Navigation/iDrive option, a second hood frames the iDrive control display at dash center, and many functions (including those of the Navigation System) are operated via the display and the controller between the front seats.

iDrive is included in the Navigation option, appearing in its 2nd generation with natural, user-friendly operation and extensive functionality. Its 8.8-in. display features attractive graphics and high (1280 x 480 pixels) resolution.

Details of the iDrive system are found in **BMW features**.

Audio systems

Two systems are offered:

- Standard system, 8 speakers including 2 subwoofers.
- Optional Harman Kardon system with 11 speakers in Convertibles, 13 in Coupes; this is

now part of a Premium Sound Package.

With either system, the subwoofers are in BMW's patented positions, in cavities at the bases of the B-pillars (generally referred to as "under the front seats").

Antennas. Both systems employ BMW's well developed, reception-enhancing diversity antenna system, with multiple circuits in the rear window of Coupes. A fin-type roof antenna serves the phone system and/or GPS functions. The housing for this antenna also accommodates an antenna for the available Satellite Radio; see **options & packages** for details.

For the Convertibles, with no fixed roof or rear window, the antenna system is more complex:

- AM/FM antenna – one set in the rear-seat side panels, the other in the rear bumper. Via a switching circuit, the former are active when the hardtop is lowered, the latter when it's raised.
- Diversity – the necessary distance between the two circuits of a diversity antenna system is created by placing the second antenna in the rear bumper.
- GPS – in the front overhead console, which on Convertibles is in the windshield frame.
- Phone – in left-front side panel (fender).
- Satellite Radio – needs a free view upward, thus mounted on trunklid.

Standard system. Features include:

- Programmable memory for 12 FM and 6 AM stations
- Search, seek and manual tuning

- Double tuner (only when Navigation System is present; displays all available FM radio stations)
- Audio volume and scroll-through-presets from steering-wheel controls
- Vehicle-speed-dependent automatic volume control
- Radio Data System (RDS), including Program Type (PTY)
- In-dash single-disc CD player, MP3-capable
- Audio muting for phone use (Bluetooth interface now standard)
- Time and outside-temperature display
- Auxiliary audio input (in center console)
- 180 watts of audio power
- 8 speakers:
 - 2 midrange, 100 mm, in front doors
 - 2 midrange, 100 mm, in rear side panels
 - 2 subwoofers, 217 mm, under front seats
 - 2 tweeters, 25 mm, in front-door mirror triangles

The Harman Kardon surround-sound system is described under **Premium Sound Package in options & packages**.

Upholstery and trim: many choices

The standard leatherette upholstery (all models except 335i/s Convertibles) is available in Cream Beige or Black. Dakota is the 3 Series leather and is available in six colors in all models, in order of their color codes:

- Gray/Black
- Oyster/Black
- Coral Red/Black
- Saddle Brown/Black
- Cream Beige
- Black

(With the /Black combinations, the dash and carpets are black.)

In Convertibles, the leather on seats, armrests, head restraints and shift knob is treated with Sun Reflective Technology, which sharply reduces surface heating from solar rays.

Just entering a 3 Series vehicle is a gracious experience. At night, one appreciates the Welcome Light: Upon unlocking vehicle, activation for 20 seconds of front luminous rings, turn signals, taillights, license-plate lights, ground lighting and interior lights. Dark Burl Walnut wood trim remains standard in all models except 335is Coupe and Convertible, which come standard with Aluminum Glacier Silver Dark. In all except 335is models, Light Burl Walnut, Fine Line Aluminum and Bamboo Anthracite are available. Aluminum Glacier Silver Dark is also available in other models in combination with the M Sport Package. All these choices are offered at no extra cost.

Whatever the trim material, it is abundantly and tastefully applied: Especially the full-width dash strip is generously dimensioned, and the material is repeated on a large area of the center console and as a handsome strip on each door.

Independently of the main trim materials just described, galvanic trim appears on the –

- Speedometer and tachometer rings
- Start/stop button's ring
- Cupholder touch strips
- Interior door handles
- Climate-control and audio knobs
- Center air outlets' adjusting tabs
- Open and Trunk/Tailgate buttons on remote
- iDrive controller if present.

3 Series key features

Except as noted, all current 3 Series Coupe & Convertible models offer the following features:

Front seats: three choices in 328i, two in 335i, standard sport seats in 335is

The manual front seats, standard in 328i Coupes, are height-adjustable; the Coupe driver's seat adds a cushion-angle adjustment.

8-way power front seats are available as part of the Premium Package or as a stand-alone option for 328i Coupes; they are standard in 335i Coupes. Power controls are on the seats' outboard edges.

Sport seats are offered as part of the M Sport Packages in all except 335is models, where they are standard. These add electropneumatic adjustment of backrest width and a manual adjustment for thigh support. Where not present on the standard manual seat (328i Coupe passenger's seat), they also add a manual cushion-angle adjustment. These can appear in combination with manual or power for the other adjustments, depending upon equipment combinations (see options & packages).

Convertible front seats: unique features

Standard, Convertible-specific power seats include:

- Seat-integrated safety belts, which further optimize the belts' fit on the occupant and ease entry into the rear seats
- Power-adjustable head-restraint/shoulder-belt height.

Otherwise, the power adjustments of the standard and sport seats correspond to those of the Coupes. All models have the easy-entry feature described earlier.

Because the seat-integrated belts are out of the way when the seat is folded over, the Convertibles don't have the belt presenters of the Coupe.

Center console: not just up front

In combination with the individual rear seats, a long center console is one of these models' "sporty 4-seater" ambience. Up front, it includes the climate-controlled storage compartment capped by part of a 2-piece center armrest. In vehicles equipped with the Navigation/iDrive option, the iDrive controller sits toward the rear of the console.

Just behind the front backrests there's a section, finished on top in the chosen trim material, that contains climatized rear air outlets, a closable compartment and footwell lights on either side. In the Coupes, aft of that there are an open tray with rubber mat and, at the very rear of the console, a bin with rollover cover.

For rear-seat passengers, the long console adds practicality, luxury, and an intimate atmosphere that's appropriate to these sporty cars.

Rear seats: contoured for luxury and comfort

BMW has a long history in luxurious 4-seat Coupes; the CS Series of 1968-75 and three generations of 6 Series come to mind. In each case, the rear seats were configured for two persons only, making these Coupes less "family cars" and more "sporty cars for two or more persons."

Today's 3 Series Coupes have similar character, though their layout enables a roomier back

seat than, say, the clearly "+2" rear compartments of some of these sporty-elegant heritage models. There is a broad fold-up center armrest containing dual cupholders, folding backrests are standard, and a pass-through with ski bag is available as part of the Cold Weather Package.

The rear-seat head restraints are height-adjustable; at their lowest position, they help preserve the driver's line of rearward vision. Bottom line: the Coupes' rear seats are real seats, if not Sedan-roomy.

Convertible rear seating is laid out essentially as in the Coupes, but the retractable hardtop's linkage reduces shoulder room from that of the Coupes – not an issue because of the 2-seat configuration. Leg room is 1.8 in. less in the Convertibles.

In place of the Coupes' split-folding rear backrests and fold-down center armrest, the Convertibles have a 1-piece folding backrest, a removable armrest, and a small center compartment with a net to help secure objects stored there.

Thoughtful features throughout

From front to rear in the 3 Series cabin, numerous thoughtful features enhance luxury and convenience:

- Auto-dimming interior and exterior mirrors, with digital compass in interior mirror; part of optional Premium Package.
- Interior trunk release, in familiar location ahead of left front door.
- 2-way moonroof on Coupes; standard 335i/is, optional 328i
- Storage compartment/ashtray

at front of center console, with glide-up cover.

- Voice Command switch on steering wheel, active only with Navigation/iDrive option (serves hands-free dialing in vehicles without iDrive)
- Enhanced Bluetooth mobile-device interface, included with BMW Assist
- Front and rear⁷ overhead consoles:
 - Included in the front one are BMW Assist buttons and the Passenger Airbag Off indicator. An interior light, separately switched left/right reading lights, BMW Ambiance Lighting, moonroof control if present, and microphones for hands-free phone use are also here.
 - The rear one, behind the moonroof, includes another interior light, separate left/right reading lights, Ambiance Lighting and space for the alarm system's motion detector.
- Fold-up rear center armrest in Coupes; includes two cupholders. Convertibles have a take-out centerpiece and the cupholders are in the rear center console.

Practical cargo space and trunk features in Coupes

Elimination of the spare tire and jack (possible because run-flat tires are standard) results in generous cargo space considering the size of these vehicles. Yet there's more than at first meets the eye: Under the trunk floor of 328i models, a concealed compartment encloses an additional 1.76 cubic feet and offers the possibility of storing smaller

⁷ – Rear console not present in Convertibles.

3 Series key features

Except as noted, all current 3 Series Coupe & Convertible models offer the following features:

objects without concern for their moving around when the vehicle is in motion.

Split folding rear seats, standard in Coupes, increase effective cargo space and add storage versatility; a ski bag is included with the Coupes' Cold Weather Package. In Convertibles, the rear seat's 1-piece backrest folds down for extra space; a through-loading system with larger cargo bag is also standard.

Safety & security

Safety and security features of the 3 Series Coupes and Convertibles are shared with those of other BMW Series, and represent BMW's state of the art in these all-important areas of vehicle attributes. Two safety features, however, are exclusive to these models:

- **Pedals that rotate forward** (decouple) in a frontal impact. The Mastervac (brake vacuum booster) is mounted so that as the front end deforms, it rotates, and with it the brake and clutch pedals. This has the effect that the pedals retreat forward, canceling much of the force transfer to the driver's feet and legs if they are on the pedals.
- **Crushable footrest.** Designed to crush under the force of the driver's left foot, so that the full impact force is not transmitted to his or her foot and leg.

All these models have Active head restraints on their front seats; these and other safety features and systems shared with other Series are described in **BMW features**.

Packages & options

Packages

Premium Package

(all models, code ZPP)

Continuing a popular offering for 3 Series models, this Package adds desirable and popular features to each 3 Series Coupe and Convertible model.

All models:

- **Auto-dimming exterior and interior mirrors,** codes 430 + 431
- **Power-fold exterior mirrors.** A valued convenience for parking in tight spaces and for navigating some car washes. Included in code 430.
- **Digital compass** in interior rearview mirror, code 4NA
- **BMW Universal Transceiver,** 3-function device for garage doors and other external electrical devices. Code 319.
- **4-way power lumbar support** on the front seats, code 488

All except 335i/is Convertibles:

- **Dakota leather upholstery** is standard in these models. Codes LC.

328i Coupes only (standard all other models):

- **Power front seats,** 8-way power + the 4-way power lumbar support. Include driver's-seat and exterior-mirror memory, with two memory settings for each driver. Code 459.
- **Auto tilt-down feature** for right-hand exterior mirror; mirror tilts down for view of the curb or other possible obstruction when the transmission is shifted into reverse. Included in code 459.
- **Power 2-way moonroof,** code 403.

M Sport Package

(all except 335is models, code ZMP)

This ultimately sporty treatment enhances the innate sportiness of all Coupe and Convertible models except the 335is pair, where comparable equipment is standard.

Sports wheels and tires² – 328i RWD Coupe and Convertible:

- **18-in. performance – V Spoke wheels** #152, 18 x 8.0 front/18 x 8.5 rear, with 225/40R-18 front / 255/35R-18 rear tires; code 2H8

328i xDrive Coupe:

- **17-in. all-season – Star Spoke wheels** #340, 17 x 8.0 front/rear, with 225/45-17 tires, code 2DG
- **18-in. performance –** as for RWD model, code 2H8, at extra cost

335i RWD Coupe and Convertible:

- **18-in. performance –** same sizes as for 328i, but M Star Spoke wheels #193M; code 2MF
- **19-in. performance –** Star Spoke wheels #230, 19 x 8.0 front/19 x 9.0 rear, with 225/35R-19 front / 255/30R-19 rear tires, code 2R4, at extra cost

335i xDrive Coupe:

- **17-in. all-season –** M Double Spoke wheels (design #194M), sized as 2DG; code 2PK
- **18-in. –** as for RWD model, code 2MF, at extra cost.

Other features –

All models:

- **Increased top-speed limiter,** code 840, in combination with performance tires whether base Package equipment or wheel/tire upgrade.

- **Specific exterior color selection.** Available only with non-metallic Alpine White or metallic Space Gray, Titanium Silver, Black Sapphire or Mineral White. Additionally, metallic Le Mans Blue is available only with the package.
- **M aerodynamic body components –** front bumper/spoiler, side sills and rear bumper apron. Code 715.
- **Gloss-chrome exhaust tips –** part of factory M Sport Package group, code 337.
- **M doorsill trim plates** with M logo and polished chrome inserts, also part of 337.
- **M sport steering wheel,** with M logo and other distinctive design touches including sections of perforated leather. Code 710 for manual transmission, or 7XA with shift paddles for automatic transmission at extra cost.
- **Short shift lever** for manual transmission, part of 337.
- **Aero leather handbrake grip,** part of 337.
- **M footrest** for driver's left foot, aluminum with rubber insert, part of 337.
- **Front sport seats,** code 481.

RWD Convertibles:

- **Sport suspension calibration,** code 704 (standard on RWD Coupes, not available on xDrive models)

² – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

3 Series key features

Except as noted, all current 3 Series Coupes & Convertible models offer the following features:

Coupes only:

- High-gloss Shadowline exterior trim, code 760
- Anthracite-color headliner, code 775

Convenience Package

(all models, code ZCV)

Bundles convenience, security and safety-related features to differing extents depending on model.

All models:

- Park Distance Control, front/rear, code 508
- Comfort Access keyless entry, an increasingly popular feature on all current models. Code 322.

Coupes only:

- Power rear-window sunshade, code 415. No sunshades are offered in Convertibles.

Cold Weather Package

(all models, code ZCW)

For all models, this package includes:

- Heated front seats, code 494. Also available as a stand-alone option.
- Headlight cleaning system, code 502. High-intensity jets, normally retracted, pop out to spray the lights with washer fluid.

Coupes only:

- Ski bag, traditional slender type, code 464

Premium Sound Package

(all models, code ZPS)

Combines two premium audio amenities most buyers wouldn't want to be without:

- Premium audio system by famed audio purveyors Harman Kardon, code 688. Compared to a standard system, this system offers –

- Increased audio power, 420 watts vs. standard 180W
- Higher-caliber speakers throughout, plus additional speakers over the standard eight: Coupes 13, Convertibles 11
- Digital Sound Processing (DSP), adjusted along with other parameters on the audio panel or (with Navigation/Drive) the control display
- Surround-sound simulation.

The upgraded speakers are as follows, for all models unless otherwise noted; an asterisk (*) denotes additional speakers over the standard system –

- 1 midrange fill speaker, 100 mm, center of dash*
- 2 midrange, 100 mm, in front doors
- 2 midrange, 100 mm, rear shelf (Coupes)*, rear side panels (Convertibles)
- 2 midrange, 100 mm, in rear side panels (Coupes)
- 2 tweeters, 25 mm, in front-door mirror triangles
- 2 subwoofers, 217 mm, upgraded, under front seats
- 2 tweeters, 25 mm, in rear side panels (Coupes*, Convertibles*).
- Satellite Radio with 1-year subscription, code 655
See **BMW features** for details on this system.

Stand-alone options

6-speed STEPTRONIC automatic transmission

(no extra cost 328i & 335i models, code 205)

This velvety-smooth, responsive and efficient automatic is offered as a stand-alone option on all 328i and 335i models. General

features of BMW automatic transmissions, and distinctions among various versions of them, are described in **BMW features**.

Shift paddles

(328i & 335i models; code 7XA; require M Sport Package)

Offered for the automatic transmission in combination with the M Sport Package. There are two paddles above the steering wheel's horizontal spokes: left one for downshifts, right one for upshifts.

The paddle-shifted automatic (drivers can still shift with the lever as well) also incorporates Direct Selection of the Manual mode. If, while driving in D, the driver manually downshifts via paddle, the Manual mode engages and the transmission holds that gear. If the driver makes no further manual shifts within 15 seconds, the transmission returns to automatic operation.

Shift paddles are included with the 335is models' Double-Clutch Transmission, next.

7-speed Double-Clutch Transmission (DCT)

(335is models, code 2TC)

This decidedly sports-oriented transmission, operating on a completely different principle from the 6-speed automatic, provides 3 modes – Normal, Sport, Manual – plus an additional Quick Shift (QS2) mode available by selecting DCT's Manual plus Sport mode via its console selector: thus a total of 4 modes. In manually selected downshifts involving abrupt rpm jumps, "rev matching" blips the throttle to synchronize engine and vehicle speeds,

resulting in what *Automobile* magazine (April '10) called "the beautiful rev match of a downshift." All shifts, whether manual or automatic and in any mode, are accomplished with no interruption of power flow.

In place of the mechanical shift lever, DCT employs an E-shift selector lever on the console. Full details on the DCT principle and what it means to drivers, for both the M and this "standard" version, appear in **BMW features**.

This is the ideal partner for a sporting engine like the 335is' twin-turbo unit. Not only does it offer more driving-style choices than a manual 6-speed, it actually improves the 0-60-mph acceleration time (from 5.1 to 5.0 sec.).

Shift paddles are an essential element of the DTC concept and are included with the DTC option.

Active Steering

(335i RWD & 335is models only, code 217)

Active Steering offers advanced and sporting benefits, described in detail in **BMW features**.

Active Cruise Control

(all except 335is models, code 541)

Active Cruise Control is described in **BMW features**. Note that for 3 Series Coupes and Convertibles, it continues with code 541 and does not include the Stop-and-Go and Collision Warning functions that are added to the Active Cruise Control system of 5, 6 and 7 Series as well as X5 and X6.

3 Series key features

Except as noted, all current 3 Series Coupe & Convertible models offer the following features:

19-in. wheels and tires

(335is models, code 2B6)

These two models have standard 18-in. wheels and performance tires in differentiated front/rear sizes. This upgrade specifies 19 x 8.0 front/19 x 9.0 rear Double Spoke wheels, design #313, and 225/35R-19 front / 255/30R-19 rear performance tires².

Automatic high beams

(optional all models, code 5AC; requires Premium Package)

Switches the headlights automatically between low and high beams. Turns on the high beams whenever traffic conditions allow, relieving the driver of this duty and ensuring that the driver always has the best possible forward vision at night. The driver can also take over at any time by using the steering-column beam control.

For more detailed information, see BMW features.

Metallic paint

(all models, color metal)

The beauty of BMW metallic paint – indeed, of all BMW paintwork – needs no introduction. All metallic colors are now available as regular options.

See M Sport Package nearby for color availability with that option. For full details on 3 Series color choices, see the Ordering and Pricing Guides on CenterNet.

Park Distance Control

(all models, code 508)

Four ultrasonic sensors each in the front and rear bumpers detect when the vehicle is approaching obstacles that may not be visible to the driver. A warning tone emanates from the front or rear of the interior

respectively, increasing in frequency as the vehicle approaches the obstacle until the tone becomes constant.

When combined with the Navigation/Drive option, PDC includes a plan-view vehicle diagram in the iDrive monitor, which graphically depicts obstacles' location relative to the vehicle.

Comfort Access keyless entry

(all models, code 322)

No need to activate a remote to unlock or lock the vehicle, nor to insert it into the dash slot before starting the engine. On Convertibles, includes remote lowering of hardtop as well as an intermediate hardtop position for loading (Comfort Loading).

In addition to this stand-alone availability, Comfort Access is included in all models' Convenience Package.

Power 2-way moonroof

(optional 328i Coupes, standard 335i/is Coupes; code 403)

This classically popular BMW feature is offered on the 328i Coupes as part of the Premium Package or this stand-alone option. Sporting and weight-conscious customers may delete the moonroof from the 335is Coupe via option code ZDM.

Dakota leather upholstery

(optional all except 335i & 335is Convertibles, where standard; codes LC)

Available as either this stand-alone option or part of the Premium Package. In the Convertibles, it incorporates Sun Reflective Technology, which significantly reduces heating from sunlight. Six color schemes are offered.

Alternate interior trim

(no extra cost all models; codes 4A3, 4B9, 4BY & 4WA)

Though galvanized trim materials for accents and functional elements appear in all vehicles (see upholstery and trim: many choices), customers also have no-extra-cost choices in the major trim across the dash, on the center console and doors, and on the rear side panels. 4AB Dark Burl Walnut continues as the standard trim in all except 335is models; the regular options are –

- 325i and 335i models – Light Burl Walnut (4A3), Fine Line Aluminum (4B9) or Bamboo Anthracite (4BY)
- All models with M Sport Package – Aluminum Glacier Silver Dark (4WA). This trim is also standard in both 335is models.

Power front seats and memory system

(optional 328i Coupes, standard 335i/is Coupes & all Convertibles; code 459)

The memory provides two positions for each user, as identified by the remote he or she is using. Also included is auto tilt-down of the right-hand exterior mirror when the transmission is shifted into reverse, a feature that's especially valuable in parallel-parking.

This stand-alone option does not include the power-adjustable lumbar support that comes with the Premium Packages; with that feature, the number of power adjustments rises by 4.

Heated front seats

(all models, code 494)

Available as this stand-alone option or as part of the Cold Weather Package, the heated seats have impressive features including:

- Large heated area, extending to the side bolsters.
- High heating power, fully 130 watts.

Heated steering wheel

(all except 335is models, code 248)

Not available with the M Sport steering wheel, which comes with the M Sport Package in 328i and 335i models and is standard in 335is models.

Navigation system + iDrive

(optional all models, code 609; for all models, adds 639 BMW Assist & Enhanced Bluetooth interface)

The instrument panel gains a "second wave" that houses the iDrive monitor, and a controller sits on the clean, uncluttered console behind the shift lever.

The entire system is BMW's CIC (Car Information Computer) with –

- 8.8-in. Control Display, new higher-resolution 1280 x 480 pixels
- Controller on console, with surrounding direct-select keys
- GPS Navigation with hard-drive database
- Voice Command system
- Programmable Memory Keys, which enable users to program

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

3 Series key features

Except as noted, all current 3 Series Coupes & Convertible models offer the following features:

frequently used functions and recall them with a single key-stroke.

iDrive (including GPS Navigation) is described in greater detail in **BMW features**.

Satellite Radio with 1-year subscription (all models, code 655)

Though now combined with the Harman Kardon premium audio system in the Premium Sound Package, Satellite Radio continues to be offered as a stand-alone. See **BMW features** for details on this system.

BMW Apps

(all models, code 6NR; includes Smartphone Integration, requires Navigation/iDrive option) An element of BMW's ConnectedDrive strategy; see **BMW features** for a description.

BMW Assist (optional all models, code 639)

Available as a stand-alone option; but also in forced combination with Navigation/iDrive, carries a zero option price, thus effectively included in that option. **BMW Assist** is BMW's comprehensive system of customer services and in-car telematics; for detailed information, see CenterNet or the **BMW Assist** pages of this or the 2012 edition for the latest program details. Includes a 4-year subscription to **BMW Assist Safety Services**. The included Bluetooth mobile-device interface is the recently introduced Enhanced version, incorporating numerous refinements and additional functions.

Power rear-window sunshade (all Coupe models, code 415)

Conveniently controlled from a console switch. Also available as part of Coupes' Convenience Package.

BMW center-installed accessories

Among the many accessories available for 2013 3 Series Coupes and Convertibles are:

- **Performance Power Kits** in two versions for 335i models
- **Strut reinforcing braces**, running from the front suspension's strut towers to the cowl area
- **Complete wheel and tire sets** in 18- and 19-in. sizes and various wheel designs
- **Wheel locks**
- **Tire valve-stem caps** with BMW lettering or logo
- **Tire Mobility Kit** and tire sealer kit
- **Aerodynamic kits**
- **Carbon-fiber mirror caps**
- **Performance Black kidney grilles**
- **Wind deflector for Convertibles**
- **Sun/wind deflector for moon-roof**
- **Dark-lens ("smoked") tail-lights**
- **Mud flaps**
- **Roof and storage systems**
- **License-plate frames**

- **Car covers**, outdoor and indoor types
- **UV sunshade**
- **Doorsill trims**, illuminated/special BMW design/BMW M types
- **Special pedals and footrests**
- **Gearshift knobs and selector levers**
- **Floormats**, all-weather
- **Snap-in adapter with USB interface** for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- **Snap-in adapter for BMW Apps** and various media
- **Connection and charging cables** of various types
- **BMW USB memory stick** in style of vehicle remote
- **BMW Bluetooth headset and speaker**
- **CD/DVD storage sleeve**
- **Cool bag**
- **BMW umbrella with LED light**
- **LED hand lamp**

For details and additional items, see the **Accessories** listings for 2013 3 Series Coupes and Convertibles on bmwusa.com.

Standard & optional features

2013 3 Series Coupes & Convertibles

Bold within table indicates new feature for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Exterior design & function	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Front & rear body-color bumpers	S	S	S	S	S	S
Xenon Adaptive headlights with dynamic auto-leveling	S	S	S	S	S	S
LED luminous rings, turn signals & side-marker lights	S	S	S	S	S	S
Cornering lights	S	S	S	S	S	S
Automatic headlight control	S	S	S	S	S	S
Retractable high-intensity headlight cleaning system	ZCW	ZCW	ZCW	ZCW	ZCW	ZCW
Daytime Running Lamps via luminous rings	S ¹	S ¹	S ¹	S ¹	S ¹	S ¹
Halogen free-form foglights	S	S	NA	S	S	S
Rain-sensing windshield wipers	S	S	S	S	S	S
Heated windshield-washer jets	S	S	S	S	S	S
Park Distance Control, front & rear	ZCV/OPT	ZCV/OPT	ZCV/OPT	ZCV/OPT	ZCV/OPT	ZCV/OPT
Welcome Light ²	S	S	S	S	S	S
Ground lighting at door handles	S	S	S	S	S	S
LED taillight clusters	S	S	S	S	S	S
Adaptive brakelights	S	S	S	S	S	S
Metallic paint	OPT	OPT	OPT	OPT	OPT	OPT
Chrome grille frames & vertical slats	S	S	–	S	S	–
Shadowline black grille frames, chrome-trimmed vertical slats	NA	NA	S	NA	NA	S
Grilles in front-bumper air intakes	Black	Black w/ chrome bars	Special black	Black	Black w/ chrome bars	Special black
Fully automatic power-retracting hardtop	–	–	–	S	S	S
Side-window trim	Black/ chrome	Black/satin aluminum	High-gloss Shadowline	Satin aluminum	Satin aluminum	Matte aluminum
High-gloss Shadowline exterior trim	ZMP	ZMP	S	NA	NA	NA
M aerodynamic body components: front bumper/spoiler, side sills & rear bumper/apron	ZMP	ZMP	S	ZMP	ZMP	S
Special all-black exterior mirrors	NA	NA	S	NA	NA	S
Unique rear bumper/apron with matte-black diffusor	NA	NA	S	NA	NA	S
Roof-seam trim in body color	S	S	S	S	S	S
Matte-chrome round exhaust outlets:						
Dual on left side, 72 mm	S	–	–	S	–	–
Dual on left & right sides, 80 mm	NA	S	–	NA	S	–
Gloss-black dual left & right, 80 mm	NA	NA	S	NA	NA	S

1 – Selectable via Vehicle & Key Memory System.

2 – Upon unlocking of vehicle, activation for 20 sec. of front luminous rings & turn signals, taillights, license-plate lights, ground lighting and interior lights.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable

ZCV – Convenience Package
ZCW – Cold Weather Package
ZMP – M Sport Package

Standard & optional features

2013 3 Series Coupes & Convertibles

Bold within table indicates new feature for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Performance & efficiency	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
DOHC 24-valve inline 6-cylinder engine:						
3.0-liter	S	-	-	S	-	-
3.0-liter TwinPower Turbo	-	S	-	-	S	-
3.0-liter twin-turbo	-	-	S	-	-	S
Engine features:						
Magnesium/aluminum composite construction	S	-	-	S	-	-
Aluminum construction	-	S	S	-	S	S
Port fuel injection	S	-	-	S	-	-
High Precision direct fuel injection	-	S	S	-	S	S
Valvetronic system	S	S	-	S	S	-
Double VANOS ³ steplessly variable valve timing	S	S	S	S	S	S
Twin-scroll turbocharger	NA	S	-	NA	S	-
Twin single-scroll turbochargers	NA	-	S	NA	-	S
Overboost function	NA	NA	S	NA	NA	S
Electronically controlled engine cooling	S	S	S	S	S	S
Electric coolant pump	S	S	S	S	S	S
Auxiliary radiator & higher-capacity cooling fan	NA	NA	S	NA	NA	S
Volume-controlled oil pump	S	S	S	S	S	S
Higher-capacity oil cooler	NA	NA	S	NA	NA	S
Direct ignition system with knock control	S	S	S	S	S	S
Dual exhaust system	Partial dual	S	S	Partial dual	S	S
Special sporty exhaust sound	NA	NA	S	NA	NA	S
6-speed manual transmission	S	S	S	S	S	S
Short shift lever (manual transmission)	ZMP	ZMP	S	ZMP	ZMP	S
6-speed STEPTRONIC automatic transmission with Normal, Sport & Manual shift modes	NC	NC	NA	NC	NC	NA
7-speed Double-Clutch Transmission (DCT) with Sport & Manual modes	NA	NA	OPT	NA	NA	OPT
Shift paddles on steering wheel (with automatic transmission or DCT)	OPT ⁴	OPT ⁴	S ⁴	OPT ⁴	OPT ⁴	S ⁴
Double-pivot strut-type front suspension	S	S	S	S	S	S

3 - VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

4 - In all except 335is HP models, required (at extra cost) when M Sport Package & automatic transmission are combined. In 335is HP models, included with optional DCT.

S - Standard
OPT - Optional
NC - No extra cost
NA - Not available
- - Not applicable

ZMP - M Sport Package

Standard & optional features

2013 3 Series Coupes & Convertibles

Bold within table indicates new feature for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Performance & efficiency (cont.)	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Aluminum front suspension components	S [NA]	S [NA]	S	S	S	S
5-link rear suspension	S	S	S	S	S	S
Front & rear anti-roll (stabilizer) bars	S	S	S	S	S	S
Aluminum front/steel rear subframes	S [Both steel ⁵]	S [Both steel ⁵]	S	S	S	S
Convertible-specific underbody reinforcements	–	–	–	S	S	S
Twin-tube gas-pressure shock absorbers	S	S	S	S	S	S
M sport suspension calibration	S [NA]	S [NA]	S	ZMP	ZMP	S
Engine-speed-sensitive variable-assist power steering	S	S	S	S	S	S
Active Steering with Servotronic vehicle-speed-sensitive power assist	NA	OPT [NA]	OPT	NA	OPT	OPT
4-wheel ventilated disc brakes with no-asbestos organic (NAO) pads	S	S	S	S	S	S
Dynamic Stability Control	S	S	S	S	S	S
xDrive fulltime all-wheel drive system, electronically controlled with variable front/rear torque split & traction control	NA [S]	NA [S]	NA	NA	NA	NA
Alloy wheels, 17 x 8.0: V Spoke #338	S	–	–	S	–	–
Star Spoke #339	NA	S	–	NA	S	–
Star Spoke #340	– [ZMP]	–	–	–	–	–
M Star Spoke #194M	NA	– [ZMP]	–	–	–	–
Alloy wheels, 18 x 8.0 front/18 x 8.5 rear: V Spoke #152	ZMP [ZMP+OPT]	–	–	ZMP	–	–
M Star Spoke #193M	NA	ZMP [ZMP+OPT]	–	NA	ZMP	–
Double Spoke #313, Ferric Gray finish	NA	NA	S	NA	NA	S
Alloy wheels, 19 x 8.0 front/19 x 9.0 rear: Double Spoke #313, Ferric Gray finish	NA	NA	OPT	NA	NA	OPT
Star Spoke (design #230)	NA	ZMP+OPT [NA]	NA	NA	ZMP+OPT	–

5 – Steel front subframe with aluminum thrust plate. S – Standard
OPT – Optional

NA – Not available
– – Not applicable

ZMP – M Sport Package

Standard & optional features

2013 3 Series Coupes & Convertibles

Bold within table indicates new feature for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Performance & efficiency (cont.)	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Run-flat tires ⁶ :						
225/45R-17 all-season	S	S	–	S	S	–
225/40R-18 front / 255/35R-18 rear performance	ZMP [ZMP+OPT]	ZMP [ZMP+OPT]	S	ZMP	ZMP	S
225/35R-19 front / 255/30R-19 rear performance	NA	ZMP+OPT [NA]	OPT	NA	ZMP+OPT	OPT
Tire Pressure Monitor	S	S	S	S	S	S
Comfort & convenience	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Doorsill trim plates with chrome trim & BMW lettering	S	S	–	S	S	–
335is badging on front flanks, trunklid, tachometer face & dash	NA	NA	S	NA	NA	S
Vehicle & Key Memory	S	S	S	S	S	S
Multi-function remote control with selective unlocking ¹ & remote trunk release	S	S	S	S	S	S
Comfort Access keyless entry	ZCV/OPT	ZCV/OPT	ZCV/OPT	ZCV/OPT	ZCV/OPT	ZCV/OPT
Aluminum/rubber doorsill trim plates with BMW lettering	S	S	–	S	S	–
M doorsill trim plates with M logo & polished chrome inserts	ZMP	ZMP	S	ZMP	ZMP	S
Aero leather handbrake grip	ZMP	ZMP	S	ZMP	ZMP	S
M footrest for driver's left foot, aluminum with rubber insert	ZMP	ZMP	S	ZMP	ZMP	S
M pedals, stainless steel-trimmed	NA	NA	S	NA	NA	S
Dual power/heated exterior mirrors	S	S	S	S	S	S
Automatic-dimming interior & exterior mirrors, power-folding exterior mirrors	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
Digital compass in interior mirror	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
Automatic High Beams	OPT ⁷	OPT ⁷	OPT ⁷	OPT ⁷	OPT ⁷	OPT ⁷
BMW Universal Transceiver (3-function garage-door opener)	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
Courtesy lights with fade-in/fade-out feature, actuation from remote, automatic switch-on upon engine shutoff, separately controlled left/right front & rear reading lights, front & rear footwell lighting & illuminated visor vanity mirrors	S	S	S	S	S	S

1 – Selectable via Vehicle & Key Memory System.

6 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 3 Series

models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

7 – Requires Premium Package.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable

ZCV – Convenience Package
ZMP – M Sport Package
ZPP – Premium Package

Standard & optional features

2013 3 Series Coupes & Convertibles

Bold within table indicates new feature for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Comfort & convenience (cont.)	328i [xDrive] Coupe	335i [xDrive] Coupe	335i Coupe	328i Convertible	335i Convertible	335is Convertible
BMW Ambiance Lighting, overhead, doors & rear side panels	S	S	S	S	S	S
Lockable glove compartment	S	S	S	S	S	S
Tilt/telescopic 3-spoke leather-wrapped sport steering wheel with fingertip audio & phone controls ⁸	S	S	-	S	S	-
M sport wheel, 369 mm/14.5 in. with M logo	ZMP	ZMP	S	ZMP	ZMP	S
Heated steering wheel (not with M Sport wheel)	OPT	OPT	NA	OPT	OPT	NA
Dynamic Cruise Control	S	S	S	S	S	S
Active Cruise Control	OPT	OPT	NA	OPT	OPT	NA
8-way adjustable driver's/6-way adjustable front passenger's seat	S	-	-	-	-	-
10-way manual front sport seats plus power-adjustable backrest width	ZMP	-	-	-	-	-
8-way power front seats with power easy-entry feature	OPT/ZPP	S	-	-	-	-
10-way power front seats with power head-restraint/shoulder-belt height & power easy-entry feature	NA	NA	-	S	S	-
4-way power front-seat lumbar support	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
8-way power + 2-way manual front sport seats plus power-adjustable backrest width & power easy-entry feature	OPT/ZMP ⁹	ZMP	S	-	-	-
12-way power front sport seats with power-adjustable backrest width, 2-way manual thigh-support adjustment on both seats, power head-restraint/shoulder-belt height, power easy-entry feature	NA	NA	NA	ZMP	ZMP	S
Memory system for driver's seat & exterior mirrors (2 settings per user)	OPT/ZPP ¹⁰	S	S	S	S	S
Front safety-belt presenters	S	S	S	-	-	-
Front seat-integrated safety belts	NA	NA	NA	S	S	S
Auto tilt-down of right-hand exterior mirror for backing up	OPT/ZPP ¹⁰	S	S	S	S	S
3-stage, thermostatically controlled heated front seats	ZCW/OPT	ZCW/OPT	ZCW/OPT	ZCW/OPT	ZCW/OPT	ZCW/OPT
Front center armrest	S	S	S	S	S	S

8 - Phone controls active when approved mobile device is paired with Bluetooth interface.

9 - Power sport seats in 328i Coupes when Premium & M Sport Packages

are combined, or when stand-alone power-seats option & M Sport Package are combined. Premium Package adds power lumbar support.

10 - Included with all power seats.

S - Standard
OPT - Optional
NA - Not available
- - Not applicable

ZCW - Cold Weather Package
ZMP - M Sport Package
ZPP - Premium Package

Standard & optional features

2013 3 Series Coupes & Convertibles

Bold within table indicates new feature for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Comfort & convenience (cont.)	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Full-length console	S	S	S	S	S	S
Climate-controlled front center console compartment	S	S	S	S	S	S
Electronic analog speedometer & tachometer	S	S	S	S	S	S
Gray instrument faces with red numerals, 335is script on tachometer	NA	NA	S	NA	NA	S
LCD main & trip odometers	S	S	S	S	S	S
Check Control vehicle monitor system iDrive system with high-resolution control display, GPS Navigation; direct-select radio, CD, phone & Navigation menus; 6 Programmable Memory Keys, enhanced Voice Command, Real Time Traffic Information & other features	OPT	OPT	OPT	OPT	OPT	OPT
Leatherette upholstery	S	S	S	S	–	–
Dakota leather upholstery (Convertibles: with Sun Reflective Technology)	ZPP/OPT	S	ZPP/OPT	ZPP/OPT	S	S
Dark Burl Walnut wood interior trim	S	S	NA	S	S	NA
Light Burl Walnut wood interior trim	NC	NC	NA	NC	NC	NA
Bamboo Anthracite wood interior trim	NC	NC	NA	NC	NC	NA
Fine Line aluminum interior trim	NC	NC	NA	NC	NC	NA
Aluminum Glacier Silver Dark interior trim	NC ¹¹	NC ¹¹	S	NC ¹¹	NC ¹¹	S
Pearl-gloss galvanic trim (speedometer & tachometer, steering wheel, climate-control & radio knobs, start/stop button, interior door handles, etc.)	S	S	S	S	S	S
Power door windows with key-off operation; 1-touch opening & closing, anti-trapping feature, opening from remote	S	S	S	S	S	S
Power rear side windows with 1-touch opening, opening from remote	NA	NA	NA	S	S	S
All-window switch with 1-touch opening	NA	NA	NA	S	S	S
Automatic climate control with separate left/right temperature settings, automatic recirculation control, misting control, bi-directional solar sensor, temperature- & volume-controlled rear air outlets, activated-charcoal microfilter ventilation & other features	S	S	S	S	S	S

11 – Requires M Sport Package.

S – Standard
OPT – Optional

NC – No extra cost
NA – Not available

– – Not applicable
ZPP – Premium Package

Standard & optional features

2013 3 Series Coupes & Convertibles

Bold within table indicates new feature for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Comfort & convenience (cont.)	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
2-way power moonroof with 1-touch opening & closing, anti-trapping feature, opening from remote, sliding interior sunshade	ZPP/OPT	S	S	–	–	–
Moonroof delete option	–	NA	NC	–	–	–
Anthracite-color headliner	ZMP	ZMP	S	NA	NA	NA
Fully automatic power-retracting hardtop	–	–	–	S	S	S
Anti-theft AM/FM/HD/CD/MP3 audio system with 8 speakers including 2 subwoofers, FM diversity antenna system, Radio Data System (RDS), automatic volume control, auxiliary audio input & other features	S	S	S	S	S	S
Variable AM/FM antenna position, hardtop raised/lowered	–	–	–	S	S	S
Harman Kardon surround-sound audio system with Logic7 signal processing, increased audio power, vehicle-specific equalizing, upgraded componentry & all features of standard system; 13 speakers (Coupes) or 11 speakers (Convertibles)	ZPS	ZPS	ZPS	ZPS	ZPS	ZPS
Satellite Radio with 1-year subscription	ZPS/OPT	ZPS/OPT	ZPS/OPT	ZPS/OPT	ZPS/OPT	ZPS/OPT
80-GB hard drive providing data storage for Navigation, audio system, phonebook & enhanced Voice Command; ripping capability from CD, MP3 player or USB stick	OPT ¹²	OPT ¹²	OPT ¹²	OPT ¹²	OPT ¹²	OPT ¹²
Bluetooth cellphone interface with high-capacity phonebook download	S	S	S	S	S	S
Enhanced Bluetooth interface	OPT ¹³	OPT ¹³	OPT ¹³	OPT ¹³	OPT ¹³	OPT ¹³
USB connectivity	S	S	S	S	S	S
iPod/USB Adapter	S	S	S	S	S	S
BMW Apps including Smartphone Integration	OPT ¹⁴	OPT ¹⁴	OPT ¹⁴	OPT ¹⁴	OPT ¹⁴	OPT ¹⁴
Front cupholders	S	S	S	S	S	S
Dual front sun visors with illuminated mirrors	S	S	S	S	S	S
Open & closable storage compartments in front doors including sunglasses compartments & coinholder	S	S	S	S	S	S

12 – Included in Navigation/Drive option.

14 – Requires Navigation/Drive option.

13 – Included with BMW Assist.

S – Standard
OPT – Optional
NC – No extra cost
NA – Not available
– – Not applicable

ZMP – M Sport Package
ZPP – Premium Package
ZPS – Premium Sound Package

Standard & optional features

2013 3 Series Coupes & Convertibles

Bold within table indicates new feature for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Comfort & convenience (cont.)	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Fold-up rear center armrest with dual cupholders	S	S	S	NA	NA	NA
Seatback storage compartments	NA	NA	NA	S	S	S
Split folding rear seats	S	S	S	NA	NA	NA
1-piece folding rear backrest	–	–	–	S	S	S
Rear center storage compartment	NA	NA	NA	S	S	S
Ski bag	ZCW	ZCW	ZCW	–	–	–
Through-loading system with cargo bag (can hold 2 small golf bags)	NA	NA	NA	S	S	S
Power-operated rear-window sunshade	ZCV/OPT	ZCV/OPT	ZCV/OPT	NA	NA	NA
Rear-window defroster	S	S	S	S	S	S
Floor mats, front & rear	S	S	S	S	S	S
Interior trunk release	S	S	S	S	S	S
Trunk features:						
Underfloor storage compartment	S	NA	NA	S	NA	NA
4 cargo tie-downs	S	S	S	S	S	S
Side compartments (capacity depends on options present)	S	S	S	S	S	S
Accessory power outlet	NA	NA	NA	S	S	S
Variable overall capacity, top raised/lowered	–	–	–	S	S	S
Comfort Loading (intermediate hardtop position for convenient trunk loading)	–	–	–	OPT ¹⁵	OPT ¹⁵	OPT ¹⁵
Safety & security	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Dynamic Stability Control, including electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Brake Control, Brake Fade Compensation, Brake Standby, Brake Drying & Start-off Assistant	S	S	S	S	S	S
plus –						
Dynamic Traction Control	S	S	S	S	S	S
Hill Descent Control	NA [S]	NA [S]	NA	NA	NA	NA
Dual front-impact airbag						
Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S	S	S	S	S

15 – Included with optional Comfort Access. S – Standard
OPT – Optional

NA – Not available
– – Not applicable

ZCV – Convenience Package
ZCW – Cold Weather Package

Standard & optional features

2013 3 Series Coupes & Convertibles

Bold within table indicates new feature for 2013. [Bracketed] information is for xDrive model where it differs from RWD model.

Safety & security (cont.)	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
3-point safety belts at all seating positions (4)	S	S	S	S	S	S
Front safety belts with automatic tensioners & force limiters	S	S	S	S	S	S
Front safety-belt presenters	S	S	S	–	–	–
Seat-integrated front safety belts	NA	NA	NA	S	S	S
LATCH attachments at rear seating positions (for securing child restraint seats)	S	S	S	S	S	S
Head restraints at all seating positions (4)	S	S	S	S	S	S
Front-seat Active head restraints	S	S	S	S	S	S
Front & rear-seat Head Protection System	S	S	S	NA	NA	NA
Active Knee Protection	NA	NA	NA	S	S	S
Rollover Protection System	–	–	–	S	S	S
Pedals that rotate forward (decouple) under frontal impact	S	S	S	S	S	S
Footrest designed to crush under force of driver's left foot	S	S	S	S	S	S
Front-seat side-impact airbags, seat-mounted	S	S	S	–	–	–
Front-seat side-impact airbags, seat-mounted with head protection	–	–	–	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S	S	S	S
Post-impact safety measures:						
Unlocking of central locking system	S	S	S	S	S	S
Switch-on of hazard flashers	S	S	S	S	S	S
Switch-on of interior lighting	S	S	S	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S	S	S	S
BMW Assist, including enhanced Automatic Collision Notification, SOS button, Enhanced Roadside Assistance, TeleService ¹⁶ , BMW Assist Safety Plan ¹⁶	OPT	OPT	OPT	OPT	OPT	OPT
Central locking system with selective unlocking (Convertibles: includes glove compartment)	S	S	S	S	S	S
Coded Driveaway Protection	S	S	S	S	S	S
Alarm system with operation from remote, interior motion detector	S	S	S	S	S	S

¹⁶ – Requires BMW Assist annual fee after 4th year.

S – Standard
OPT – Optional

NA – Not available
– – Not applicable

Technical specifications

2013 3 Series Coupes & Convertibles

Bold within table indicates new specification for 2013. [Bracketed] specification is for xDrive model where it differs from FWD model.

General	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Curb weight, lb.:						
Manual transmission	3362 [3583]	3560 [3737]	3571	3825	3979	4001
Automatic transmission	3428 [3627]	3582 [3759]	3593	3891	4001	4034
Weight distribution, front/rear, %:						
Manual transmission	49.8/50.2 [51.4/48.6]	51.1/48.9 [52.2/47.8]	51.9/49.1	45.8/54.2 ¹	47.1/52.9 ¹	47.1/52.9 ¹
Automatic transmission	49.8/50.2 [52.0/48.0]	51.4/48.6 [53.1/46.9]	51.2/48.8	46.5/53.5 ¹	47.7/52.3 ¹	47.5/52.5 ¹
Wheelbase, in.	108.7 ²					
Track, front/rear, in.	59.1/59.6 ^{2,3}					
Length, in.	181.9 ²					
Width, in.	70.2 ²					
Height, in.	54.9	54.1	54.1	54.5 ¹	54.5 ¹	54.0 ¹
Body	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Type	2-door coupe ⁴			2-door convertible ⁵		
Aerodynamic drag coefficient (C _d)	0.29 [0.31]		0.30	0.30	0.31	0.31
EPA size classification	Subcompact ²					
Accommodations	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Seating capacity, persons	4 ²					
Shoulder room, front/rear, in.	55.3/51.9 ⁴			55.3/49.3 ⁵		
Head room, front/rear:						
Without moonroof	38.4/36.8	–	38.4/36.8	38.0/36.5 ⁵		
With moonroof	37.4/37.1	37.4/37.1	37.4/37.1	–		
Leg room, front/rear	41.8/33.7 ⁴			41.8/31.9 ⁵		
EPA passenger-compartment volume, cu ft.	88.5 ⁴			84.0 ⁵		
EPA cargo volume, cu ft.	11.1 ^{4,6}			9.0 ^{1,5,6}		
Engine & electrical	328i models		335i models		335is models	
Engine type	DOHC inline 24-valve 6-cylinder ²					
Basic engineering features	Magnesium/aluminum composite construction, port fuel injection, Double VANOS ⁷ steplessly variable intake- & exhaust-valve timing		Aluminum construction with cast-in iron cylinder liners, direct fuel injection, Double VANOS ⁷ steplessly variable intake- & exhaust-valve timing ⁸			

- 1 – With hardtop raised.
 2 – Specification applies to all models.
 3 – With standard wheels.
 4 – Specification applies to all Coupes.

- 5 – Specification applies to all Convertibles.
 6 – Can be expanded via folding rear seats in Coupes, or augmented via folding rear backrest in Convertibles.

- 7 – VANOS = **V**ariable **N**Ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

- 8 – Specification applies to all 335i & 335is models.
 – – Not applicable

Technical specifications

2013 3 Series Coupes & Convertibles

Bold within table indicates new specification for 2013. [Bracketed] specification is for xDrive model where it differs from RWD model.

Engine & electrical (cont.)	328i models	335i models	335is models
Special valvetrain features	Valvetronic variable intake-valve lift	Valvetronic variable intake-valve lift	–
Direct fuel injection	–	High Precision (solenoid-controlled)	High Precision (piezo-controlled)
Turbocharging system	Naturally aspirated (not turbocharged)	Single twin-scroll turbo	Twin single-scroll turbos
Bore x stroke, mm/in.	85.0 x 88.0/ 3.35 x 3.45	84.0 x 89.6/3.31 x 3.53 ⁸	
Displacement, cc/cu in.	2996/183	2979/182 ⁸	
Compression ratio	10.7:1	10.2:1 ⁸	
Power @ rpm, hp	230 @ 6500 rpm	300 @ 5800	320 @ 5900
Torque @ rpm, lb-ft.	200 @ 2750	300 @ 1200-5000	332 @ 1500 (overboost: 370)
Engine-management system	MSV 80 with knock control (2 sensors); port fuel injection, variable valve timing & lift, engine cooling & other functions included in control strategy	MEVD 17.2 with knock control (2 sensors); direct fuel injection, variable valve timing (335i: & lift), engine cooling & other functions included in control strategy ⁸	MSD 81
Fuel requirement	Premium unleaded ²		
Fuel capacity, U.S. gal.	16.1 ²		
Battery capacity, amp-hr.	70 ²		
Alternator output rating, amp./W	180/2520 ²		

Drivetrain	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Drive system	Front engine/ RWD [AWD]	Front engine/ RWD [AWD]	Front engine/ RWD	Front engine/ RWD	Front engine/ RWD	Front engine/ RWD
Manual transmission	6-speed ² , Type I [H]	Type K	Type G	Type I	Type K	Type G
Ratios: 1st	4.32:1 [4.35:1]	4.11:1	4.17:1	4.32:1	4.11:1	4.17:1
2nd	2.46:1 [2.50:1]	2.32:1	2.40:1	2.46:1	2.32:1	2.40:1
3rd	1.66:1	1.54:1	1.58:1	1.66:1	1.54:1	1.58:1
4th	1.23:1	1.18:1	1.19:1	1.23:1	1.18:1	1.19:1
5th	1.00:1	1.00:1	1.00:1	1.00:1	1.00:1	1.00:1
6th	0.85:1	0.85:1	0.87:1	0.85:1	0.85:1	0.87:1
Reverse	3.94:1 [3.93:1]	3.73:1	3.68:1	3.94:1	3.73:1	3.68:1
Final drive ratio	3.23:1 [3.38:1]	3.08:1	3.08:1	3.91:1	3.15:1	3.08:1

² – Specification applies to all models.

⁸ – Specification applies to all 335i & 335is models.

– – Not applicable
AWD – All-wheel drive
RWD – Rear-wheel drive

Technical specifications

2013 3 Series Coupes & Convertibles

Bold within table indicates new specification for 2013. [Bracketed] specification is for xDrive model where it differs from RWD model.

Drivetrain (cont.)	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Automatic or Double-Clutch transmission	6-speed, GM6	6-speed, ZF 6 HP 19 TU	7-speed, DKG 436	6-speed, GM6	6-speed, ZF 6 HP 19 TU	7-speed, DKG 436
Ratios: 1st	4.06:1	4.17:1	4.78:1	4.06:1	4.17:1	4.78:1
2nd	2.37:1	2.34:1	3.06:1	2.37:1	2.34:1	3.06:1
3rd	1.55:1	1.52:1	2.15:1	1.55:1	1.52:1	2.15:1
4th	1.16:1	1.14:1	1.68:1	1.16:1	1.14:1	1.68:1
5th	0.85:1	0.87:1	1.39:1	0.85:1	0.87:1	1.39:1
6th	0.67:1	0.69:1	1.20:1	0.67:1	0.69:1	1.20:1
7th	–	–	1.00:1	–	–	1.00:1
Reverse	3.20:1	3.40:1	4.45:1	3.40:1	3.40:1	4.45:1
Final drive ratio	3.73:1 [3.91:1]	3.46:1	2.56:1	3.91:1	3.46:1	2.56:1
Chassis	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Body/frame construction	Unitized steel ²					
Front suspension	Struts, double-pivot lower arms, coil springs, twin-tube gas-pressure shock absorbers, tubular anti-roll bar, subframe ² (RWD models: aluminum lower arms, wheel carriers & subframe; RWD Coupe models & both 335is models have std. M sport suspension calibration; on 328i & 335i Convertibles this is part of M Sport Package.)					
Rear suspension	5-link system, coil springs, twin-tube gas-pressure shock absorbers, tubular anti-roll bar ² (RWD Coupe & both 335is models have standard M sport suspension calibration; on 328i & 335i Convertibles this is part of M Sport Package.)					
Rack-&-pinion steering: Standard system	Engine-speed-sensitive power assist ²					
Overall ratio	16.0:1 [18.2:1]	16.0:1 [18.2:1]	16.0:1	16.0:1	16.0:1	16.0:1
Turns lock-to-lock	3.0 [3.2]	3.0 [3.2]	3.0	3.0	3.0	3.0
Optional Active Steering (335i RWD & 335is models only)	Vehicle-speed-sensitive ratio & power assist					
Overall ratio	Electrically/electronically variable over wide range of 10.8:1 – 18.0:1					
Turns lock-to-lock min./max.	1.8-3.0					
Turning circle, ft.	36.1 [38.7]	36.1 [38.7]	36.1	36.1	36.1	36.1

2 – Specification applies to all models.

– – Not applicable

RWD – Rear-wheel drive

Technical specifications

2013 3 Series Coupes & Convertibles

Bold within table indicates new specification for 2013. [Bracketed] specification is for xDrive model where it differs from FWD model.

Chassis (cont.)	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
4-wheel ventilated disc brakes, vacuum-assisted:						
Front, diameter x thickness, mm/in.	312 x 24/12.3 x 0.94 ⁹		348 x 30/13.7 x 1.18 ⁸			
Caliper material	Aluminum ²					
Rear, diameter x thickness, mm/in.	300 x 20/11.8 x 0.79 ⁹		336 x 22/13.2 x 0.87 ⁸			
Caliper material	Cast iron ²					
Cast-alloy wheels:						
Standard	17 x 8.0	17 x 8.0	18 x 8.0 F/ 18 x 8.5 R	17 x 8.0	17 x 8.0	18 x 8.0 F/ 18 x 8.5 R
M Sport Package	18 x 8.0 F/ 18 x 8.5 R [17 x 8.0]	18 x 8.0 F/ 18 x 8.5 R [17 x 8.0]	–	18 x 8.0 F/ 18 x 8.5 R/	18 x 8.0 F/ 18 x 8.5 R	–
M Sport Package upgrade	NA [18 x 8.0 F/ 18 x 8.5 R]	19 x 8.0 F/ 19 x 9.0 R [18 x 8.0 F/ 18 x 8.5 R]	–	NA	19 x 8.0 F/ 19 x 9.0 R	–
Stand-alone option	NA	NA	19 x 8.0 F/ 19 x 9.0 R	NA	NA	19.0 x 8.0 F/ 19 x 9.0 R
Run-flat tires ¹⁰ :						
Standard	225/45R-17 all-season	225/45R-17 all-season	225/40R-18 F/ 255/35R-18 R performance	225/45R-17 all-season	225/45R-17 all-season	225/40R-18 F/ 255/35R-18 R performance
M Sport Package	225/40R-18 F/ 255/35R-18 R performance [225/45R-17 all-season]	225/40R-18 F/ 255/35R-18 R performance [225/45R-17 all-season]	–	225/40R-18 F/ 255/35R-18 R performance	225/40R-18 F/ 255/35R-18 R performance	–
M Sport Package upgrade	NA [225/40R-18 F/ 255/35R-18 R performance]	225/35R-19 F/ 255/30R-19 R performance [225/40R-18 F/ 255/35R-18 R performance]	–	NA	225/35R-19 F/ 255/30R-19 R	–
Stand-alone option	–	–	225/35R-19 F/ 255/30R-19 R performance	–	–	225/35R-19 F/ 255/30R-19 R performance
Stability-enhancement system	Dynamic Stability Control, including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Brake Control, Brake Fade Compensation, Brake Standby, Brake Drying & Start-up Assistant ² ; xDrive models add Hill Descent Control					

2 – Specification applies to all models.
8 – Specification applies to all 335i & 335is models.

9 – Specification applies to all 328i models.

10 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard

and consequential damages. 3 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

NA – Not available
– – Not applicable
F – Front
R – Rear

Technical specifications

2013 3 Series Coupes & Convertibles

Bold within table indicates new specification for 2013. [Bracketed] specification is for xDrive model where it differs from FWD model.

Performance data	328i [xDrive] Coupe	335i [xDrive] Coupe	335is Coupe	328i Convertible	335i Convertible	335is Convertible
Acceleration, 0-60 mph, sec. ¹¹ :						
Manual transmission	6.2 [6.8]	5.3 [5.2]	5.1	6.7	5.5	5.2
Automatic or Double-Clutch transmission	6.8 [7.0]	5.5 [5.3]	5.0	7.2	5.7	5.2
Top speed, mph ¹² :						
Standard	130	130	150	130	130	150
M Sport Package	150 [130]	150 [130]	–	150	150	–
M Sport Package upgrade	NA [150]	150	–	150	150	–
EPA estimated MPG, city/highway/combined:						
Manual transmission	19/28/22 [16/25/19]	19/28/22 [20/28/23]	18/26/21	17/26/20	19/28/22	18/26/21
Automatic transmission or DCT	18/28/22 [17/25/20]	18/27/21 [18/27/21]	17/24/19	18/27/21	18/27/21	17/24/19

11 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle, road and environmental conditions; testing procedures and driving style. These results should be used for comparison

only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

12 – Electronically limited.

– – Not applicable

2013 1 Series:

BMW's most affordable Coupes and Convertibles add a duo of sporty new 135is models.

The appeal of the 1 Series' quartet of compact Coupes and Convertibles never rests merely at the lower end of BMW's price scale. Instead, year for year the 1 Series gets the usual BMW attention to product attributes, features, engineering and technology, and all-around excellence. 2013 is no exception.

Model year 2012 saw an all-around freshening, with new-design front bumper and lighting clusters, LED taillights, an M aerodynamic treatment for the M Sport Package, new wheel designs and new metallic paint colors. Standard wheel sizes were upsized by an inch. 135i models got standard power seats, all models got a standard iPod/USB Adapter, and there were new upholstery and interior trim choices.

For 2013, the highlight is a pair of new 135is models, featuring a higher-performance engine and an array of added standard equipment that includes most features of the other models' M Sport Package plus several items of added, exclusive sports equipment.

What's new for 2013

As of 7/12 production:

New models

- 135is Coupe and Convertible added, so that there are now three sets of models: 128i, 135i and 135is
- 135is features include:
 - Higher-output TwinPower Turbo engine
 - Special exhaust system
 - Exclusive 18-in. wheel design
 - High-gloss black grille slats
 - M aerodynamic exterior treatment
 - Black exterior-mirror caps (in combination with Carbon Black paint)
 - High-gloss Shadowline exterior trim
 - 135is badging outside and inside
 - M doorsill trims
 - Special Aluminum Glacier interior trim
 - M sport steering wheel
 - M driver's footrest
 - Stainless-steel-trimmed pedals (manual transmission only)
 - Power front sport seats
 - Leather-clad manual-transmission shift knob with M logo; leather shift and handbrake boots, leather handbrake grip
 - Exclusive leather color choice: Black with blue stitching, same option price as other leather colors

Other changes

- New 17-in. standard wheel design for 128i Convertible, Star Spoke #371
- Sport steering wheel (standard 128i/135i) adds chrome trim around multi-function controls; also applies to optional version with shift paddles
- New interior trim choice: Fine Line Anthracite wood, standard 135i/optional 128i

Packages & options

- Sport and Convenience Packages discontinued; Lighting and Technology Packages added
- General reorganization of package contents and stand-alone options
- Priority 1 options discontinued

Changes shared with other Series

- Climate controls: "snowflake" symbol changed to "A/C," AUC (automatic recirculation) supplemented by "M" (manual) setting, blower control adds "OFF" label
- "CD" key at iDrive controller changed to "Media"

1 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see pages 518-533.

128i Coupe

“Basic” model – the least costly, most attainable BMW Coupe of all; powered by the advanced and unique N52 engine. This naturally aspirated 6-cylinder is the pure definition of “sweet”; it delivers a unique blend of performance, refinement and quality that is supremely satisfying – to just about everyone, but especially to those whose tastes run to elegant balance.

Exterior design & function

- Halogen free-form low-beam headlights and foglights
- Automatic headlight control
- Rain-sensing windshield wipers
- Dual power/heated exterior mirrors
- Adaptive brakelights
- Matte-chrome exhaust tips

Performance & efficiency

- 3.0-liter DOHC inline 6-cylinder engine with magnesium/aluminum composite construction, Valvetronic variable intake-valve lift, Double VANOS¹ variable intake- and exhaust-valve timing; 230 hp/200 lb.-ft., EPA combined 22 mpg with manual or automatic transmission
- Choice of 6-speed manual or STEPTRONIC automatic transmission
- Aluminum double-pivot strut-type front suspension
- 5-link rear suspension
- Vehicle-speed-sensitive variable-assist rack-and-pinion power steering

- 4-wheel ventilated disc brakes
- 17 x 7.0 alloy wheels, Star Spoke design #262
- 205/50R-17 run-flat all-season tires
- Dynamic Stability Control
- Tire Pressure Monitor

Comfort & convenience

- Vehicle & Key Memory
- Tilt/telescopic leather-wrapped sport steering wheel with multi-function controls
- Dynamic cruise control
- Dual power/heated exterior mirrors
- 6-way adjustable front seats
- Leatherette upholstery
- High-gloss black interior trim
- Power door windows with 1-touch open/close
- Automatic climate control with separate left/right controls (dual-zone)
- Anti-theft AM/FM/HD/CD/MP3 audio system with Radio Data System, 10 speakers, auxiliary audio input
- iPod/USB Adapter
- Manual easy-entry feature for access to rear seats
- Split folding rear seats

Safety & security

- Dual-airbag Supplementary Restraint System
- Front & outboard rear safety belts with automatic tensioners and force limiters
- Front- and rear-seat Head Protection System
- Front-seat side-impact airbags
- Coded Driveaway Protection

Packages & options

- Available option packages:
 - Premium (Comfort Access keyless entry, Boston leather upholstery, 2-way power moonroof, BMW Universal Transceiver, auto-dimming interior and exterior mirrors, power-folding exterior mirrors, digital compass in interior mirror, 8-way power front seats + 4-way power front-seat lumbar support, ambient lighting package, Satellite Radio with 1-year subscription)
 - M Sport (sport suspension, 17-in. M wheels in differentiated front/rear sizes with run-flat performance tires², M aerodynamic exterior treatment, Shadowline exterior trim, specific exterior color selection, M door sill trims, M aluminum-trimmed driver's footrest, M Sport steering wheel, 8-way front sport seats with power-adjustable backrest width, Nappa leather-trimmed manual shift knob with M logo, Nappa leather hand-brake boot and grip, Anthracite-color headliner, increased top-speed limiter)
 - Technology (Navigation system + iDrive, BMW Apps, Smartphone Integration, BMW Assist, Bluetooth mobile-device interface)
 - Cold Weather Package (headlight cleaning system, heated steering wheel, heated front seats)
 - Lighting Package (Xenon Adaptive headlights with LED accents and dynamic auto-leveling, LED taillights)
- Stand-alone options:
 - 6-speed STEPTRONIC automatic transmission
 - Shift paddles for automatic transmission (sport or M sport steering wheel)
 - Park Distance Control, rear only
 - Automatic High Beams (require Premium Package)
 - Boston leather upholstery
 - 2-way power moonroof with 1-touch open/close
 - Light Burl Walnut or Anthracite wood interior trim
 - Glacier Silver aluminum trim (requires M Sport Package)
 - Alpine White interior trim (not available with heated steering wheel)
 - 8-way power front seats
 - Front sport seats
 - Heated front seats
 - Harman Kardon surround-sound premium audio system
 - BMW Assist and Bluetooth cellphone interface
 - Anti-theft alarm system

128i Convertible

Convertible companion to 128i Coupe, with same powertrain and essentially same equipment level as the Coupe. Relative to 3 Series, the price increment from Coupe to Convertible is less because the 1 Series has a softtop rather than the 3's retractable hardtop. Points of differentiation from 128i Coupe include:

- 1 – VANOS = VAriable NOckerwellen Steuerung = variable camshaft control, or variable valve timing.
- 2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 1 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

1 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see page 518-533.

- EPA highway rating is 27 mpg with automatic transmission vs. Coupe's 28
- Fully lined, fully automatic power softtop, choice of Black or Taupe standard colors
- Different wheel design, Star Spoke design #371 vs. Coupe's #262
- Narrower rear seat, though still quite sufficient for 2 passengers
- Rear head room about equal to that of Coupe without moonroof, more than Coupe with moonroof
- No storage tray between rear seats
- Fixed backrest, vs. Coupe's split folding, with small storage compartment
- Take-out piece for access to storage compartment, vs. Coupe's fold-up rear center armrest
- Through-loading system with cargo bag
- Variable trunk space, top raised/lowered, via adjustable storage box for softtop
- Structural underbody reinforcements: stronger side sills, diagonal reinforcements from front subframe and rear cross-member/trunk floor to side sills
- Performance somewhat affected by greater weight of Convertible (+286 lb.)
- Head protection for front occupants provided by upward-deploying side airbags, vs. Coupe's front-to-rear curtain-type HPS
- Head protection for rear occupants provided by Rollover Protection System (auto-deploying tubular rollbars behind rear passengers)
- Same options and packages as for 128i Coupe, except:
 - Leather upholstery with Sun Reflective Technology (Premium Package or stand-alone option) significantly reduces solar heating of leather; this treatment not available in Coupe
 - Premium Package – absence of moonroof reduces package price
 - Moonlight Black softtop as stand-alone option
 - Navigation System adds Convertible climate-control mode
 - Aluminum interior trim not available

135i Coupe

This more upscale of the two regular 1 Series Coupes features BMW's award-winning Twin-Power Turbo 6-cylinder engine plus numerous distinctions in its drivetrain, chassis, exterior details and interior features. BMW positions it as a sporty model, standard-equipped with 18-in. wheels and performance tires, sport suspension, and an M aerodynamic treatment that gives it almost an M Sport Package look. Here are the key features that distinguish it from its 128i counterpart:

- 3.0-liter DOHC 24-valve inline 6-cylinder engine with aluminum construction, twin-scroll turbocharger, direct fuel injection, Valvetronic variable intake-valve lift and Double VANOS¹ variable valve timing; 300 hp/300 lb-ft. torque, EPA combined mileage 23 with manual transmission, 21 with Double-Clutch Transmission (DCT)

- Manual transmission has higher torque capacity, different ratios
- Instead of 128i's 6-speed torque-converter automatic transmission, 135i offers 7-speed DCT
- Standard M sport suspension
- Special Brembo high-performance brake system with larger rotor dimensions, 6-piston front/2-piston rear fixed calipers, finished in black and with BMW lettering
- 18 x 7.5 front/18 x 8.5 rear alloy wheels, V Spoke design #372
- 215/40R-18 front / 245/35R-18 rear performance run-flat tires²
- Additional standard equipment:
 - Xenon Adaptive headlights with auto-leveling, cornering lights, Daytime Running Lamps via LED luminous rings, LED accent strips
 - Taillights with LED, 3D-effect
 - High-intensity headlight cleaning system, retractable vs. 128i optional fixed type
 - M aerodynamic exterior treatment
 - Power front seats, 8-way + lumbar
 - Anthracite wood interior trim
 - 2-way power moonroof
- Same options and packages as 128i Coupe, except:
 - Premium Package omits wood interior trim because standard
 - M Sport Package omits sport suspension because standard; doesn't affect wheel and tire sizes, only wheel design; omits M aerodynamic exterior treatment because standard
 - Cold Weather Package omits headlight cleaning system because standard
 - No Lighting Package because contents standard
- Steering-wheel shift paddles included with DCT, even without M Sport Package; include quicker-acting tachometer
- Active Steering available
- 17 x 7.0 alloy wheels, Star Spoke design #256, same size front/rear with all-season tires, available at no extra cost
- Light Burl Walnut wood, High-gloss Black or Glacier Silver Aluminum interior trim available at no extra cost

135i Convertible

Relates to 135i Coupe as 128i Convertible to its Coupe counterpart. Except as affected by modest extra weight, it offers the same dazzling TwinPower Turbo performance as the Coupe; it has essentially the same equipment level and offers the same Packages and options.

135is Coupe

New model for '13; elevates the 1 Series' innate sportiness with a higher-output version of the TwinPower Turbo engine (320 hp vs. 135i models' 300), plus an array of equipment and features that either adopt M Sport Package content as standard or add exclusive touches. European Delivery is not available. Here's how the 135is Coupe distinguishes itself from the 135i:

- 1 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.
- 2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 1 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

1 Series models & key features

This information lists major features, and helps position and distinguish the models in the Series. For a comprehensive summary of features, see page 518-533.

M Sport Package features made standard:

- M aerodynamic exterior treatment
- High-gloss Shadowline exterior trim
- M doorsill trims
- M sport steering wheel (with DCT, includes shift paddles)
- M aluminum-trimmed driver's footrest
- Power front sport seats
- Aluminum Glacier interior trim
- Leather-clad manual-transmission shift knob with M logo
- Leather shift and handbrake boots, leather handbrake grip
- Anthracite-color headliner
- Increased top-speed limiter

Exclusive features:

- Higher-output version of TwinPower Turbo engine: 320 hp vs. 300, 317 lb-ft. vs. 300; auxiliary radiator, higher-output cooling fan
- Performance exhaust system with special muffler, 80-mm stainless-steel end pipes, chrome-plated tips
- High-gloss black grille slats
- Black exterior-mirror caps (with Carbon Black Metallic exterior color only)
- "135is" badging outside and inside
- Stainless-steel-trimmed pedals (manual transmission only)
- Leather color choice: Black with blue stitching

135is Convertible

Like its Coupe companion, a new model for '13; except for the Anthracite-color headliner, the Convertible has the same distinguishing features from the 135i model.

1 Series key features

Except as noted, all current 1 Series models offer the following features:

Exterior design & function

1 Series design strategy

The 1 Series made its European debut as a 5-door hatchback, and later added a 3-door hatchback. In these forms it has been a robust success, bringing traditional BMW virtues to a vehicle class where the company had not been active before. Recently, these models entered their 2nd generation and their success got a fresh boost.

Yet U.S. customers don't like hatchbacks as much as do Europeans. Thus BMW developed – for world markets but especially for the U.S. – the two body types offered here: a Coupe and a Convertible, both 2-doors as Coupes and Convertibles usually are. As such, these two compact BMWs exemplify a longstanding BMW ideal: trim, efficient automobiles that offer practical transportation while also delivering a sporting, enjoyable driving experience. Their exterior design visually expresses this character.

Both body types ride a 104.7-inch wheelbase, exactly 4 in. shorter than that of the E9x 3 Series; at 172.2 in. long they're 8.4 in. shorter than the 3 Series Coupes and Convertibles. Within this architecture, they live up to BMW tradition with a long hood that announces their front-mounted inline 6-cylinder engine; a passenger cabin ("greenhouse") set well back in the chassis, and a short rear deck.

At the front, it's all BMW, with the traditional "kidney" grilles and a 4-headlight lighting configuration that, with the 128i optional/

135i and 135is standard Xenon Adaptive headlights, include luminous rings as parking lights and Daytime Running Lamps, and cornering lights to help the driver see around tight corners and to the sides when backing up. The rings are LED, and so are accent strips at the top. On 128i models, the bumper/spoiler ensemble incorporates "air curtains" that ingest air and funnel it through the wheelwells to reduce turbulence and wind resistance. Standard on 135i/135is models and included in the 128i M Sport Package is a deep M front bumper/spoiler ensemble; in 135i/is form, as on M Cars themselves, this lets extra-large air intakes take precedence over foglights. (128i models do come standard with foglights.)

In profile: Coupe. A sharply defined shoulder line, starting at the front and running all the way to the trunklid, sets a strong accent and emphasizes the long-hood/short deck proportions. The trapezoidal greenhouse is graceful while providing plenty of glass area for the driver's outward view; its set-back position draws the eye to the rear wheels, highlighting BMW's rear-wheel drive.

On 128i and 135i models, standard Chrome Line trim around the side windows lends a filigree character signaling that this is no ordinary small car. On the 135i and 135is, and the 128i with its M Sport Package, M aerodynamic side sills accent the profile; high-gloss Shadowline frames the side windows; a trunklid spoiler emphasizes the taut lines while

1 Series key features

Except as noted, all current 1 Series models offer the following features:

adding downforce that enhances stability at speed.

Convertible. Of course there are two profiles: softtop down, softtop up. With the top down, the Convertible naturally seems longer, more graceful; Chrome Line, also standard, adds the filigree touch with a delicate chrome definition of the beltline all the way from A-pillar to A-pillar. As with the Coupes, high-gloss Shadowline appears on the beltline of M Sport Package-equipped 128i/135i Convertibles and their 135is pendant.

Top up, the Convertible is 0.4 in. lower than the Coupe, but looks lower than that. The softtop intersects more sharply with the lower body than does the Coupe's roofline; as it also makes a color and texture break with the lower body, adds a touch of elegant formality as well. The top comes in a choice of two standard colors, Black and Taupe, and is offered optionally in Moonlight Black, a special material with metallic silver highlights. Like their Coupe counterparts, the 135i Convertible comes standard with M aerodynamic side sills and the 128i gets them via the M Sport Package.

The rear view. BMW's traditional L-shaped taillights come in two forms:

- standard 128i, with incandescent light sources
- with the Xenon Adaptive headlights that are standard on 135i/is models and optional on the 128i, 3D-effect units with multiple LED strips making them brighter and more dramatic.

At the rear, too, 135i/is models

have a bolder bumper/spoiler ensemble; it has a black center section framing a center air diffuser and, at the left, dual exhaust tips in matte chrome on 128i, black chrome on 135i models, gloss chrome on 135is models. This bumper/spoiler ensemble is also part of the 128i M Sport Package.

Performance & efficiency

N52 3.0-liter DOHC 24-valve inline 6-cylinder engine with Valvetronic (128i models)

The amazing N52 engine's engineering features include –

- **Valvetronic variable intake-valve lift**, replacing the traditional throttle and enhancing power, efficiency and response to the driver's demands.
- **Magnesium/aluminum composite construction**, saving weight and thus also contributing to enhanced performance and efficiency.
- **Electric coolant pump**, requiring less power, speeding engine warmup and making the engine more compact. Contributes to efficiency.
- **Variable-volume oil pump**, also requiring less power and enhancing lubrication; thus contributes to performance, efficiency and durability.

This wonderfully smooth and sonorous engine delivers 230 hp @ 6500 rpm and 200 lb-ft. of torque at 2750 rpm. This torque peaking speed is relatively low and, with the strong torque value itself, makes for a robust response to the driver's accelerator foot. All this comes through in strong 0-60-mph acceleration times and

1 Series key features

Except as noted, all current 1 Series models offer the following features:

remarkably favorable EPA mileage: **128i Coupe** – 6.1 sec. with manual transmission, 6.7 with automatic; EPA ratings 19 mpg city/28 mpg highway/22 mpg combined manual, 18/28/22 automatic.

128i Convertible – 6.4 sec. with manual transmission, 7.0 with automatic; 19/28/22 mpg manual, 18/27/21 automatic.

For more extensive details on the fascinating N52 engine, see **BMW features**.

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (135i & 135is models)

This outstanding performance engine powers the 135i models and features the following highlights:

- **Twin Scroll turbocharger**
- **Valvetronic variable intake-valve lift.** This was BMW's first engine to combine Valvetronic and turbocharging; for 2013, new V-8 engines also feature this technology.
- **Direct fuel injection**, which BMW calls High Precision Injection.

This engine features numerous other advanced, fascinating and rational engineering and technological attributes; for details see **BMW features**. Suffice it to note that in 135i form it develops 300 hp/300 lb-ft. torque and actually tops the 128i's EPA mileage ratings when paired with the standard 6-speed manual transmission.

New for 2013 is a special, higher-output version for the two 135is models. Via **performance-optimized software**, maximum

power output rises to 320 hp, and maximum torque to 317 lb-ft.

Here are the highlights of the 135i and 135is models' performance and efficiency:

- **135i Coupe** – 0-60 mph in 5.1 sec. with manual transmission, 5.0 sec. with optional Double-Clutch Transmission (DCT); EPA ratings 20/28/23 mpg manual, 18/25/21 DCT.
- **135i Convertible** – 0-60 in 5.4 sec. manual, 5.3 DCT; EPA mileage 19/28/22 manual, 18/25/20 DCT.
- **135is Coupe** – 0-60 mph in 4.9 sec. with manual, 4.8 with DCT. EPA mileage ratings unchanged.
- **135is Convertible** – 0-60 in 5.2 sec. manual, 5.1 DCT. EPA ratings unchanged.

Other distinctive features of the 135is engine version contribute to its performance, efficiency and practicality:

- **Auxiliary radiator** for enhanced engine cooling to handle the increased output. This is positioned at the lower left side and fed air through the left outboard intake; the M bumper/spoiler configuration is a prerequisite for the engine treatment.
- **Higher-output cooling fan**, for the same purpose.
- **Performance exhaust system**, featuring a unique, larger-volume muffler that not only enhances exhaust flow (for freer performance) but also produces a delightfully sporty sound – especially a “burbling” under power-off conditions. The most visible part of this system is its dual 80-mm (vs. 60-mm on 135i) stainless-steel end pipes with chrome-plated tips.

1 Series key features

Except as noted, all current 1 Series models offer the following features:

Together with the extensive exterior and interior features included in the new 135is models, this performance boost delivers a new level of excitement in these compact BMW machines.

6-speed manual transmission (standard all models)

The manual transmission of 128i models is the Type I, which has been optimized for relatively light weight and high mechanical efficiency; it plays a role in these models' excellent fuel economy.

For the more powerful 135i/s models, BMW's engineers designed the Type K 6-speed manual gearbox to accommodate BMW's "middle" engines' torque output while being compact and efficient. Type K incorporates internal refinements for ease and precision of shifting, and quiet operation; for more details, see **BMW features**.

6-speed STEPTRONIC automatic transmission (optional 128i models)

BMW's familiar, highly refined and efficient 6-speed automatic is optional on both 128i models. For modest extra cost, steering-wheel shift paddles can be combined with either the Sport or M Sport steering wheel; in combination with the M Sport Package, the latter is a no-extra-cost option.

7-speed Double-Clutch Transmission (DCT) (optional 135i/s models)

Along with certain other BMW compact performance-oriented models, all 135i and 135is models offer this concept instead of the 128i models' conventional torque-converter automatic. It employs the same operating

principle as the M3s' 7-speed M DCT, but has a simplified scheme of operating modes. For example, instead of the M version's Drive-logic system of 11 modes, the version offered here provides the driver with Normal, Sport and Manual plus an additional Quick Shift (QS2) mode that's available by selecting Manual plus the Sport mode via its console selector: thus a total of 4 modes.

In manually selected downshifts involving abrupt rpm jumps, "rev matching" blips the throttle to synchronize engine and vehicle speeds, resulting in what *Road & Track* magazine (July '09) enthusiastically called "whoop and burble" in the Z4 35i. All upshifts, whether manual or automatic and in any mode, are accomplished with no interruption of power flow.

DCT is controlled by BMW's E-shift selector lever; 128i models' automatic transmission presents a mechanical lever to the driver.

Full details on the DCT principle and what it means to drivers, for both the M and this version, appear in **BMW features**. DCT is the ideal partner for a moderately sized sporting engine like the 135i models' brilliant TwinPower Turbo unit. Not only does it offer more driving-style choices than a manual 6-speed, it actually improves the 0-60-mph acceleration time of all 135i and 135is models.

Shift paddles are an essential element of the DCT concept and are included with the DCT option; with the M Sport Package or on 135is models they are on the M Sport steering wheel; in non-ZMP 135i models they are on the sport steering wheel.

Double-pivot front suspension

The 1 Series shares with the 3 Series this unique BMW type of front suspension, featuring two lower arms working in combination with a spring/shock-absorber strut. These two lower arms are the reason for its name "double-pivot."

This familiar system continues to contribute to the nimble, secure handling of all 1 and 3 Series, Z4 and X3 models; it is described in **BMW features**.

5-link rear suspension

This system could be described as a double-A-arm system³ with an additional lateral track rod; the upper and lower A-arms actually consist of two links each, their vertical positions differing. (This is similar to the front suspension's dual lower arms.)

As legendary as the double-pivot front system, this configuration contributes equally to the remarkably nimble, secure and enjoyable handling of all 1 and 3 Series, Z4 and X3 models. It too is described in **BMW features**, as is the completely distinct 5-link system employed in BMW's larger models of the 5, 6 and 7 Series, X5 and X6.

Steering: evolution standard, revolution optional

BMW's engine-speed-sensitive variable-assist power rack-and-pinion steering system, standard in the 1 Series, has generated universal praise; *Car and Driver* (May '08) credited it with "switch-blade steering response that jabs the nose at corners with a firm, steady equispace that is BMW's trademark." The "Revolution" here is the optional Active Steering, offered as a

stand-alone option on 135i/s models. For details, see **BMW features**.

4-wheel ventilated disc brakes: generous dimensions, advanced technology (all models)

128i models feature ventilated cast-iron rotors and (as another contribution to balanced weight distribution) aluminum calipers at the front. But the 135i and 135is models go a step further, actually including some features not found on any other current BMW model. Here are some details for both model sets:

128i models. All four wheels have 300-mm/11.8-in. ventilated rotors, in the good BMW tradition a generous dimension considering these models' trim weights. As on other BMW models, single-piston "floating" calipers apply stopping force to the rotors.

135i/s models. A special high-performance brake system, developed with world-famous brake supplier Brembo and unique among BMW models, delivers not only more powerful braking to match these models' spectacular performance but also perceptibly firmer pedal feel. Here are the key upgrades:

- Larger rotor dimensions – front 338 mm/13.3 in., rear 324 mm/12.8 in.

3 – "Double A-arm" refers to the classic system of two A-shaped lateral arms, one upper and one lower, determining suspension geometry. This principle also appears in the front suspension of the current BMW 5, 6 and 7 Series, X5 and X6.

1 Series key features

Except as noted, all current 1 Series models offer the following features:

- **High-performance calipers** – 6-piston fixed front, 2-piston fixed rear. Front and rear calipers are made of aluminum to minimize the weight increase associated with these more complex calipers. For visual appeal, they are finished in glossy, heat-resistant black; their special heritage is revealed via BMW lettering, visible through the wheels.

Among today's BMWs, fixed calipers are found only on these 135s and the M5/M6 duo. A floating caliper has a piston on only one side of the rotor; when the brake is applied, part of the caliper moves ("floats") to effect braking. In a fixed caliper, there are pistons on both sides of the rotor, pressing on the pads from opposite directions. The simplest fixed caliper has 2 pistons; 6-piston front calipers show that BMW has gone all-out to achieve braking performance appropriate to the track as well as normal

public roads. In particular, the front brakes' 6 pistons promote an ultra-firm, ultra-linear feel at the brake pedal that is sure to thrill enthusiasts, especially on the track.

A refinement on all current BMW models is that the discs (rotors) have a Geomet coating to eliminate rusting on the rotor areas not swept by the brake pads. In the context of Condition-Based Service, there are separate front and rear wear sensors via which the mileage remaining on the front and rear pads can be displayed and appropriate service scheduled.

Special DSC feature: "limited-slip differential"

Another enthusiast-oriented 1 Series feature, now shared with 335i/s models, 5, 6 and 7 Series and (in a distinct AWD version called Performance Control) X1 and X3, is a Dynamic Stability Control function that emulates a traditional BMW M

limited-slip differential. With DSC de-activated via the switch, in cornering the rear-wheel brakes are applied gently and left/right selectively to limit the difference between left and right rear wheel speeds – as appreciated by sporting and skilled BMW drivers for decades. In contrast to other stability-control interventions, this function does not trigger the DSC indicator in the instrument cluster; this is because it's a pure traction function, not related to stability.

This feature was developed for true driving enthusiasts and is meant for use on closed road courses or on a track.

Wide selection of wheel designs; all-season or performance tires, all run-flats (all models)

Maintaining a BMW tradition, 128i and 135i models offer at least two wheel-and-tire

combinations; all 1 Series tires, whether all-season or performance, are run-flats. Standard equipment combinations are tailored to the product character of each model: 17-in. same-size front/rear with all-season tires in specific designs for 128i Coupe and Convertible; 18-in. in differentiated front/rear sizes with performance tires² on 135i Coupe and Convertible. The new 135is models also wear 18-in. equipment in differentiated sizes, and come with just one especially sporty and stylish wheel design. 128i models with the M Sport Package get 17-inchers with performance tires in differentiated sizes; on the aggressively standard-equipped 135i models, 17-in. all-season equipment is optional for customers who prioritize bad-weather traction. The table below summarizes all available combinations and the changes for 2013.

Model & version	Wheel size & design	Run-flat tires	Changes for '13
128 Coupe standard	17 x 7.0 Star Spoke #262 2D1	205/50R-17 all-season	No changes
128i Convertible standard	17 x 7.0 Star Spoke #371 2DM	205/50R-17 all-season	New wheel design
135i Coupe & Convertible stand-alone option	17 x 7.0 Star Spoke #256 2R2	205/50R-17 all-season	Was P1, now regular option
128i Coupe & Convertible M Sport Package	17 x 7.0 front/17 x 7.5 rear M Double Spoke #207M 2MG	205/50R-17 front/ 225/45R-17 rear performance ²	No changes
135i Coupe & Convertible standard	18 x 7.5 front/18 x 8.5 rear V Spoke #372 2FA	215/40R-18 front/ 245/35R-18 rear performance ²	No changes
135i Coupe & Convertible M Sport Package	18 x 7.5 front/18 x 8.5 rear M Double Spoke #261M 2MR	↑	No changes
135is Coupe & Convertible standard	18 x 7.5 front/18 x 8.5 rear Double Spoke #313 2NF	↑	New model, new wheel design

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 1 Series

models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

1 Series key features

Except as noted, all current 1 Series models offer the following features:

Comfort & convenience

Interior design: comfort and practicality in a compact package

The 1 Series cabin presents its driver and passengers with BMW's traditional levels of design, quality, premium materials and satisfying functionality in a sporting, compact format. "The interior is up to snuff with BMW's other offerings," reported *AutoWeek* on June 2, '08, "something that would almost certainly have suffered had the company aimed to build a poor man's car."

Typical BMW: the ergonomic control center

The control center is laid out essentially as in other BMWs, with round analog speedometer and tachometer plus fuel gauge and the most urgent warning indicators directly in front of the driver. The standard On-board Computer display is between the two main instruments; via the left-hand steering-column stalk the driver can toggle through readouts of time, ambient temperature and range on remaining fuel. In vehicles with manual transmission, an upshift indicator here can assist the driver in achieving optimum fuel economy. (For best fuel economy at any given road speed, one should drive in the highest possible gear.) Manual adjustment of the steering wheel for height and reach is standard.

3-spoke sport steering wheel standard in all 128i/135i models

All models come standard with a 3-spoke steering wheel. Both wheel styles (standard sport, optional M sport) have leather-wrapped rims, and their arrange-

ment of multi-function controls on the steering-wheel face is the same. Included here are –

- **Audio** – volume, preset scroll and audio source or, with iDrive/Navigation, programmable key for various iDrive functions
- **Air recirculation** – to switch recirculation on and off manually
- **Phone functions** – for hands-free operation, active if vehicle has the Bluetooth cellphone interface and an approved phone model is paired with it
- **Voice Command** – active if vehicle has Navigation/iDrive option; enables hands-free calling even in vehicles without Navigation if the available Bluetooth mobile-device interface is present.

The standard sport wheel has a larger center face, galvanic-trimmed lower spokes and (new for '13) chrome trim framing the multi-function controls. Presenting an even sportier look, the M sport wheel of the M Sport Packages and 135is models has a different spoke design, omits the bright trim, displays the M logo on its bottom spoke, and adds a sporty leather perforation to portions of the rim. (Perforated leather also appears on the hand-brake grip with this Package.)

Steering-wheel heating is available with the standard wheel, but not with the M sport wheel.

iDrive: new-age mastery of vehicle functions

Like 3 Series Coupes and Convertibles, X1 and Z4, the 1 is available with or without iDrive. The iDrive control display is housed in a fixed nacelle at

dashtop center and measures 8.8 in. Screen resolution is a high 1280 x 480 pixels. Whereas the 5, 6, 7 and X3 Series, all recently completely redesigned, now have 8 keys, the 1 Series continues with 6 Programmable Memory Keys plus one for entertainment-system mode and one for toggling between AM and FM.

Details of the acclaimed iDrive system, including GPS Navigation, are found in BMW features.

Hard drive for data storage: high capacity, fast retrieval

With the Navigation/iDrive option, an 80-GB hard drive provides data storage for the iDrive system, GPS Navigation, entertainment systems, Voice Command and phone system. Included in all current BMW models with Navigation, this amenity is described in BMW features.

Dual-zone automatic climate control

A decidedly premium feature of all 1 Series models is its full-featured automatic climate control, which includes –

- **Separate left/right temperature controls** (dual-zone control).
- **Misting sensor.** Via the wipers' rain sensor, misting of the windshield is sensed visually and system operation adjusted automatically to clear it up.
- **Heat at Rest,** a great feature that allows heating the interior for a limited time with the engine off. BMW's electric engine coolant pump facilitates this.
- **Automatic recirculation control** shuts off outside air when a sensor detects a high level of air pollution.

- **Indirect airflow** via outlets atop the dash, for pleasant, draft-free climate control. (With the Navigation/iDrive option, users have further choices in air delivery.)
- **Recall of individual users' settings** via Key Memory: temperature and any manually selected air distribution.

More detailed information on the features of BMW climate control are found in BMW features.

Audio systems

All models come standard with the Code 676 8-speaker system. The premium option, available stand-alone, is a 10-speaker Harman Kardon surround-sound system.

Both systems employ the same head unit, except that it does differ between vehicles with and without the Navigation/iDrive option. Extensive features and functions are provided by both systems:

- HD Radio
- Programmable memory for 12 FM and 6 AM stations
- Search, seek and manual tuning
- Double tuner (only when Navigation is present; displays all available FM radio stations)
- Audio volume and scroll-through presets from steering-wheel controls
- Vehicle-speed-dependent automatic volume control
- Radio Data System (RDS), including Program Type (PTY)
- In-dash single-disc CD player, MP3-capable
- Audio muting for phone use (with Bluetooth interface, included with available BMW Assist).

1 Series key features

Except as noted, all current 1 Series models offer the following features:

- Time and outside-temperature display
- Auxiliary audio input (in center console)
- iPod/USB Adapter.

The standard system's amplifier/speaker system includes vehicle-specific equalizing, 180-watt multi-channel amplification, and 8 speakers including 2 subwoofers:

- 2 midrange in the doors
- 2 tweeters in the mirror triangles
- 2 midrange in the rear shelf (Coupes) or rear side panels (Convertibles)
- 2 subwoofers in BMW's patented positions beneath the front seats.

The optional premium Harman Kardon system is described in **packages & options**. Both systems include BMW's reception-enhancing diversity antenna system, with multiple circuits in the Coupe's rear window frame; on Convertibles a mast antenna on the left rear body panel and circuits in the rear bumper provide the diversity benefit.

Other antennas. On Coupes, a fin-type roof antenna serves the phone and/or Navigation System as well as the GPS aspect of the available BMW Assist. On Convertibles, the phone antenna is in the rear bumper; the GPS/BMW Assist antenna is in the softtop hard cover. The Satellite Radio antenna is in the trunklid of all models equipped with that option.

Upholstery and trim: BMW quality – of course

Upholstery choices begin with standard **leatherette**, in Black or a Taupe color that is distinct from

either of the Beige tones in the 3 Series. **Boston leather**, a grade specific to the 1 Series, comes in the Premium Packages or as a stand-alone option in no fewer than six standard colors: Black, Taupe, Savanna Beige, Terracotta, Coral Red and Oyster/Black.

New for 2013, and available only in the 135is models, is Black leather with exclusive Blue stitching—a striking scheme that is especially attractive in combination with Silver, Blue, Black and White exterior colors.

Interior trim – what some might call “trim accents” – appears on the dash, center console and door pulls – and is offered in five materials, all of which contribute to the pervasive feeling of quality while satisfying our customers' diverse esthetic tastes.

- **High-gloss black** – standard in 128i models; optional at no extra cost in 135i models
- **Light Burl Walnut** – optional at extra cost in 128i; no extra cost in 135i models
- **Fine Line Anthracite wood** – new for '13; standard in 135i, optional in 128i models
- **Glacier Silver Aluminum** – optional in combination with M Sport Package; at extra cost in 128i models, no extra cost in 135i models. Standard in both 135is models.
- **Alpine White** – optional at no extra cost in 128i and 135i, not available in 135is models; it appears on the steering wheel, and is not available in combination with heated wheel.

Beyond these “feature trims” is BMW's elegant galvanic material (see **BMW features** for definition)

in Pearl-gloss finish on the –

- Speedometer and tachometer rings
- Start/stop button's ring
- Interior door handles
- Climate-control and audio knobs
- Center air outlets' adjusting tabs
- Glove-compartment opener.

With Glacier Silver and Alpine White, these elements are trimmed in Chrome Pearl Gray, as distinct from the Pearl-gloss finish that appears with other trims.

More details on the option scheme in **options & packages**.

Seating: intimate and sporty

1 Series models are configured as pure 4-seaters; as such they have particular appeal to younger buyers, with or without children. Up front, spacious seating is provided by two individual, highly supportive seats with a center console separating them. In the rear, there are likewise two individual seats, in Coupes with a separating console between them. Also in Coupes, both backrests fold for versatility in loading cargo. (Convertibles have a fixed backrest with center opening into the standard through-loading system.) In all models, entry into the rear seats is facilitated by a manual easy-entry feature that allows moving the front seat forward, then returning it to its previously set position.

Front seats: several choices in every model

As always in BMWs, the individual front seats are contoured, padded and upholstered for excellent support and comfort:

firm, but not overly so. Driver and passenger get a great feeling of being “at one” (or two) with the vehicle.

128i models come standard with 6-way manually adjustable front seats that include a height adjustment. 8-way power seats with 4-way power lumbar support are standard in 135i/s models.

The optional possibilities are:

- **8-way power** – part of 128i Premium Package or as a stand-alone option. Include driver's-seat memory with 2 settings for each user.
- **4-way power lumbar support** – included in 128i Premium Package; not available as stand-alone option.
- **Sport seats** – in the usual BMW format with more prominent side bolsters, power-adjustable backrest width and manually adjustable thigh support. These added adjustments apply equally to either manual or power versions. Stand-alone, or included in M Sport Package for 128i and 135i; standard in 135is models.

Heated front seats are part of the Cold Weather Package or a stand-alone option.

Front center console and cupholders

There are two open-type cupholders in the front center console. With the Navigation/iDrive option, the iDrive controller takes up the space of one of them, so a removable cupholder is added for insertion into a slot at the passenger side of the console, or stored away.

1 Series key features

Except as noted, all current 1 Series models offer the following features:

Rear seats: specific configurations for Coupe and Convertible

Coupes' rear seating is similar to that of 3 Series Coupes. Individual cushions for two passengers are separated by a low console containing a storage tray divided into two portions, small and larger. The backrest is 60/40 split folding, the wider right-hand portion including a fold-up armrest.

Each backrest portion can be folded essentially flat to extend cargo space from the trunk into the interior. The head restraints are height-adjustable and removable, but do not have to be removed to fold the backrests.

Convertibles' rear seating is similar in character to that of the Coupes – elegantly contoured and upholstered – with these differences:

- Less space, because the folded softtop and its mechanism must be accommodated. There are 10.8 in. less shoulder room (though still enough for two adults) and 0.7 in. less leg room. On the other hand, there's fully 1.1 in. more head room than in the Coupes with moonroof.
- Fixed backrest, vs. the Coupes' split folding.
- Centerpiece between cushions, padded but with no storage tray.
- No center armrest.

Instead of the Coupes' folding rear seats, Convertibles have a center section that can be removed and set down on the seat cushions and center divider. This reveals a wide center through-loading opening and

a cargo bag that can carry up to four pairs of skis or two snowboards. (This configuration precludes rear seating.)

So – not as roomy as the Coupes' rear seat, but for a good cause. In its February 6, '08 issue, Switzerland's authoritative *Automobil Revue* sums up the Convertible's interior space as “a roomy 2+2,” and adds that it's adequate for “a trip to Italy for four persons.” That's from Switzerland, of course, a day trip by car.

In all models, entry into the rear seats is facilitated by a manual easy-entry feature. LATCH attachments (Lower Anchors and Tethers for Children) provide for securing a child restraint seat at each position.

The Convertibles' power softtop: classic design, fully powered

All Convertible models come standard with a fully automatic, fully lined power softtop. Though not as quiet inside with the top up as the 3 Series' retractable hardtop, the softtop saves weight and helps keep 1 Series Convertibles' pricing well below that of their 3 Series counterparts.

The top itself. As a classic softtop, it imparts clean exterior lines when up, and folds compactly under a hard cover when lowered. Its heated glass rear window is frameless, adding to the design's simple elegance, and relatively thick 3.8-mm glass helps reduce interior noise. A full interior lining covering the top's bows and links gives a finished appearance inside, enhances weather insulation and also

reduces wind noise over the top – this last quality in addition to the acoustically optimized outer material. Black is its standard color, Taupe available at no extra cost.

Optional Moonlight Black.

A special material with silver metallic highlights, at nominal extra cost.

Lowering and raising the top.

Normally via the switch in the center stack. Occurs in 22 seconds, not including the lowering of the side windows that also occurs. The softtop cover opens and closes automatically. Lowering can be started at any vehicle speed up to 20 mph, and continued up to 25 mph...all with wind gusts up to 30 mph.

Softtop cover. Displaying BMW's usual attention to detail, it's bordered in chrome, thinly and elegantly. With the M Sport Package or on the 135is, this trim is high-gloss Shadowline black. This trim extends around the passenger compartment, all the way from one A-pillar to the other.

Using the remote (only in vehicles with Comfort Access), the top can be lowered or raised from closer than 13 feet. Farther away it can only be lowered, and if the windows were up to begin with, they do not return to their closed position.

Variable softtop storage. As in other BMW Convertibles, cargo space can be maximized when the top is up by adjusting the variable storage box. For the top to be lowered, the box must be set in its lower position. (The

Owner's Manual refers to this box as a “partition.”) For more information, see variable cargo space on following pages.

Thoughtful features throughout

From front to rear in the 1 Series cabin, numerous thoughtful features enhance luxury and convenience:

- **Auto-dimming interior and exterior mirrors**, with digital compass in interior mirror; part of optional Premium Package.
- **Interior trunk release**, in familiar location ahead of left front door.
- **Power 2-way moonroof** standard on 135i/s, optional on 128i Coupe.
- **Voice Command** switch on steering wheel, active with Navigation/iDrive option; also serves hands-free calling with the Bluetooth interface.
- **Bluetooth mobile-device interface**, included with BMW Assist option.
- **Front overhead console** with BMW Assist buttons and the Passenger Airbag Off indicator. An interior light, separately switched left/right reading lights⁴, BMW Ambiance Lighting⁴, moonroof control in so-equipped Coupes, and microphones for hands-free phone use⁵ are also here.
- **Fold-up front center armrest** in all models.

4 – With Premium Package.

5 – With BMW Assist + Bluetooth.

1 Series key features

Except as noted, all current 1 Series models offer the following features:

Variable cargo space in Convertibles

To maximize trunk volume, 1 Series Convertibles have variable cargo space via the adjustable softtop storage box. With the top up, the box can be adjusted to its upper position for maximum space. For the top to be lowered, the box must be set in its lower position. This arrangement helps to achieve an excellent trunk volume of 8.0 cubic feet with the top up, 7.0 cu ft. with it lowered.

Safety & security

Most safety and security features of the 1 Series are shared with those of other BMW Series, and represent BMW's state of the art in these all-important areas of vehicle attributes. One feature, however, made its first appearance in here and is specific to this Series:

- **Crash-optimized front seats**, an enhancement for the safety of trunk occupants in rear-end crashes. Specially padded head restraints and backrests significantly reduce the risk of injury in such impacts.

Certain other 1 Series safety features should be stressed to customers because this is the most attainable BMW Series:

- **Full-featured Dynamic Stability Control** with the outstanding braking functions explained in **BMW features**
- **Front- and rear-seat Head Protection System** deployed from the roof in Coupes
- **Front-seat head protection** provided by tall side-impact airbags in Convertibles

- **Auto-deploying Rollover Protection System** in Convertibles
- **BMW's targeted structural engineering** for energy absorption and management, optimum occupant protection.

Options & packages

Packages

Premium Package

(All models, code ZPP)

Continuing a popular offering for other BMW Series, this package adds desirable and popular features to each 1 Series model.

All models:

- **Auto-dimming exterior and interior mirrors**, codes 430 and 431
- **Power-fold exterior mirrors**. A valued convenience for parking in tight spaces and for navigating some car washes. Included in option code 431.
- **Comfort Access keyless entry**, code 322
- **Boston leather upholstery**, available in six attractive colors plus one additional color for 135is models only. Convertibles include Sun Reflective Technology on the seats, armrests, head restraints and shift knob. Codes LVV.
- **Digital compass in interior rearview mirror**, code 4NA
- **Satellite Radio** with 1-year subscription, code 655
- **Ambiance lighting package** – exterior ground lighting, separately controlled left/right front reading lights, illuminated visor mirrors, front BMW Ambiance Lighting and front footwell lighting. Code 563.

- **BMW Universal Transceiver**, the 3-function device that can operate garage doors and other external electrical devices or systems. Its controls are positioned in the front overhead console. Code 319.

128i models:

- **Power front seats**, 8-way power + 4-way power lumbar support. Include driver's-seat and exterior-mirror memory, with two memory settings for each driver. Codes 459 and 488.
- **Auto tilt-down feature** for right-hand exterior mirror; mirror tilts down for view of the curb or other possible obstruction when the transmission is shifted into reverse. Included with Code 459.

128i Coupe:

- **Power 2-way moonroof**, code 403.

M Sport Package

(128i & 135i models, code ZMP; not available in combination with heated steering wheel)

Popular demand for this package has led to discontinuance of the less extensive Sport Package.

Most ZMP contents are standard on or in the 135is models; contents for the 128i/135i models are –

- **High-gloss Shadowline** exterior trim, code 760
- **Le Mans Blue and Carbon Black** metallic exterior colors, codes 381 and 416; available only with Package at separate extra cost
- **M doorsill trims**, part of factory option code 337
- **M Sport steering wheel** with M logo, perforated leather on portions of rim and on hand-

brake grip; code 710. In combination with automatic transmission (128i) or Double-Clutch Transmission (135i), code 7XA with shift paddles

- **M driver's footrest**, part of 337
- **Manual-transmission shift lever** with M logo, Nappa leather-trimmed knob; part of 337
- **Nappa leather shift and handbrake boots**, handbrake grip, part of 337
- **Sport front seats**, code 481
- **Anthracite-color headliner** in Coupes, code 775
- **Increased top-speed limiter**.

128i models:

- **Sport suspension**, code 704; standard on 135i models
 - **17-in. wheels and performance tires** – 17 x 7.0 front/17 x 7.5 rear M Double Spoke wheels #207M with 205/50R-17 front / 225/45R-17 rear tires². Code 2MG.
 - **M aerodynamic exterior treatment** consisting of front and rear bumper/spoiler/diffuser ensembles, side sills; code 715
- 135i models:
- **18-in. wheels and performance tires** – 18 x 7.5 front/18 x 8.5 rear M Double Spoke wheels #261M with 215/40R-18 front / 245/35R-18 rear tires², code 2MR. These are the same as the standard wheel/tire sizes, but with a sportier M design.

² – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 1 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

1 Series key features

Except as noted, all current 1 Series models offer the following features:

Technology Package

(all models, code ZTP)

New for '13; has identical contents for all models:

- **Navigation system + iDrive**, code 639. Instrument panel gains a dashtop center nacelle that houses the iDrive monitor; the iDrive controller sits on the uncluttered console behind the shift lever. Elements include –
 - High-resolution 8.8-in. Control Display (1280 x 480 pixels)
 - Controller with surrounding direct-select keys
 - GPS Navigation with hard-drive database
 - Voice Command system
 - Programmable Memory Keys, which enable users to program frequently used functions and recall them with a single keystroke.
 - Real Time Traffic Information

Details on iDrive and GPS Navigation are presented in **BMW features**.

- **BMW Assist**, BMW's customer-services and in-vehicle telematics system, code 639. For details, see CenterNet or the **BMW Assist** pages of this handbook.
- **Bluetooth mobile-device interface**, included with BMW Assist.
- **BMW Apps**, code 6NR. Facilitates controlling specific iPhone Apps via iDrive. Users can enhance and customize their vehicle's infotainment capabilities by updating existing BMW ConnectedDrive Apps or downloading a new BMW third-party app.
- **Smartphone Integration**, code 6NF

Cold Weather Package

(128i & 135i models, code ZCW)

Popular and highly functional group of features that enhance the winter driving experience.

128i and 135i models:

- **Heated front seats**, 2-stage thermostatically controlled heating of extensive surface area; code 494
- **Heated steering wheel** (code 248) if vehicle is not equipped with M Sport Package.

Both 128i models:

- **High-intensity headlight cleaning system**, code 502 (fixed nozzles; system with retractable nozzles standard on 135i models)

Availability is restricted as follows:

- Not available on 135is models
- Not available in combination with M Sport Package or Alpine White interior trim on 128i and 135i models.

Lighting Package

(128i models, code ZLP; standard 135i/is models)

Formerly a combined stand-alone option and referred to as Xenon Adaptive headlights, this package includes –

- **Xenon headlights**, code 522
- **Adaptive Light Control**, code 524.

The Adaptive feature “steers” the headlights via an electronic control system and small servo motors. Other features included are **auto-leveling** of the headlights to reduce glare to oncoming drivers; and **cornering lights**, which improve the driver's forward view in low-speed corners and when backing up. Features and functions of these lighting systems are described in **BMW features**.

Stand-alone options

6-speed STEPTRONIC automatic transmission

(128i models, code 205)

This advanced, performance-enhancing and velvety-smooth automatic is offered as a stand-alone option on both models. General features of BMW automatic transmissions, and distinctions among various versions of them, are described in **BMW features**.

7-speed Double-Clutch Transmission

(135i & 135is models, code 2TC)

For these more performance-oriented models, BMW offers this especially efficient, direct transmission, which functions equally well as a manual or automatic and actually improves acceleration. It is the perfect partner for the also highly efficient, agile TwinPower Turbo engine of these models; for a detailed description of how DCT works, see **BMW features**.

Shift paddles

(128i & 135i models, code 2XA or 7XA)

Shift paddles are available three ways:

- **128i with automatic transmission and not M Sport Package** – on standard sport steering wheel or M Sport steering wheel, optional at extra cost (different prices).
- **135i with Double-Clutch Transmission (DCT) and not**

M Sport Package – on standard sport steering wheel at extra cost

- **135i with M Sport Package and DCT, 135is with DCT** – on M Sport steering wheel at no extra cost.

There are two paddles above the steering wheel's horizontal spokes: actuating the left one effects a downshift, the right one an upshift. Accordingly, they are labeled “-” and “+”.

The option codes are 2XA with the standard sport steering wheel, 7XA for the M sport wheel. Thus for 128i models with M Sport Package, the code is 7XA and this includes the Sport version of the automatic transmission, with quicker shifting in its Manual mode plus a “dynamic tachometer” that can respond to the resulting sharper rpm changes. As this option is required when M Sport Package and automatic transmission are combined, in effect all 128i models with automatic and this package come only with the shift paddles.

For 135i models without M Sport Package, the option code is 2XA; with M Sport Package the code is 7XA. In either case, the shift paddles are required with DCT.

Active Steering

(135i & 135is models, code 217)

Active Steering offers dramatic benefits in terms of handling agility, described in detail in **BMW features**.

1 Series key features

Except as noted, all current 1 Series models offer the following features:

All-season tires for 135i models (code 2R2, no extra cost)

This stand-alone option provides 17 x 7.0 Star Spoke wheels of design #256, same size front/rear with 205/50R-17 run-flat all-season tires, as an all-weather alternative to the standard 18-in. equipment with differentiated front/rear sizes and performance tires².

Automatic High Beams (all models, code 5AC; requires Premium Package)

Switches the headlights automatically between low and high beams. Turns on the high beams whenever traffic conditions allow, relieving the driver of this duty and ensuring that the driver always has the best possible forward vision at night. The driver can also take over at any time by using the steering-column beam control.

For more detailed information, see **BMW features**.

Park Distance Control, rear only (all models, code 507)

On 1 Series models, PDC employs four ultrasonic sensors in the rear bumper to detect when the vehicle is approaching obstacles that may not be visible to the driver. A warning tone emanates from the rear of the interior, increasing in frequency as the vehicle approaches the obstacle until the tone becomes constant.

When combined with the Navigation/iDrive option, PDC includes a plan-view vehicle diagram in the iDrive monitor, which graphically depicts obstacles' location relative to the vehicle.

Metallic paint (128i & 135i models, color codes)

The beauty of BMW metallic paints needs no introduction; with recent developments in the painting process, its beauty is even more satisfying. Eight colors are available on all models without restriction. Le Mans Blue and Carbon Black are available on 128i and 135i models only in combination with the M Sport Package, on 135is models without restriction.

2-way power moonroof (optional 128i Coupe, standard 135i & 135is Coupes)

Though included in the 128i Coupe's Premium Package, this popular option is available as a stand-alone option too.

Moonlight Black softtop (Convertibles only, code 3YA)

This special softtop material with silver metallic highlights is offered at nominal extra cost. Operation of the fully automatic power softtop is not affected, and it is offered only in Black. Customers may also choose the standard softtop material in Taube as a no-extra-cost alternative to the standard Black top.

Boston leather upholstery (all models, codes LW)

Available in six colors as either this stand-alone option or part of the Premium Package; additionally, new-for-'13 Black with Exclusive Blue Stitching is available in 135is models. In Convertibles, the leather benefits from Sun Reflective Technology, which significantly reduces heating from sunlight.

Many choices of interior trim (codes 4A3, 4AT, 4CE, 4DH & 4MG)

While galvanic trim materials for accents and functional elements appear in all vehicles, customers have extensive choices in the major trim across the dash, on the center console and on the door pulls. The Premium Package no longer includes any specific interior trim; all trims are either standard or stand-alone options. Here's the scheme:

- **Light Burl Walnut**, code 4A3 – optional at extra cost in 128i, no extra cost in 135i models
- **High-gloss black**, code 4AT – standard in 128i, optional at no extra cost in 135i models
- **Fine Line Anthracite wood**, code 4CE – newly standard in 135i, optional at extra cost in 128i models
- **Alpine White**, code 4DH – optional at no extra cost in all 128i and 135i models, but not available in combination with heated steering wheel
- **Glacier Silver Aluminum**, 4MG – standard in 135is models; optional at extra cost in 128i, no extra cost in 135i models. Where optional, requires M Sport Package.

Glacier Silver Aluminum and Alpine White include differently finished galvanic elements; Alpine White adds white accents to the steering wheel.

Power front seats and memory system

(optional 128i models, code 459; standard 135i & 135is models) Offered as a stand-alone option for 128i customers who do not want the Premium Package. The memory provides two positions

for each user, as identified by the remote he or she is using. Also included is auto tilt-down of the right-hand exterior mirror when the transmission is shifted into reverse, a useful feature especially in parallel-parking.

Option 459 does not include the power-adjustable lumbar support that comes with the Premium Package; with that feature, the number of power adjustments rises by 4.

Sport front seats (128i & 135i models, code 481)

Though included in the M Sport Package for these models and standard in 135is models, these seats are also available as a stand-alone option for those who desire their exceptional support but do not want full sports equipment.

Heated steering wheel (128i & 135i models, code 248; not in combination with M Sport Package or Alpine White interior trim)

The heated wheel is included in the Cold Weather Package or available as this stand-alone option if the vehicle is not equipped with the M Sport Package. This is because there is not currently a heated version of the M Sport steering wheel, nor of either wheel with Alpine White trim.

² – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 1 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

1 Series key features

Except as noted, all current 1 Series models offer the following features:

Heated front seats

(all models, code 494)

Available as this stand-alone or as part of the Cold Weather Package, the heated seats have impressive features:

- **Large heated area**, extending to the side bolsters
- **High heating power**, fully 130 watts.

Premium Harman Kardon surround-sound system

(all models, code 677)

The top 1 Series system upgrades amplification, speaker quality and features:

- 10 speakers, adding 2 tweeters in the rear shelf (Coupes) or rear side panels (Convertibles)
- 4 x 40 watts + 2 x 70, for a total of 300 watts of power
- Surround sound
- “harman/kardon” script on tweeters in mirror triangles.

BMW Assist

(all models, code 639)

In addition to being part of the Technology Package, BMW Assist is also available as this stand-alone option. BMW Assist is BMW's comprehensive system of customer services and in-car telematics; for detailed information, see CenterNet or the BMW Assist pages of this Fast Facts edition. The option price includes a 4-year subscription to BMW Assist Safety Services.

Anti-theft alarm system

(all models, code 302)

BMW's familiar system, with linking red light to indicate that the doors and trunk are secured.

BMW center-installed accessories

Among the many available items are:

- **Complete wheel and tire sets**
- **Strut reinforcing braces** for front suspension
- **BMW Performance brake discs**, cross-drilled
- **High-performance headlight bulbs**
- **Aerodynamic body kits**
- **Wind deflector** for Convertibles
- **Rear spoiler**
- **Park Distance Control**, rear only (aftermarket version, not same as factory option)
- **Sport muffler** for more “sound of performance”
- **Alarm system**
- **Nose mask**
- **Car covers**; BMW Form-Fit™ indoor, regular indoor and indoor/outdoor types

- **Windshield sunshade**
- **Illuminated doorsill trims** with BMW lettering
- **Sun/wind deflector** for moonroof
- **BMW Portable Navigation Pro**
- **BMW USB memory stick**
- **Premium Satin interior kit**
- **Elegantly trimmed selector levers**, shift knobs and handbrake grips
- **Personal electronics**
- **Floormats**, carpet and rubber
- **Aluminum- and stainless steel-trimmed pedals**
- **Aluminum-trimmed footrest**

...and much more

For details, see the latest Accessories listing for the 1 Series on bmwusa.com.

Standard & optional features

2013 1 Series

Bold within table indicates new feature for 2013. 135is models are new for 2013.

Exterior design & function	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Front & rear body-color bumpers	S	S	S	S	S	S
Xenon Adaptive headlights in 3D-effect clusters, LED luminous rings & accent strips at top; auto-leveling	ZLP	ZLP	S	S	S	S
Cornering lights	OPT ¹	OPT ¹	S	S	S	S
Automatic headlight control	S	S	S	S	S	S
Automatic High Beams	OPT ²	OPT ²	OPT ²	OPT ²	OPT ²	OPT ²
High-intensity headlight cleaning system	ZCW	ZCW	S	S	S	S
Daytime Running Lamps via luminous rings	OPT ¹	OPT ¹	S	S	S	S
Halogen free-form foglights	S	S	NA	NA	NA	NA
Heated windshield-washer jets	S	S	S	S	S	S
Rain-sensing windshield wipers	S	S	S	S	S	S
Power-folding exterior mirrors	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
Gloss-black exterior-mirror caps (except with Carbon Black exterior color)	NA	NA	NA	NA	S	S
Park Distance Control, rear only	OPT	OPT	OPT	OPT	OPT	OPT
LED taillights	OPT ¹	OPT ¹	S	S	S	S
Adaptive brakelights	S	S	S	S	S	S
Metallic paint	OPT	OPT	OPT	OPT	OPT	OPT
Vertical grille slats	Matte black	Matte black	Chrome	Chrome	Gloss black	Gloss black
Fully automatic, fully lined power softtop, operable up to 25 mph; choice of Black or Taupe	-	S	-	S	-	S
Moonlight Black softtop	-	OPT	-	OPT	-	OPT
M aerodynamic body treatment: front & rear bumper/spoiler ensembles, side sills	ZMP	ZMP	ZMP	ZMP	S	S
Black/chrome side-window trim	S	-	S	-	-	-
High-gloss Shadowline exterior trim	ZMP	ZMP	ZMP	ZMP	S	S
Matte-chrome exhaust tips, dual 60-mm, left side	S	S	-	-	-	-
Black-chrome exhaust tips, dual 60-mm, left side	NA	NA	S	S	-	-
Stainless-steel end pipes, dual 80-mm, left side; gloss-chrome tips	NA	NA	NA	NA	S	S

1 – Included with Xenon Adaptive headlights (Lighting Package)

2 – Require Premium Package

S – Standard
 NA – Not available
 -- – Not applicable
 ZCW – Cold Weather Package

ZLP – Lighting Package
 ZMP – M Sport Package
 ZPP – Premium Package

Standard & optional features

2013 1 Series

Bold within table indicates new feature for 2013. 135is models are new for 2013.

Performance & efficiency	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
DOHC 24-valve inline 6-cylinder engine:						
3.0-liter	S	S	–	–	–	–
3.0-liter TwinPower Turbo	–	–	S	S	–	–
3.0-liter higher-output TwinPower Turbo	–	–	–	–	S	S
Engine features:						
Magnesium/aluminum composite construction	S	S	–	–	–	–
Aluminum construction	–	–	S	S	S	S
Twin-scroll turbocharger	NA	NA	S	S	S	S
High Precision direct fuel injection	NA	NA	S	S	S	S
Valvetronic variable intake-valve lift	S	S	S	S	S	S
Double VANOS ³ steplessly variable valve timing	S	S	S	S	S	S
Electronically controlled engine cooling	S	S	S	S	S	S
Electric coolant pump	S	S	S	S	S	S
Auxiliary radiator + high-output cooling fan	NA	NA	NA	NA	S	S
Volume-controlled oil pump	S	S	S	S	S	S
Direct ignition system with knock control	S	S	S	S	S	S
Exhaust system	Partial dual	Partial dual	Single	Single	Single w/ special muffler & end pipes	Single w/ special muffler & end pipes
6-speed manual transmission	S	S	S	S	S	S
6-speed STEPTRONIC automatic transmission with Normal, Sport & Manual shift modes	NC	NC	NA	NA	NA	NA
7-speed Double-Clutch Transmission (DCT) with Normal, Sport & Manual shift modes	NA	NA	OPT	OPT	OPT	OPT
Shift paddles on steering wheel	ZMP/OPT ⁴	ZMP/OPT ⁴	ZMP/NC ⁵	ZMP/NC ⁵	NC ⁵	NC ⁵
Double-pivot-type front suspension	S	S	S	S	S	S
Aluminum front suspension components	S	S	S	S	S	S
5-link rear suspension	S	S	S	S	S	S
Aluminum front/rear subframes	S	S	S	S	S	S
Convertible-specific underbody reinforcements	–	S	–	S	–	S
Twin-tube gas-pressure shock absorbers	S	S	S	S	S	S
M sport suspension calibration	ZMP	ZMP	S	S	S	S
Engine-speed-sensitive variable-assist power steering	S	S	S	S	S	S

3 – VANOS = VAriable NOckenwellen
Steuerung = variable camshaft control,
or variable valve timing.

5 – Included with Double-Clutch
Transmission.

4 – Only with automatic transmission.

S – Standard
OPT – Optional
NC – No extra cost

NA – Not available
– – Not applicable
ZMP – M Sport Package

Standard & optional features

2013 1 Series

Bold within table indicates new feature for 2013. 135is models are new for 2013.

Performance & efficiency	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Active Steering with Servotronic vehicle-speed-sensitive power assist & ratio	NA	NA	OPT	OPT	OPT	OPT
4-wheel ventilated disc brakes	S	S	S	S	S	S
Special Brembo high-performance brake system with larger rotors, 6-piston front/2-piston rear fixed aluminum calipers; heat-resistant black finish & BMW lettering on calipers	NA	NA	S	S	S	S
Dynamic Stability Control	S	S	S ⁶	S ⁶	S ⁶	S ⁶
17 X 7.0 alloy wheels:						
Star Spoke design #262	S	NA	–	–	–	–
Star Spoke design #371	NA	S	–	–	–	–
Star Spoke design #256	NA	NA	NC ⁷	NC ⁷	–	–
17 X 7.0 front/17 x 7.5 rear alloy wheels, M Double Spoke design #207M	ZMP	ZMP	–	–	–	–
18 x 7.5 front/18 x 8.5 rear alloy wheels: V Spoke design #372	NA	NA	S	S	–	–
M Double Spoke design #261M	NA	NA	ZMP	ZMP	–	–
Double Spoke design #313	NA	NA	NA	NA	S	S
Run-flat tires ⁸ :						
205/50R-17 all-season	S	S	NC ⁷	NC ⁷	–	–
205/50R-17 front / 225/45R-17 rear performance	ZMP	ZMP	–	–	–	–
215/40R-18 front / 245/35R-18 rear performance	NA	NA	S	S	S	S
Increased top-speed limiter	ZMP	ZMP	ZMP	ZMP	S	S
Tire Pressure Monitor	S	S	S	S	S	S

6 – Includes electronic limited-slip-differential function.
7 – Not available in combination with M Sport Package.

8 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 1 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

S – Standard
OPT – Optional
NC – No extra cost

NA – Not available
– – Not applicable
ZMP – M Sport Package

Standard & optional features

2013 1 Series

Bold within table indicates new feature for 2013. 135is models are new for 2013.

Comfort & convenience	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Doorsill trim plates with chrome trim & BMW lettering	S	S	S	S	–	–
BMW M doorsill trim	ZMP	ZMP	ZMP	ZMP	S	S
Vehicle & Key Memory	S	S	S	S	S	S
Multi-function remote control with selective unlocking ⁹	S	S	S	S	S	S
Comfort Access keyless entry	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
Dual power/heated exterior mirrors	S	S	S	S	S	S
Automatic-dimming interior & exterior mirrors	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
Digital compass in interior mirror	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
BMW Universal Transceiver (garage-door opener)	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
Courtesy lights with fade-in/fade-out feature, actuation from remote, automatic switch-on upon engine shutoff	S	S	S	S	S	S
Exterior ground lighting, separately controlled left/right front reading lights, illuminated visor mirrors, front BMW Ambiance Lighting & front footwell lighting	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
Lockable glove compartment	S	S	S	S	S	S
Tilt/telescopic 3-spoke leather-wrapped sport steering wheel with fingertip audio, air recirculation, Voice Command ^{10, 11} & phone ¹¹ controls		S	S	S	S	–
M Sport steering wheel with same features	ZMP	ZMP	ZMP	ZMP	S	S
Heated steering wheel	ZCW/OPT ¹²	ZCW/OPT ¹²	ZCW/OPT ¹²	ZCW/OPT ¹²	NA	NA
M driver's footrest	ZMP	ZMP	ZMP	ZMP	S	S
M stainless-steel-trimmed pedals (manual transmission only)	NA	NA	NA	NA	S	S
Manual shift lever with M logo & Nappa-leather knob	ZMP	ZMP	ZMP	ZMP	S	S
Dynamic cruise control	S	S	S	S	S	S
6-way adjustable front seats	S	S	–	–	–	–
8-way power front seats	ZPP/OPT	ZPP/OPT	S	S	–	–

9 – Selectable via Vehicle & Key Memory.

10 – This control active when vehicle is equipped with Navigation/Drive option.

11 – Phone controls active when vehicle is equipped with BMW Assist and approved mobile device is paired with Bluetooth interface.

12 – Not available in combination with M Sport Package or Alpine White interior trim.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable

ZCW – Cold Weather Package
ZMP – M Sport Package
ZPP – Premium Package

Standard & optional features

2013 1 Series

Bold within table indicates new feature for 2013. 135is models are new for 2013.

Comfort & convenience	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
4-way power front-seat lumbar support	ZPP	ZPP	S	S	S	S
8-way adjustable front sport seats with power-adjustable backrest width, manual thigh-support adjustment	ZMP/OPT	ZMP/OPT	–	–	–	–
10-way power front sport seats with power-adjustable backrest width, manual thigh-support adjustment	OPT/ZPP + OPT/ZMP ¹³	OPT/ZPP + OPT/ZMP ¹³	ZMP	ZMP	S	S
Memory system for driver's seat & exterior mirrors (2 settings per user)	OPT/ZPP ¹⁴	OPT/ZPP ¹⁴	S	S	S	S
Auto tilt-down of right-hand exterior mirror for backing up	OPT/ZPP ¹⁴	OPT/ZPP ¹⁴	S	S	S	S
3-stage, thermostatically controlled heated front seats	ZCW/OPT	ZCW/OPT	ZCW/OPT	ZCW/OPT	OPT	OPT
Fold-up front center armrest	S	S	S	S	S	S
Dual cupholders in front center console	S	S	S	S	S	S
Accessory power outlet in front center console	S	S	S	S	S	S
Electronic analog speedometer & tachometer	S	S	S	S	S	S
LCD main & trip odometers	S	S	S	S	S	S
Check Control vehicle monitor system	S	S	S	S	S	S
On-board computer monitoring current & cumulative fuel economy, average speed, ambient temperature, date & time; also includes freeze warning	S	S	S	S	S	S
iDrive system with 8.8-in. high-resolution control display, GPS Navigation; direct-select radio, media, phone & Navigation menus; 6 Programmable Memory Keys, Voice Command, Real Time Traffic Information & other features	ZTP/OPT	ZTP/OPT	ZTP/OPT	ZTP/OPT	ZTP/OPT	ZTP/OPT
Hard drive for Navigation, entertainment, Voice Command & phone system	ZTP/OPT ¹⁵	ZTP/OPT ¹⁵	ZTP/OPT ¹⁵	ZTP/OPT ¹⁵	ZTP/OPT ¹⁵	ZTP/OPT ¹⁵

13 – Power sport seats when Premium & M Sport Packages are combined; when stand-alone power-seats option & M Sport Package are combined; when stand-alone power seats & stand-alone sport seats are combined. If 128i Premium Package, 4-way power lumbar support is also included (standard with other models).

14 – Included with all power seats.
15 – Included with Navigation/iDrive option.

S – Standard
OPT – Optional
– – Not applicable

ZCW – Cold Weather Package
ZMP – M Sport Package
ZPP – Premium Package
ZTP – Technology Package

Standard & optional features

2013 1 Series

Bold within table indicates new feature for 2013. 135is models are new for 2013.

Comfort & convenience	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Leatherette upholstery	S	S	S	S	S	S
Boston leather upholstery (Convertibles: with Sun Reflective Technology)	ZPP/OPT	ZPP/OPT	ZPP/OPT	ZPP/OPT	ZPP/OPT	ZPP/OPT
High-gloss black interior trim	S	S	NC	NC	NA	NA
Light Burl Walnut interior trim	OPT	OPT	NC	NC	NA	NA
Glacier Silver Aluminum interior trim	OPT ¹⁶	OPT ¹⁶	NC ¹⁶	NC ¹⁶	S	S
Anthracite wood interior trim	OPT	OPT	S	S	NA	NA
Alpine White interior trim	NC ¹⁷	NC ¹⁷	NC ¹⁷	NC ¹⁷	NA	NA
Power door windows with key-off operation; 1-touch opening & closing, anti-trapping feature, opening from remote	S	S	S	S	S	S
Power rear side windows with 1-touch opening, opening from remote	NA	S	NA	S	NA	S
Automatic climate control with separate left/right temperature settings, automatic recirculation control, misting sensor, activated-charcoal microfilter ventilation, draft-free airflow & other features	S	S	S	S	S	S
2-way power moonroof with 1-touch opening & closing, anti-trapping feature, opening from remote, sliding interior sunshade	ZPP/OPT	–	S	–	S	–
Anthracite-color headliner	ZMP	–	ZMP	–	S	–
Fully automatic, fully lined power softtop	–	S	–	S	–	S
Anti-theft AM/FM/HD/CD/MP3 audio system with 8 speakers including 2 subwoofers, vehicle-specific equalizing, Radio Data System (RDS), diversity antenna system, auxiliary audio input & other features	S	S	S	S	S	S

¹⁶ – Requires M Sport Package.

¹⁷ – Not available in combination with heated steering wheel.

S – Standard
OPT – Optional
NC – No extra cost
NA – Not available

– – Not applicable
ZMP – M Sport Package
ZPP – Premium Package

Standard & optional features

2013 1 Series

Bold within table indicates new feature for 2013. 135is models are new for 2013.

Comfort & convenience	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Harman Kardon surround-sound audio system with 10 speakers, Logic7 signal processing, increased audio power, upgraded componentry & all features of standard system	OPT	OPT	OPT	OPT	OPT	OPT
Satellite Radio with 1-year subscription	ZPP	ZPP	ZPP	ZPP	ZPP	ZPP
iPod/USB Adapter	S	S	S	S	S	S
BMW Apps + Smartphone Integration	ZTP	ZTP	ZTP	ZTP	ZTP	ZTP
Bluetooth cellphone interface with high-capacity phonebook download	ZTP/OPT¹⁸	ZTP/OPT¹⁸	ZTP/OPT¹⁸	ZTP/OPT¹⁸	ZTP/OPT¹⁸	ZTP/OPT¹⁸
Open storage compartments & bins in doors & center console (Coupes only; also between rear seats)	S	S	S	S	S	S
Split folding rear seats	S	NA	S	NA	S	NA
Through-loading system with cargo bag	NA	S	NA	S	NA	S
Rear-window defroster	S	S	S	S	S	S
Floor mats, front & rear	S	S	S	S	S	S
Interior trunk release, electrically operated	S	S	S	S	S	S
Storage net & tie-down strap in trunk	S	S	S	S	S	S
Variable trunk capacity, softtop raised/lowered	–	S	–	S	–	S

¹⁸ – Included with BMW Assist option, whether Technology Package or stand-alone.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable

ZPP – Premium Package
ZTP – Technology Package

Standard & optional features

2013 1 Series

Bold within table indicates new feature for 2013. 135is models are new for 2013.

Safety & security	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Dynamic Stability Control, including electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Traction Control, Dynamic Brake Control, Brake Fade Compensation, Brake Standby, Brake Drying & Start-off Assistant	S	S	S	S	S	S
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S	S	S	S	S
3-point safety belts at all seating positions (4)	S	S	S	S	S	S
Front safety belts with automatic tensioners & force limiters	S	S	S	S	S	S
LATCH attachments at rear seating positions	S	S	S	S	S	S
Front seats optimized for protection in rear impact	S	S	S	S	S	S
Head restraints at all seating positions (4)	S	S	S	S	S	S
Front- & rear-seat Head Protection System	S	-	S	-	S	-
Rollover Protection System	-	S	-	S	-	S
Front-seat side-impact airbags, seat-mounted	S	-	S	-	S	-
Front-seat side-impact airbags, seat-mounted with head protection	-	S	-	S	-	S
Post-impact safety measures:						
Unlocking of central locking system	S	S	S	S	S	S
Switch-on of hazard flashers	S	S	S	S	S	S
Switch-on of interior lighting	S	S	S	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S	S	S	S
BMW Assist, including enhanced collision notification, Assist & SOS buttons, enhanced Roadside Assistance, TeleService ¹⁹ , BMW Assist Safety Plan ¹⁹ , Bluetooth cellphone interface	ZTP/OPT	ZTP/OPT	ZTP/OPT	ZTP/OPT	ZTP/OPT	ZTP/OPT
Central locking system with selective unlocking ⁹	S	S	S	S	S	S
Coded Driveaway Protection	S	S	S	S	S	S
Alarm system with operation from remote, interior motion detector	OPT	OPT	OPT	OPT	OPT	OPT

⁹ – Selectable via Vehicle & Key Memory.

¹⁹ – Requires BMW Assist annual fee after 4th year.

S – Standard
OPT – Optional
– – Not applicable
ZTP – Technology Package

Technical specifications

2013 1 Series

Bold within table indicates new specification for 2013. 135is models are new for 2013.

General	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Curb weight, lb.:						
Manual transmission	3208	3494	3373	3638	3373	3638
Automatic transmission	3285	3571	3439	3704	3439	3704
Weight distribution, front/rear, %:						
Manual transmission	50.5/49.5	48.3/51.7	51.6/48.4	49.4/50.6	51.6/48.4	49.4/50.6
Automatic transmission	51.0/49.0	49.1/50.9	51.9/48.1	49.7/50.3	51.9/48.1	49.7/50.3
Wheelbase, in.	104.7 ¹					
Track, front/rear, in. (with standard wheels)	58.3/59.6	58.3/59.6	57.9/58.9	57.9/58.9	57.9/58.9	57.9/58.9
Length, in.	172.2 ¹					
Width, in.	68.8 ¹					
Height, in.	56.0	55.6	55.4	54.8	55.4	54.8
Body	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Type	2-door Coupe ²	2-door Convertible ³				
Aerodynamic drag coefficient (C _d)	0.31	0.34	0.33	0.34	0.33	0.34
EPA size classification	Subcompact ¹					
Accommodations	128i Coupe	128i Convertible	135 Coupe	135i Convertible	135is Coupe	135is Convertible
Seating capacity, persons	4 ¹					
Head room, front/rear, in.:						
without moonroof	37.9/37.1	38.6/37.0	–	–	–	–
with moonroof	36.7/35.9	–	36.7/35.9	–	36.7/35.9	–
Leg room, front/rear, in.	41.5/32.1 ²	41.5/31.8 ³				
EPA passenger-compartment volume, cu ft.	85.6 ²	78.0 ³				
EPA cargo volume	10.0 ²	8.0/7.0 ^{3,4}				

1 – Specification applies to all models.

2 – Specification applies to all Coupe models.

3 – Specification applies to all Convertible models.

4 – Cargo volumes for Convertibles with softtop compartment up/down.

– – Not applicable

Technical specifications

2013 1 Series

Bold within table indicates new specification for 2013. 135is models are new for 2013.

Engine & electrical	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Engine type	DOHC inline 24-valve 6-cylinder, magnesium/aluminum composite construction, Valvetronic variable intake-valve lift & Double VANOS ⁵ steplessly variable intake- & exhaust-valve timing ⁶		DOHC inline 24-valve 6-cylinder, aluminum construction with cast-iron cylinder liners, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁵ steplessly variable intake- & exhaust-valve timing ⁷			
Bore x stroke, mm/in.	85.0 x 88.0/3.35 x 3.46 ⁶		84.0 x 89.6/3.31 x 3.53 ⁷			
Displacement, cc/cu in.	2996/183 ⁶		2979/182 ⁷			
Compression ratio	10.7:1 ⁶		10.2:1 ⁷			
Power @ rpm, hp	230 @ 6500 ⁶		300 @ 5800 ⁸			320 @ 5800⁹
Torque @ rpm, lb-ft.	200 @ 2750 ⁶		300 @ 1200-5000 ⁸			317 @ 1500-5000⁹
Engine-management system	MSV80 with knock control (2 sensors); variable valve lift & timing, engine cooling & other functions included in control strategy ⁶		MSD81 with knock control (2 sensors); direct fuel injection, variable valve lift & timing; engine cooling & other functions included in control strategy ⁷			Performance Power Kit Version 2 software⁹
Induction system	Single-stage ²					
Fuel requirement	Premium unleaded ¹					
Fuel capacity, U.S. gal.	14.0 ¹					
Battery capacity, amp-hr.	70 ¹					
Alternator output rating, amp./W	150/2100 (MT), 180/2520 (AT) ⁶		180/2520 ⁷			

5 – VANOS = Variable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

6 – Specification applies to 128i models.

7 – Specification applies to 135i & 135is models.

8 – Specification applies to 135i models only.

9 – Specification applies to 135is models only.

AT – Automatic transmission

MT – Manual transmission

Technical specifications

2013 1 Series

Bold within table indicates new specification for 2013. 135is models are new for 2013.

Drivetrain	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Drive system	Front engine/ rear-wheel drive ¹					
Manual transmission	6-speed, Type I ⁶		6-speed, Type K ⁷			
Ratios: 1st	4.32:1 ⁶		4.11:1 ⁷			
2nd	2.46:1 ⁶		2.32:1 ⁷			
3rd	1.66:1 ⁶		1.54:1 ⁷			
4th	1.23:1 ⁶		1.18:1 ⁷			
5th	1.00:1 ⁶		1.00:1 ¹			
6th	0.85:1 ⁶		0.85:1 ⁷			
Reverse	3.94:1 ⁶		3.73:1 ⁷			
Final drive ratio	3.23:1 ⁶		3.08:1 ⁷			
Automatic or Double-Clutch transmission	Automatic 6-speed, GM ⁶		Double-Clutch Transmission, 7-speed, DKG 436 ⁷			
Ratios: 1st	4.06:1 ⁶		4.78:1 ⁷			
2nd	2.37:1 ⁶		3.06:1 ⁷			
3rd	1.55:1 ⁶		2.15:1 ⁷			
4th	1.16:1 ⁶		1.68:1 ⁷			
5th	0.85:1 ⁶		1.32:1 ⁷			
6th	0.67:1 ⁶		1.20:1 ⁷			
7th	–		1.00:1 ⁷			
Reverse	3.20:1 ⁶		4.45:1 ⁷			
Final drive ratio	3.73:1 ⁶		2.56:1 ⁷			

1 – Specification applies to all models.

6 – Specification applies to 128i models.

7 – Specification applies to 135i & 135is models.

Technical specifications

2013 1 Series

Bold within table indicates new specification for 2013. 135is models are new for 2013.

Chassis	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Body/frame construction	Unitized steel ¹					
Front suspension	Struts, double-pivot lower arms, coil springs, twin-tube gas-pressure shock absorbers, tubular anti-roll bar, subframe; aluminum lower arms, steering knuckle & subframe ¹ (M sport suspension calibration standard 135i/ is models, ZMP 128i models)					
Rear suspension	5-link system, coil springs, twin-tube gas-pressure shock absorbers, tubular anti-roll bar ¹ (M sport suspension calibration standard 135i/ is models, ZMP 128i models)					
Rack-&-pinion steering: Standard system	Engine-speed-sensitive hydraulic power assist ¹					
Overall ratio	16.0:1 ¹					
Turns lock-to-lock	3.0 ¹					
Optional Active Steering	Vehicle-speed-sensitive ratio & power assist ⁷					
Overall ratio	Electrically/electronically variable over wide range of 10.8:1 – 18.0:1 ⁷					
Turns lock-to-lock, max.-min.	1.8-3.0 ⁷					
4-wheel ventilated disc brakes, vacuum-assisted:						
Front diameter, mm/in.	300/11.8 ⁶		338/13.3 ⁷			
Rear diameter, mm/in.	300/11.8 ⁶		324/12.8 ⁷			
Caliper type/material, front	Floating/aluminum ⁶		6-piston fixed/aluminum ⁷			
Caliper type/material, rear	Floating/cast iron ⁶		2-piston fixed/aluminum ⁷			
Cast-alloy wheels: standard	17 x 7.0 ⁶		18 x 7.5 front/18 x 8.5 rear ⁷			
optional	17 x 7.0 front / 17 x 7.5 rear ⁶ (ZMP)		17 x 7.0 (stand-alone) ⁸		– –	
Run-flat tires: standard	205/50R-17 all-season ⁶		215/40R-18 front / 245/35R-18 rear performance ^{7,10}			
optional	205/50R-17 front / 225/45R-17 rear performance (ZMP) ⁶		205/50R-17 all-season (stand-alone) ⁹			
Stability-enhancement system	Dynamic Stability Control, including electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Traction Control, Dynamic Brake Control, Brake Fade Compensation, Brake Standby, Brake Drying & Start-up Assistant ¹ ; 135i/ is models only add electronic limited-slip differential					

1 – Specification applies to all models.

6 – Specification applies to 128i models.

7 – Specification applies to 135i & 135is models.

8 – Specification applies to 135i models only.

9 – Specification applies to 135is models only.

10 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. 1 Series models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

– – Not applicable
ZMP – M Sport Package

Technical specifications

2013 1 Series

Bold within table indicates new specification for 2013. 135is models are new for 2013.

Performance & efficiency data	128i Coupe	128i Convertible	135i Coupe	135i Convertible	135is Coupe	135is Convertible
Acceleration, 0-60 mph, sec. ¹¹ :						
Manual transmission	6.1	6.4	5.1	5.4	4.9	5.2
Automatic or Double-Clutch transmission	6.7	7.0	5.0	5.3	4.8	5.1
Top speed, mph ¹² :						
With all-season tires	130 ¹					
With performance tires	150 ¹					
EPA estimated MPG, city/highway/combined:						
Manual transmission	19/28/22	19/28/22	20/28/23	19/28/22	20/28/23	19/28/22
Automatic transmission	18/28/22	18/27/21	18/25/21	18/25/20	18/25/21	18/25/20

1 – Specification applies to all models.

12 – Electronically limited.

11 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle; road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

2013 Z4:

The classic BMW Roadster, featuring enhanced standard equipment, stable or reduced prices, and functional updates.

Having introduced an all-new, more fuel-efficient 28i powertrain and the Exclusive Canyon Brown Package in 2012, BMW's retractable-hardtop Roadster continues in essentially the same form for 2013 – but with extensive upgrades in standard equipment for all models. The upper-level 35i and 35is models offer this expanded standard equipment with no price increase; the 28i even arrives at a reduced base price. Thus the major story for '13 is greater value. But as the listing below shows, there are also functional enhancements.

For all the technical and esthetic evolution it has seen since introduction of the new generation in '09, the Z4 remains BMW's classic 2-seat Roadster, with a powerful, front-mounted engine under a long hood; driver and passenger sitting low and relatively far back in the chassis; rear-wheel drive, optimum front/rear weight distribution and a low center of gravity for responsive handling; and finally, "the BMW way" of designing, engineering, harmonizing and calibrating these elements into a uniquely satisfying entity.

All this enables the Z4 to remain a milestone in the history of automotive progress and driving pleasure. *Automobile* Magazine rendered this judgment in its June '09 issue: "With this latest generation, the modern BMW roadster takes another step on its way to becoming a sports-car classic." After test-driving the then-new 35is model in its April 5, '10 issue, *AutoWeek* declared that "Top up or down, the

Z4 sDrive 35is confirms BMW's commitment to the enthusiast driver."

What's new for 2013

As of 7/12 production:

Expanded standard equipment All models:

- Comfort Access keyless entry
- Auto-dimming interior and exterior mirrors
- Power-folding exterior mirrors
- BMW Universal Transceiver (3-function garage-door opener)
- Ambiance lighting package: Ambiance lighting at front center, door storage bins and dashtop compartment; door exit lights, illumination at exterior door handles, left/right reading lamps, footwell illumination, illuminated glove compartment, Pathway Lighting via headlight-flasher control
- 4-way power lumbar support on both seats
- Digital compass in interior rear-view mirror
- Smoker's package, including accessory power outlet
- Wind deflector (formerly center-installed)

28i:

- Power seats + seat/exterior-mirror memory
 - Dual-zone automatic climate control
 - Brushed-aluminum interior trim
- #### 35i:
- 18-in. Multi-Spoke wheels and performance tires in differentiated front/rear sizes; replace 17-in. differentiated
 - Sport seats

35is:

- BMW Assist
- 14-speaker premium audio system

Package & option changes

- Premium Package discontinued, as most content now standard (all models)
- 28i Sport Package gets 18-in. differentiated wheels/tires, replacing 17-in.
- 35i Sport Package discontinued
- 35is Premium Sound Package discontinued
- P1 options eliminated
- Fewer option combination requirements

Functional enhancement

- Retractable hardtop can be lowered or raised at vehicle speeds up to 25 mph

Changes shared with other Series

- Climate controls: "snowflake" symbol changed to "A/C," AUC (automatic recirculation) supplemented by "M" (manual setting, blower control adds "OFF" label)
- "CD" key at iDrive controller changed to "Media" (Navigation-equipped vehicles only)

Z4 models & key features

This information lists major features, and helps position and distinguish the models in the line. For a comprehensive summary of features, see pages 574-585.

Z4 sDrive28i

“Entry” model, incorporating trail-blazing powertrain technology that combines high performance with outstanding fuel efficiency. After getting an expanded range of standard equipment in '12, the 28i adds still more standard features for '13, as summarized under **what's new**. Key features and attributes include:

Exterior design & function

- Xenon Adaptive headlights with dynamic auto-leveling, luminous rings as parking lights, Daytime Running Lamps and Welcome Light
- Automatic headlight control
- Rain-sensing windshield wipers
- Aluminum hood; reduces vehicle weight and helps optimize front/rear weight distribution
- Dual power/heated, power-folding exterior mirrors
- Comfort Access keyless entry
- Fully automatic retracting hardtop with 20-sec. lowering and raising at vehicle speeds up to 25 mph
- Adaptive brakelights
- Model designation “sDrive28i” on front flanks

Performance & efficiency

- 2.0-liter DOHC 16-valve inline 4-cylinder engine with aluminum construction, twin-scroll turbocharger, direct fuel injection, Valvetronic variable intake-valve lift, Double VANOS¹ variable intake- and exhaust-valve timing, 240 hp/260 lb-ft., 0-60 mph in 5.5 sec. manual transmission/5.6 sec. automatic, EPA combined rating 26 mpg with either transmission
- Automatic start/stop function for engine (manual transmission only)

- Choice of 6-speed manual or 8-speed STEPTRONIC Sport automatic transmission; manual has short shift lever, automatic has E-shift and steering-wheel shift paddles
- Double-pivot strut-type front suspension with aluminum components
- Central Link rear suspension
- Vehicle-speed-sensitive, energy-saving electric power rack-and-pinion steering
- Driving Dynamics Control – Comfort and Sport settings for engine response and steering assist; additional setting (Sport+) switches Dynamic Stability Control to Dynamic Traction Control mode. In vehicles so equipped, Comfort and Sport settings also apply to automatic transmission and Adaptive M Suspension.
- 4-wheel ventilated disc brakes
- Brake Energy Regeneration
- 17 x 7.0 alloy wheels, Star Spoke design #290
- 225/45R-17 run-flat performance tires²
- Dynamic Stability Control
- Tire Pressure Monitor

Comfort & convenience

- Vehicle & Key Memory
- BMW Universal Transceiver
- Tilt/telescopic, Sun Reflective Technology leather-wrapped sport steering wheel with multi-function controls
- Auto-dimming interior and exterior mirrors
- Digital compass in interior mirror
- Ambiance lighting
- Power seats, 8-way adjustable + 4-way lumbar support
- Memory system for driver's seat and exterior mirrors
- Padded center armrest
- Leatherette upholstery

- Brushed-aluminum interior trim
- Power windows with 1-touch open/close (front), 1-touch open (rear); all-window switch with 1-touch open; power sealing system on door windows
- Dual-zone automatic climate control with activated-charcoal microfilter ventilation, automatic recirculation control, misting sensor and other features
- Anti-theft AM/FM/HD/CD/MP3 audio system with Radio Data System, 11 speakers including 2 subwoofers, auxiliary audio input
- Bluetooth mobile-device interface
- iPod/USB Adapter
- Through-loading system with cargo bag
- Locking glove compartment, closable storage bins in doors, locking center console compartment, cross-rack with lashing eyes behind seats
- Mount/demountable wind deflector
- Floor mats
- Fully finished trunk with variable hardtop compartment for optimized space, Soft Close, release from interior, exterior or remote

Safety & security

- Dual-airbag Supplementary Restraint System
- Safety belts with automatic tensioners and force limiters
- Side-impact airbags
- Active Knee Protection
- Rollover Protection
- Coded Driveaway Protection
- Anti-theft alarm system with operation from remote

Packages & options

- Available packages:
 - Sport (Adaptive M Suspension, 18 x 8.0 front/18 x 8.5 wheels in Star Spoke design #276, 225/40R-18 front / 255/35R-18 rear performance tires², sport seats, increased top-speed limiter)
 - M Sport (Adaptive M Suspension, 18-in. Star Spoke wheel design #325M with performance tires² in same sizes as Sport Package, M aerodynamic exterior treatment; M doorsill trims, M driver's footrest, M Sport steering wheel, leather manual gearshift knob; sport seats, Aluminum Carbon Shadow interior trim, BMW Individual Anthracite-color headliner, increased top-speed limiter)
 - Exclusive Canyon Brown (sport seats, Canyon Brown Merino Extended leather upholstery, Fine Line Anthracite wood interior trim)
 - Exclusive Citrus Yellow (Black Alcantara/leather upholstery, sport seats, BMW Individual Piano Black interior trim, Anthracite-color headliner, special floor mats)
 - M Sport/Canyon Brown and M Sport/Citrus Yellow Packages combine contents of the two package sets; see **packages & options** for details

1 – VANOS = Variable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. Z4 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions; snow chains cannot be fitted.

Z4 models & key features

This information lists major features, and helps position and distinguish the models in the line. For a comprehensive summary of features, see pages 574-585.

- Cold Weather (retractable headlight cleaning system, heated steering wheel and seats, storage package)
- Premium Sound (14-speaker premium audio system, Satellite Radio with 1-year subscription)
- Stand-alone options:
 - 8-speed sport automatic transmission + shift paddles (no extra cost)
 - Automatic High Beams
 - Park Distance Control
 - Heated front seats
 - Kansas leather upholstery
 - Dark Ash Grain wood interior trim
 - Navigation/iDrive + BMW Assist
 - BMW Assist + Enhanced Bluetooth (combox controller)
 - Satellite Radio with 1-year subscription
 - BMW Apps + Smartphone Integration
 - 6-disc DVD changer
- 300 hp/300 lb-ft. torque, 0-60 mph in 5.1 manual/5.0 DCT, EPA combined rating 21 mpg manual/19 mpg DCT
- Different transmission choices:
 - Manual transmission has higher torque capacity, different ratios
 - Optional 7-speed Double-Clutch Transmission (DCT); functions equally brilliantly as manual or automatic, actually improves performance over manual transmission. An especially sporty transmission.
 - Dual exhaust system; visible from outside by single 80-mm matte-chrome exhaust tips on each side of vehicle, vs. 28i's two 72-mm tips on left side
 - 18 x 8.0 front/18 x 8.5 rear alloy wheels, Multi-Spoke design #293
 - 225/40R-18 front / 255/35R-18 rear performance tires²
 - Aluminum/cast-iron composite front brake rotors for optimum weight distribution, reduced unsprung weight
 - Larger brake dimensions: front discs 348 mm/13.7 in. vs. 28i's 330/13.0; rear discs 324 mm/12.8 in. vs. 300/11.8
 - Aluminum matte vertical grille slats and lower outboard grille frames, vs. black
 - Model designation "sDrive35i" on front flanks
 - Silver/chrome doorsill trims, vs. black
 - Sport seats (add power-adjustable backrest width, manually adjustable thigh support)
 - Kansas leather upholstery standard, vs. optional

Z4 sDrive35i

Featuring BMW's acclaimed twin-turbo 6-cylinder engine, the 35i embodies a major increment of power and refined sound. Its available 7-speed Double-Clutch Transmission offers a sportier dimension in driving pleasure and response over the standard 6-speed manual. Beyond its brilliant performance, the 35i also offers extensive upgrades in standard features, finishes and amenities over the 28i:

- 3.0-liter DOHC 24-valve inline 6-cylinder engine with aluminum construction, twin turbochargers, direct fuel injection with piezo injectors, Double VANOS¹ variable valve timing;

- Packages and options as for 28i, except:
 - No Sport Package; standard wheels and tires upgraded to same as in 2012 Sport Package
 - M Sport, Exclusive + M Sport-combined Packages delete sport seats, as standard
 - 19-in. V Spoke wheels (#296) and performance tires in differentiated front/rear sizes available as stand-alone upgrade in combination with M Sport and M Sport-combined Packages
 - Extended Kansas leather available in 35i, not in 28i
- Specific, sporty calibration of electric power steering
- Standard 18-in. wheel/tire equipment in same differentiated sizes as 35i, wheel design unique to 35i
- All other elements of factory M Sport Package (code 337) as standard equipment:
 - Same exterior color selection (Jet Black, Crimson Red and Orion Silver not available)
 - M aerodynamic exterior treatment: specific front bumper/spoiler and rear bumper/apron/diffuser ensembles
 - M doorsill trims with M logo
 - M aluminum-trimmed driver's footrest
 - M sport steering wheel with shift paddles
 - BMW Individual Anthracite-color headliner
 - Increased top-speed limiter
- Specific to 35i's, not part of code 337:
 - Matte-aluminum lateral bars in outer front air intakes (M Sport Package: all-black)
 - Specific body-color insert in rear apron, Dark Shadow diffuser section (M Sport Package: complete insert in Dark Shadow)
 - Exterior mirrors finished in Oxide Silver
 - Gray instrument faces, "sDrive35i" script on tachometer

Z4 sDrive35is

Top Z4 model, featuring an even higher-output twin-turbo engine, standard 7-speed DCT with shift paddles, standard Adaptive M Suspension, numerous exterior design distinctions and points of interior design and equipment as listed here. Except for wheel design and interior trim, all elements of the 35i M Sport Package are standard on the 35is. This model's distinctions are:

- Upgraded N54 twin-turbo 6-cylinder engine, producing 335 hp vs. 35i's 300, 332 lb-ft. torque (also vs. 300) plus Overboost function providing 370 lb-ft. for brief acceleration periods; specially developed exhaust sound. EPA combined mileage rating same as for 35i with DCT.
- Standard 7-speed DCT with shift paddles
- Standard Adaptive M Suspension (included in Sport and M Sport Packages of other models), with suspension lowered 10 mm (0.4 in.) from other models' standard setting

1 - VANOS = Variable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

2 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. Z4 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions; snow chains cannot be fitted.
DCT - Double-Clutch Transmission.

Z4 models & key features

This information lists major features, and helps position and distinguish the models in the line. For a comprehensive summary of features, see pages 574-585.

- M Aluminum Carbon Shadow interior trim
- Premium audio system standard, vs. Premium Sound Package
- Floor mats with piping in M colors, "sDrive35is" script
- BMW Assist + Enhanced Bluetooth standard, vs. optional
- Packages and options as 35i, except:
 - No M Sport or Premium Sound Package (premium audio standard)
- Citrus Yellow Package deletes BMW Anthracite-color headliner, as standard
- No M Sport/Canyon Brown or /Citrus Yellow Package
- Stand-alone optional 19-in. wheels are design #326M, exclusive to 35is
- Brushed Aluminum interior trim available at no extra cost (standard 35i)

Z4 key features

Except as noted, all current Z4 models offer the following features:

Exterior design & function

BMW's roadster tradition

The Z4 is an expression of a longstanding BMW tradition, which began in 1935 with the 315/1 and 319/1, two versions of a perky little 2-seater powered by a small 6-cylinder engine. In 1936, the tradition became legend with the fabulous **328 Roadster**, which began as a successful race car, went on to become a beloved sports car, and is now one of the great collectibles of its era.

Another spectacular BMW classic was the **507**, of which only about 250 were built in the mid- to late 1950s. Today, this elegantly designed, V8-powered roadster commands high six-figure prices at collector-car auctions; the most recent *Kelley Blue Book Official Guide for Early Model Cars* lists \$987,000 as the value of an "excellent" example – and an additional \$19,900 for one with the optional Rudge wheels. Elvis Presley owned one.

Unknown in America, yet also important to BMW roadster evolution, was the **Z1** – conceptually amazing, with a fiberglass body and electrically retracting doors. Powered by the 2.5-liter 6-cylinder of its time (1988-91), it offered sweet performance, excellent handling, sleek and innovative design, and the unique ability to be driven with its doors open. The Z1 was expensive, built in small numbers, and offered only overseas – altogether a very special sports car!

In 1996, BMW introduced a roadster that was affordable to many more customers, including those in the U.S.: the **Z3**. It was

an instant, international hit. Over its career it was offered first with a 4-cylinder engine, later with 6-cylinder units of up to 315 horsepower. The Z3 is fondly remembered as a relatively simple, elemental, fun-to-drive machine with BMW engineering and quality.

With its design inspired by the classic 507, the **Z8** made its debut in 2000 as BMW's highest-performing, highest-technology roadster. The Z8's limited production run was capped by the automatic-transmission ALPINA version in '03. Z8s are already coveted collector cars; a recent *Hemmings Motor News* listed an example for \$109,000. Which brings us to the **Z4**. Making its debut in 2003, it marked a dramatic design departure from the Z3, with daring lines and cuts from front to rear. It remained a softtop Roadster; in '06 a fastback Coupe (also a 2-seater) was set alongside the Roadster, and M versions of both body styles were introduced. With six models ranging from 215 to 330 hp, these 1st-generation Z4s finished their run in '08. The new Z4 made its debut in '09, consolidating the former two body styles into a new retractable-hardtop Roadster embodying the subtle, sophisticated design evolution that's described here.

Evolution of an original: the Z4 design strategy

No question about it, the 1st-generation Z4 (2003) was an original. Created to carry the Z4 concept into another era, the current Z4 is evolved in a subtle, instantly recognizable way.

Typically BMW, the current Z4

Z4 key features

Except as noted, all current Z4 models offer the following features:

is a major functional evolution. Most obvious, of course, is its retractable hardtop. The graceful silhouette it lends the top-up Z4 is obvious enough; not readily perceptible is the material it's made of. Aluminum costs more in production, but how appropriate for a sports car: BMW accomplished all the benefits of a hardtop – see **comfort & convenience** – with only 155 pounds of extra weight over the previous Roadster. And the aluminum's weight savings are right at the top, helping the Z4 achieve a lower center of gravity than it would with a steel roof.

At the front, the traditional and famous BMW “kidney” grilles take on an energetic, slanted-oval form that thrusts the BMW identity forward while meeting Europe's tough regulations for pedestrian protection. Housing BMW's traditional 4-lamp configuration, the lighting clusters sweep around the sides to accommodate all the functions of modern illumination: Adaptive headlights that help the driver “see around” curves at speed, low-speed cornering lights as well; luminous rings serving as parking lights, Daytime Running Lamps and the Welcome Lamp function. Dynamic auto-leveling is standard; see **BMW features** for an explanation.

(Note that foglights are not available. The lighting clusters are engineered to obviate the need for them.)

Spanning almost the full vehicle width at the bottom of the bumper/spoiler ensemble are ample air intakes, with framed grilles at the sides in black on the 28i, aluminum matte on the 35i. The

M Sport Package/35is aerodynamic exterior treatment leads off with a differently configured front end, applying black honeycomb screening to all three air inlets, and the 35is model adds matte-aluminum lateral bars to the outboard openings.

From the main grilles upward, harmoniously flowing lines sweep back along the fender tops and to the steeply raked windshield. The hood is raked, signifying another BMW tradition: powerful, smooth, great-sounding inline engines. Including the 35is' higher-output twin-turbo unit, the Z4 now offers a choice of three engines.

In profile, the Z4 features a primary beltline sweeping downward into the door, then “hiking” upward and finally downward again to conclude at the rear edge. This line recalls the prominent front and rear fenders and cut-down doors of classic roadsters. The other, higher beltline, framing the cockpit, is more in the idiom of modern roadsters. Other highlights of the side view – aside from an appealing selection of standard and optional wheel designs – include “gills” integrating LED turn indicators, BMW logo, model designation, and a sculpted knife-edge curving upward from the front wheelwell. Aft of the rear wheels, substantial overhang signifies a rearward weight bias that promotes responsive handling (50.9-52.7% of the weight on the rear wheels) and aerodynamics that press the vehicle solidly down on the road. Bright LED-rowed taillights can be seen easily from the side.

Though accommodating the lowered hardtop, the rear deck

is gracefully low; this enhances not only the design but also the driver's view to the rear even with the true-roadster low seating position. Parameters like this were clear goals in designing the Z4; it had to be a truly “open” vehicle, imparting a genuine roadster feeling to its driver and passenger. Another factor in this is the windshield header: the sun visors are no closer to the occupants' heads than in the original Z4. (In some retractable-hardtop designs, the windshield header is set far back to reduce the hardtop's length and that bothers some drivers and passengers.)

At the rear, the trunklid ends in an essentially vertical surface, topped by an integral spoiler that rises sharply in both side and rear views. The taillight units reach inward to enhance visibility from the rear; the 3rd brakelight is in a stylish trunklid recess and the bumper frames the license plate, a center spoiler lip and cutouts for the exhaust tips (two on the left side on 28i, one on each side on 35i and 35is).

Aerodynamics: meaningful refinement

Here BMW's aim was to enhance the joy of top-down driving:

- Reaching far rearward, the side windows help reduce drafts around the occupants when raised.
- Occupants can regulate wind flow around their heads by adjusting the side windows to varying heights. Tell prospects: Try it!
- The sport seats (28i in packages, otherwise standard) provide slightly greater freedom from

wind turbulence than the standard ones.

- In the most comfortable configuration for top-down driving – windows up, the now-standard wind deflector mounted – driving comfort is “excellent even at speeds of over 125 mph,” according to the designers and engineers. Not something to experience in the U.S., but meaningful in Germany and quite an accomplishment.

Performance & efficiency

N20 2.0-liter TwinPower Turbo 4-cylinder engine with Valvetronic (Z4 sDrive28i)

This new-generation 28i engine offers highly fuel-efficient yet also lively and satisfying performance, while leaving the role of higher-performance alternative to the 35i/is models with their twin-turbo 6-cylinder engine. Its key features and attributes are:

- **4 cylinders** – first 4-cylinder BMW engine offered in the U.S. since 1998; applies BMW's latest engine technology to achieving a new level of fuel efficiency while maintaining typical BMW performance.
- **Valvetronic variable intake-valve lift**, replacing the traditional throttle and enhancing power, efficiency and response to the driver's demands. A distinctive BMW engine feature.
- **Twin Scroll turbocharger**, providing a hearty performance boost in combination with Valvetronic. Another distinctive BMW engine feature.
- **Direct fuel injection** contributing to both performance and efficiency.

Z4 key features

Except as noted, all current Z4 models offer the following features:

- **Twin balance shafts.** BMW's first application of a feature that lends a 4-cylinder engine smoothness approaching that of more cylinders.

"Bottom lines" for the customer: torque, power, performance, fuel efficiency, weight.

Here we draw a comparison not to the N55 Twin Scroll 6-cylinder or the 35i/is N54 twin-turbo, but rather to the naturally aspirated³ 6-cylinder that powered the Z4 28i predecessor, the 2011 Z4 30i:

	2011 Z4 30i	2012-13 Z4 28i
Power @ rpm, hp	255 @ 6500	240 @ 5000-6000
Torque @ rpm, lb-ft.	220 @ 2600	260 @ 1250-4800
0-60 mph, sec.:		
Manual transmission	5.8	5.5
Automatic transmission	6.0	5.6
EPA mileage, city/highway/combined:		
Manual transmission	18/28/22	22/34/26
Automatic transmission	18/28/22	22/33/26
Engine weight, lb.	355	335
Vehicle curb weight, lb.:		
Manual transmission	3252	3263
Automatic transmission	3329	3307
Weight distribution with manual transmission, front/rear, %	47.9/52.1	47.3/52.7

N54 engine: twin turbocharging, piezo direct fuel injection, high compression ratio and other standout attributes (Z4 sDrive35i)

With the N20 engine and this N54 turbocharged unit, BMW demonstrates its approach to high performance for now and the future: Instead of ever-larger engines, BMW will achieve its performance goals with smaller, lighter, more efficient and cleaner-running engines. Turbocharging is an essential element of this strategy.

Thanks mainly to the new engine's more abundant torque, spread over a wider rpm range as is typical of BMW's turbo engines, the new 28i handily out-accelerates its predecessor. This is especially true with the automatic transmission, which is an 8-speed in place of the previous 6-speed. The EPA mileage ratings here also show that efficiency is a benefit of the new engine.

The 300-hp N54 engine is completely distinct from the N20. Its distinguishing features include –

- **Twin turbocharging** with air-to-air intercooling to control the temperature of the air being charged into the engine.
- **Special exhaust system** to match the engine's forced-induction system and provide optimum sound character for a Roadster.
- **Cast-iron cylinder liners**, combining with the all-aluminum structure to handle the greatly increased internal loads of this engine.

- **Conventional valvegear**, vs. the N20's Valvetronic.

If the 28i model's performance is strong, that of the 35i is dramatically strong. From a standstill, with manual transmission this next-up Z4 can reach 60 mph in just 5.1 sec.; with its optional 7-speed Double-Clutch Transmission, even more quickly: just 5.0 sec. This is a story unto itself, but read on:

EPA ratings for the 35i with its standard 6-speed manual transmission are an excellent 19/26/21. With the 7-speed DCT, this goes to 17/24/19. Thus: mileage does drop a bit, but in view of the terrific performance it's still impressive. Z4 35i drivers will have plenty of bragging rights, whether the subject is performance or "gas mileage"! In the Z4 context, *Road & Track* (July '09) called this "an all-purpose, doles-everything-well engine." For a more detailed description, see **BMW features**.

N54 in the 35is: even higher twin-turbo performance

For this model, BMW engineers developed a special version of the twin-turbo engine and logically dubbed it HP.

Principally via software, the engine's peak torque is lifted from 300 to 332 lb-ft., and peak power from 300 to 335 hp. But not enough for BMW's engineers, who went a step further with an Overboost feature that allows the turbos to deliver higher boost pressure for brief periods at engine speeds up to the midrange. This produces a peak of 370 lb-ft. – think of that, 23% more than the already torquy 35i engine – which

functions as a "passing gear" and also results in even more impressive acceleration data. Indeed: with the standard 7-speed Double-Clutch Transmission (DCT), the 35is catapults to 60 mph in just 4.8 sec.!

BMW's engineers also gave the 35is its own exhaust system, tuned specifically for a deep rumble that will delight the ears of avid performance driving enthusiasts. Indeed, *AutoWeek* (April 5, '10) credited the 35is with "a wonderful soundtrack – a throaty combination of induction and exhaust blare that takes on a delicious hard-edged growl as you approach the 6500-rpm cutout."

Even with all this added excitement, the EPA mileage ratings are the same as for the DCT-equipped 35i model.

6-speed manual transmission (standard 28i & 35i)

The 35i model uses the Type G, a heavy-duty gearbox also found in the 400-hp 550i and even the M3. The 28i employs a somewhat lighter-duty Type I-350-Turbo: The "350" signifies its 350 Newton-meters torque capacity – which approximates the N20 engine's 260 lb-ft. This unit features especially high mechanical efficiency.

In both models where the manual transmission is offered, the shift lever is extra-short for sporty shift feel and quick action.

3 – In a "naturally aspirated" engine, air is drawn into the engine by the pistons' downward, or "suction," stroke. By contrast, a supercharger or turbocharger compresses and supplies the engine's air in what is known as "forced induction."

Z4 key features

Except as noted, all current Z4 models offer the following features:

8-speed STEPTRONIC Sport automatic transmission (optional 28i)

Compared to the predecessor's 6-speed automatic, the 8-speed's "taller" cruising gears contribute to moderate fuel consumption, lower carbon-dioxide emissions, stronger performance and more relaxed cruising. Along with the N20 engine, this transmission belongs to the BMW EfficientDynamics concept.

The Z4 employs the Sport version, incorporating Quick Shift II internal features for –

- extremely quick, positive shifts
- Direct Selection of the Manual mode by simply making a shift via paddle.

Also included is a fast-reacting tachometer that can "keep up with" the rapid rpm rises that accompany this transmission's lightning-fast downshifts. For a more detailed explanation of BMW automatic transmissions in general and the Sport Automatic in particular, see the **BMW features** section.

7-speed Double-Clutch Transmission (DCT) (optional 35i, standard 35is)

This advanced transmission concept employs the same operating principle as the 7-speed M DCT that's available in the M3, but a simplified scheme of operating modes. It provides a choice of 3 modes – Normal, Sport, Manual – plus an additional Quick Shift (QS2) mode that's available by selecting the Sport mode of Driving Dynamics Control via its console selector, plus DCT's Manual mode: thus a total of 4 modes. In manually selected downshifts involving abrupt rpm jumps, "rpm matching" blips the

throttle to synchronize engine and vehicle speeds, resulting in what *Road & Track* magazine (July '09) enthusiastically called a "whoop and burble." All shifts, whether manual or automatic and in any mode, are accomplished with no interruption of power flow.

Full details on the DCT principle and what it means to drivers, for both the M and this "standard" version, appear in **BMW features**. This is the ideal partner for a sporting engine like the 35i's twin-turbo unit; all the more so for the 35is' higher-output version. Not only does it work with even greater efficiency than a manual 6-speed, it actually improves the 0-60-mph acceleration time (from 5.1 to 5.0 sec. for the 35i; 4.8 sec. for the 35is).

Shift paddles (included with automatic transmission or DCT)

With both of these transmissions, BMW's by-now familiar steering-wheel shift paddles have a separate option code but are included with the transmission option. The left paddle is for downshifts, the right for upshifts, always pulled toward driver for shifts. They're attractively clad in pearl-gray chrome galvanic finish and ergonomically shaped. Depending on model and equipment, the paddles appear on the Sport steering wheel (standard) or M Sport steering wheel (with M Sport or combined packages, or standard on the 35is).

Special structural measures

Outstanding structural rigidity of the body and chassis was a primary Z4 goal. To this end, there are special diagonal braces in five places:

- from front center of front suspension carrier to upper body crossmember
- from front center of front suspension carrier back to side members behind the suspension
- from cowl center to spring towers
- from rear suspension carrier out to side members, just behind doors
- from trunk floor forward to side sills.

Additionally, the body sills are of 3-mm metal, vs. 2.5 for the previous softtop Roadster, and have internal lateral reinforcements; a double-shell thrust plate augments the rear suspension carrier. The overall result is a 15% stiffer chassis.

Double-pivot front suspension

This is a unique BMW concept long used in upper-crust BMW models like 7, 6 and 5 Series and their M counterparts. As of '06 it migrated to the 3 Series, and in '09 to the Z4.

The system features two lower arms working in combination with the spring/shock-absorber strut. These two lower arms are the reason for its name "double-pivot."

By employing two lower arms, this system provides several fundamental advantages:

- **Small positive steering offset**, for best steering feel and control under all road conditions. Though the two arms don't actually intersect, if you extend their axes to a point where they do intersect, you find a "virtual pivot point" that is ideal for achieving this result. Steering offset is the "lever arm"

through which road forces act on the suspension system.

- **Large steering caster**, for outstanding stability in straight-line driving and excellent steering return action coming out of curves.
- **Space for large brakes**, by virtue of the arrangement of the two lower arms.

In Z4 guise, the system employs extensive aluminum components for low unsprung weight. This improves the suspension's response to bumps and other road irregularities; it can also enhance riding comfort and, on an irregular road surface, handling as well. Aluminum components on each side include –

- Both lower arms (forged aluminum)
- Wheel carrier (also forged)
- Brake caliper (not part of suspension but part of unsprung weight as it moves up and down with the wheel)
- Brake shield (stamped piece; also not part of suspension, but part of unsprung weight).

In addition, the subframe that carries the front suspension is of aluminum, as is the steering rack; these are not unsprung components, but do contribute to overall weight reduction – and being up front, also to the "typical BMW" near-50/50 weight distribution. This subframe adds rigidity, enhances steering precision and is also an integral element in the vehicle's management of impact energy in a frontal crash.

Central Link rear suspension

This multi-link system, unique among current BMW car models, is capable of keeping the rear wheels at virtually ideal angles relative to the road.

Z4 key features

Except as noted, all current Z4 models offer the following features:

The Central Link is a large, curved longitudinal arm, pivoted directly ahead of the rear wheel's vertical and horizontal center-point (hence the name) on a rubber bushing of highly sophisticated design. Each wheel also has an upper and a lower lateral arm, for a total of three links per wheel. The system helps give remarkable handling and good riding comfort, yet is simpler than many multi-link concepts.

Highlights include:

- **Aluminum link.** The upper transverse link on each side is of cast aluminum, saving more than 1 lb. in unsprung weight over steel.
- **Wide track** as at the front.
- **Vibration-reducing subframe** carrying the suspension and differential. Composed of sheet-metal sections and tubes, it is exceptionally rigid. The subframe is attached to the main structure through four vibration-absorbing rubber mounts.
- **Acoustically decoupled final drive.** The final drive (differential) is attached to the subframe via vibration-absorbing mountings; as the subframe itself is attached to the main structure through such mountings, the result is "acoustically decoupled" mounting that hampers gear noise from reaching the main structure. This is particularly important in a roadster, as occupants sit relatively close to the differential.
- **Negative camber angles** for maximum cornering ability. At rest, Z4s have a negative camber angle of 2°, visible in a slight inward tilt of the tops of the rear tires.

Overall suspension calibration. To underscore the Z4's sports-car character, relatively firm springs, shock absorbers and anti-roll bars have been adopted. This means –

- **A firm ride,** communicating clearly that the Z4 is a serious sports car.
- **Very "flat" cornering.** The roadster's low center of gravity contributes to this.

Adaptive M Suspension: upgrading handling and riding comfort

In standard form, the Z4 expertly balances precise and responsive handling with riding comfort that's outstanding for a sports car. Indeed, achieving such results is the true art of suspension development, and BMW's success in this regard is documented by *Motor Trend*, which in its June '09 issue commented that "It's a much softer roadster in its natural dynamic setting than the last Z4, and yet it's better connected to the road."

Beyond this excellence in standard form, BMW's proven electronically controlled suspension system further refines the handling-and-comfort balance of this series. Called Adaptive M Suspension, it employs electronically controlled shock absorbers, with Comfort and Sport settings selected by the console-mounted Driving Dynamics Control. For further details on this optional system, included in all Sport and M Sport Packages, see **BMW features**.

Front/rear weight distribution: BMW tradition, with a specific Z4 nuance

BMW's longtime tradition of configuring the vehicle and arranging components for optimum front/rear weight distribution applies to the Z4 in a specific way.

Although the optimum is generally viewed as 50/50 – equal weight on the front and the rear wheels – BMW gives the Z4 the nuance of a slight to moderate rearward weight bias: namely, between 50.6% and 52.7% of the weight on the rear wheels depending on model and transmission. Without at all violating this hallowed BMW principle, the rearward bias lends a little extra agility that's appropriate to a sports car.

Electric power steering: energy-saving concept in refined form

Among BMWs, the Z4 pioneered electric power steering (EPS), with the steering assisted by an electric servo motor instead of the usual hydraulic pump⁴. This concept carries over from the original Z4, but has been thoroughly updated. Benefits, mostly important to sport-minded drivers, include these:

- Facilitates specific tuning of steering characteristics via software. This fine-tuning has been further refined for the current Z4 generation.
- Optimized position for servo motor. Adjacent and parallel to the steering rack, the motor applies assist there. This setup achieves excellent road feel and reduces road vibration, noise and stress on system components.

- Vehicle-speed-sensitive power assist (Servotronic). Other current models with this form of varying the power assist (whether electric or hydraulic) are the 3 Series Sedans; 5, 6 and 7 Series; X1 and X3; all M models; and all models with optional Active Steering. (See **BMW features** for an explanation of benefits.)
- Reduced real-world vehicle fuel consumption, because the electric motor operates only when the steering wheel is turned.
- Can actually apply return action coming out of a curve or corner. This occurs primarily at lower speeds, and contributes to strong road feel.

"The electromechanical steering," commented the April '10 *AutoWeek* Z4 35is report, "running reworked mapping, is nicely weighted, quick to respond and eager to self-center."

Z4 brakes: engineered to match three Z4 performance levels

On the technology side, there is a notable brake feature on the 35i and 35is: composite aluminum/cast-iron front rotors, which reduce unsprung weight and add fade resistance. For details on this concept (which also appears in the 5, 6 and 7 Series, X5 and X6) see **BMW features**.

As always, BMW dimensions the brakes to match engine performance:

- **28i** – front 330 mm/13.0 in., rear 300/11.8.
- **35i, 35is** – front 348 mm/13.7 in., rear 324/12.8, plus the composite front rotors.

⁴ – As of 2013, EPS is also employed in 3 Series Sedans and 5, 6 and 7 Series, X1 and X3.

Z4 key features

Except as noted, all current Z4 models offer the following features:

Such generous dimensions and the 4-wheel ventilated rotors that are standard on all Z4s (indeed, all current BMW models) are very much part of BMW's ongoing performance tradition: the brakes must match the performance.

Brake Energy Regeneration, added to Z4s in 2011, continues to contribute its part to Efficient-Dynamics. See BMW features for details on this.

Sporty alloy wheels and run-flat performance tires on every Z4, from 17 to 19 in.

Each Z4 model comes standard with amply dimensioned standard wheels and run-flat performance tires. Upgrade possibilities are offered via the Sport (28i) or M Sport Package (28i and 35i) and, for the 35i additionally, a stand-alone 19-in. set in combination with the 35i M Sport Package. Unique 19-in. equipment is available without restriction on the 35is. All wheel designs are exclusive to the Z4; the available wheel/tire equipment is shown in the nearby table.

Comfort & convenience

Like the exterior, the Z4 interior is elegant, harmonious, sweeping. The Citrus Yellow and Canyon Brown Packages, plus a variety of stand-alone options, add extensive opportunities for personalization.

Retractable hardtop: elegant design, snug weather protection, convenience

After elegantly meeting the challenge of a folding hardtop on the larger, 4-passenger 3 Series Convertibles, BMW brought the concept to the 2nd-generation Z4. With the Z4's smaller dimensions – the 3 Series top is in three pieces because of its length, the Z4 just two pieces – BMW has met the challenge here with a design that's just as elegant.

Retractable hardtops add some weight to a vehicle, but the Z4 hardtop is made of aluminum to keep this increase to a minimum. It weighs about 15.5 lb. less than would a steel top; and since this weight savings is at the top, it

lowers the center of gravity and thus contributes to the Z4's nimble handling.

When the user actuates and holds the console "top down" button, opening occurs almost noiselessly in just 20 sec. in four phases via six hydraulic cylinders (two fewer than in 3 Series Convertibles):

- Top's rear section lifts, moves forward over front section
- Trunklid opens from the front
- "Stacked" front and rear top sections move rearward and lower into its storage compartment
- Trunklid closes.

The variable partition in the trunk must be in its lowered position before the top can be lowered. If the windows are up, they are automatically lowered for the raising or lowering, then returned to their previous position.

As with the 3 Series Convertibles, the engineers even saw to it that a wet hardtop can be lowered without undue risk of getting the trunk and contents wet. On each side there are moisture

catch trays in the outboard floor areas and provisions in two other areas to catch water drops, which are then dried out by ventilation air exiting the trunk.

In standard-equipped 28i and 35i models, the hardtop's cloth headliner is in Oyster, a light color that enhances the feeling of space and openness inside. All M Sport Packages, the Exclusive Citrus Yellow Package and the 35is come with the BMW individual Anthracite-color headliner favored by many sports-minded BMW customers.

In its July '09 road test of the then-new Z4, *Road & Track* called the top "slick-operating." Germany's *auto motor und sport* (May 7, '09) noted that "with the wind deflector mounted and side windows up, the open-air season stretches into early spring and late autumn," while *R&T* commented on the relative lack of wind noise with the top up. In current production, the hardtop can be raised or lowered at driving speeds up to 25 mph.

With the now-standard Comfort

Model & version	Wheel size & design	Run-flat performance tires ²	Changes for '13
Z4 sDrive28i standard	17 x 8.0 Star Spoke #290 2S3	225/45R-17	No changes
Z4 sDrive35i standard	18 x 8.0 front/18 x 8.5 rear Multi-Spoke #293 2S5	225/40R-18 front / 255/35R-18 rear	Newly standard; formerly Sport Package or stand-alone option
Z4 sDrive35is standard	18 x 8.0 front/18 x 8.5 rear Star Spoke #295 2S4	↑	No changes
Z4 sDrive28i Sport Package	18 x 8.0 front/18 x 8.5 rear Star Spoke #276 2B9	↑	Replace former 17-in. wheels & tires of Sport Package
Z4 sDrive 28i & 35i M Sport Package ⁵	18 x 8.0 front/18 x 8.5 rear Star Spoke #325M 2MU	↑	No changes
Z4 sDrive35i M Sport Package upgrade ⁴	19 x 8.0 front/19 x 8.5 rear V Spoke #296 2KW	225/35R-19 front / 255/30R-19 rear	↑
Z4 sDrive35is stand-alone option	19 x 8.0 front/19 x 8.5 rear Double Spoke #326M 2MV	↑	↑

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. Z4 models are

not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions; snow chains cannot be fitted.

4 – As of 2013, EPS is also employed in 3 Series Sedans and 5, 6 and 7 Series, X1 and X3.

5 – Including M Sport/Canyon Brown & Citrus Yellow Packages.

Z4 key features

Except as noted, all current Z4 models offer the following features:

Access system, a Comfort Loading function similar to that offered in the 3 Convertibles provides an intermediate hardtop position for loading the trunk when the top is down.

Instruments and controls: traditional and contemporary, beautifully blended

In the BMW tradition, the driver faces round, analog speedometer and tachometer. (In the 35is, these have the gray dial faces BMW reserves for especially sporty models.) Less frequently observed instruments appear at the bottoms of the main dials; lighting controls are to the left of the steering column, start/stop and climate controls to the right.

The 28i and 35i come standard with a 3-spoke sport steering wheel, exclusive to Z4s, trimmed in galvanic Pearl-gloss chrome and incorporating Sun Reflective Technology into its leather rim covering; how logical in a Roadster! The wheel is adjustable for reach and height; multi-function stalks on either side of the steering column execute functions in typical BMW fashion. At 361 mm/14.2 in. diameter and 35.1 mm/1.4 in. rim thickness, the wheel is expressly sporty; its rim includes thumb contours. An even sportier M wheel, with black spokes and the BMW M logo, is included in all M Sport Packages and is standard in the 35is. Shift paddles, with galvanic finish and ergonomic contours, are included with the 8-speed automatic (optional 28i) or 7-speed Double-Clutch Transmission (optional 35i, standard 35is).

Reaching across dash center and sweeping up to meet the upper padded surface is a panel in the

chosen trim material (see details nearby) that houses the climate controls. Now standard in all models is an automatic climate-control system that includes separate left/right (dual-zone) temperature controls.

On the center console are some controls shared with other recently introduced BMW models:

- **Driving Dynamics Control** – offering Comfort and Sport settings for throttle response, power-steering assist and Dynamic Stability Control, plus (in combination with automatic transmission or DCT) corresponding modes for the transmission, and (in combination with Adaptive M Suspension) the suspension system.
- **Electromechanical parking brake** – analogous to the traditional pull-up handbrake lever, a small galvanic-clad handle sets the brake and a button releases it. This can also be used as an emergency brake in the highly unlikely event of brake failure.
- **iDrive controller** – on Z4s equipped with the Navigation/iDrive option. Surrounded by the direct-select menu buttons described in **options & packages**.

Padded upholstery sweeps rearward from the passenger's side of the console to cover a center armrest/lid that can be lifted to reveal a capacious storage compartment.

Excellent outward view for driver, more room for both occupants

The Z4 has two windows on each side, one in the door and a small quarter-window aft. All are powered; those in the

doors incorporate BMW's power sealing system (familiar from other 2-door models, 5 Series GT and 6 Series Gran Coupe), which lowers the closed window slightly as the door is opened, then seats it positively into the weatherseal when the door is closed. All side windows include 1-touch opening. There's also an all-window switch with 1-touch opening. Combined with a large rear window, the four side windows make for a bright and "airy" cockpit with the top up.

Seating features

Now standard in all models are 12-way power seats that include a cushion-angle adjustment and 4-way power lumbar support. Sport seats are included in the Sport and various M Sport Package combinations of the 28i and are standard in the 35i and 35is. These add power-adjustable backrest width as in other BMW models, plus manually adjustable thigh support; more aggressive side bolsters provide the extra body support favored by sporting drivers.

Head restraints on all Z4 seats are fixed.

Upholstery: a wide range of appealing choices

Tasteful, boldly contemporary upholstery schemes combine with the interior design to present customers with a broad range of choices. Black leatherette, the base upholstery material for the 28i, is a serviceable and practical material that's applied and sewn to BMW's usual high quality standards.

The 35i and 35is models come standard with a sturdy leather grade called Kansas. Available

in the strong colors Beige, Coral Red and Walnut as well as traditional Black, this leather appears as seat facings, head restraints, door and center armrests and the passenger's side of the console; a leather-like synthetic clads certain high-wear areas such as the outboard seat sides, upper seat backside, door upholstery inserts and the driver's side of the center console. The Black scheme is essentially all-black except for a few elements in Anthracite color; Beige, Coral and Walnut are 2-tone with numerous black areas. These vary according to the main color, but always include the upper door surfaces/ledges, lower door surfaces, driver's side of console, dashtop and shift-lever boot.

For the 35i and 35is, there is an Extended Kansas Leather option that adds Kansas leather to the passenger's-side door pull and other leather types to certain components: the Oregon grade to the upper door surfaces/ledges, dashtop, sun visors, windshield header and A-pillars; and rich Nappa to the door armrests. This is available in the same colors as the non-extended Kansas leather.

Exclusive Canyon Brown Package

Available in all models, this esthetic treatment applies lavish Merino and rich Nappa leather – familiar from M models and BMW Individual Composition options – in the warm Canyon Brown color.

For the 28i, this Package includes sport seats, which are standard in the 35i and 35is. Canyon Brown is also available on the 28i and 35i in combination with

Z4 key features

Except as noted, all current Z4 models offer the following features:

the M Sport Package as the M Sport/Canyon Brown Package.

Alcantara/Nappa Leather in Black and Yellow

In the same manner as Canyon Brown, this bold esthetic treatment is available via the Exclusive Citrus Yellow Package or M Sport/Citrus Yellow Package.

Further details on these highly “customized” packages, their complex contents and availability, and the packages that combine them with the M Sport Package, are presented in the **options & accessories** section.

With all leather interiors, Sun Reflective Technology enhances the resistance to solar heat of the seats and various interior surfaces facing upward; even the leather covering of all Z4 steering wheels includes SRT.

Interior trims: character, variety, elegance

“Interior trim” refers to accent materials for which there are customer choices. These appear on the panel that holds the start/stop button and climate controls; a surface near the tops of the doors that encompasses the interior door handle; and much of the center console’s top surface.

Brushed Aluminum, elegant in a technical way, is newly standard in the 28i and continues in the 35i. Then comes **Ash Grain**, a dark wood that’s optional at no extra cost in all models.

The 35is brings with it an appropriately sporty-technical **M Aluminum Carbon Shadow** trim, with diamond texture, that’s also part of other models’ M Sport Package. Yet maintaining BMW’s practice of offering

customers plenty of choices, **Brushed Aluminum** and **Ash Grain** are available at no extra cost in this model.

A second wood trim is the **Fine Line Anthracite** that’s included in the Exclusive Canyon Brown Package. A parallel offering is the BMW Individual **Piano Black** that comes with the Exclusive Citrus Yellow group. Altogether, there are five available interior trims – each representing a distinctive esthetic choice.

On all Z4 models and versions, the fixed rollover bars have a handsome black/silver pearl-gloss finish.

Dual-zone automatic climate control

Newly standard in the 28i, and continuing in the 35i/35is, is an automatic climate-control system offering a wide range of state-of-the-art features and functions:

- **Separate left/right temperature controls** (dual-zone control).
- **Misting sensor.** Via the wipers’ rain sensor, windshield misting is sensed visually and system operation adjusted to clear it up.
- **Solar sensor,** helping calibrate system operation to solar heat streaming through the windshield.
- **Automatic recirculation control,** a familiar BMW feature that shuts off outside air when a sensor detects a high level of air pollution.
- **Convertible mode** for tailoring system operation to top-down driving; included when vehicle is equipped with the Navigation/Drive option.
- **Recall of individual users’ settings** via Key Memory/Personal Profile: temperatures and any manually selected air distribution.

More detailed information on BMW climate-control systems is found in **BMW features**.

Two excellent audio systems, appealing audio options

Like most current BMW models, Z4s come standard with the BMW Professional audio head unit, including standard HD Radio plus the Radio Data System (RDS), diversity antenna system, automatic adjustment of volume to vehicle speed, MP3-compatible single-disc CD player, auxiliary audio input, iPod/USB Adapter and other features. In 28i and 35i models, 4-channel audio power is 245 watts. In vehicles with Navigation/Drive, some audio controls migrate to the iDrive system.

The 28i/35i standard speaker count is 11, including:

- Midrange in each door – 2 speakers
- Midrange behind each seat – 2 speakers
- Tweeters in mirror triangles – 2 speakers
- Kick woofers in A-pillars – 2 speakers
- Subwoofer behind each seat – 2 speakers
- Center-fill in dash – 1 speaker.

Newly standard in the 35is, and continuing as part of an optional Premium Sound Package for 28i and 35i models, is an outstanding premium system whose upscale features include:

- **Much higher audio power,** 650 watts; multi-channel amplification
- **Simulated Surround Sound**
- **Digital Sound Processing** when combined with the Navigation/Drive option, operated through the iDrive user interface. Otherwise, the system

has fixed but vehicle-specific equalizing.

- **Higher-grade and additional speakers.** The additional ones beyond the 28i/35i standard 11 include –
 - Rear center midrange behind seats – 1 speaker
 - Rear center tweeter behind seats – 1 speaker
 - Front center tweeter in dash – 1 speaker– for a total of 14.

The 28i/35i Premium Sound Package includes this audio system plus Satellite Radio with 1-year subscription.

Storage provisions: places to put stuff

The Z4 excels in storage provisions:

- Locking glove compartment
- Each door includes a closeable storage bin
- Behind the seats is a cross-rack that includes lashing eyes to secure objects stored there
- In vehicles without the Navigation/Drive option, an additional storage compartment at dash-top center (this is where the Nav/iDrive control display goes)
- A spacious compartment under the center armrest, which locks when the vehicle central locking is activated.

There are two fixed cupholders in the console; a third one attaches to the console’s right side, and can be stored in the glove compartment.

Additional storage amenities are included in a storage group that’s included in the Cold Weather Package:

- Nets on the seat backsides and in the passenger’s footwell

Z4 key features

Except as noted, all current Z4 models offer the following features:

- Compartment in the bulkhead behind the seats
- Clothes hooks on the Rollover Protection bars
- Tiedown straps in the trunk.

Through-loading system with cargo bag

Also standard in all models, this amenity means a lot to the many Z4 customers who pursue outdoor sports. It includes –

- A large (9.6 in. wide, 8.7 in. high) center pass-through in the interior-to-trunk bulkhead
- A cargo bag that's larger than the traditional ski bag, accommodating a golfbag or two pairs of skis up to 170 cm/67 in. The bag includes a zipper to facilitate cleaning and a strap to tie down objects inside it; toward the rear there's an additional positioner with elastic strap to secure skis. (It is possible to load skis this way and then lower the top.)

The trunk: fully finished and variable

Although the trunk cannot be called large, it can accommodate a medium-sized hard-shell suitcase with the hardtop down. With the top up and the variable partition adjusted accordingly, the trunk gains an additional 2 cu ft. of space and, for example, can hold:

- a 46-in. golfbag transversely
- A large Samsonite F[®]Lite luggage piece
- Various combinations of soft-drink cartons.

Side storage spaces⁶ with lids help with organizing smaller objects. The trunklid can be opened from the remote or an interior button; standard Soft Close means it doesn't need

to be slammed, but rather can be set down gently and then snugged down electrically.

Safety & security

Most Z4 safety and security features are shared with those of other BMW Series; however, certain features are specific to the Z4:

- **Active Knee Protection**, which provides two dedicated airbags, positioned ahead of the driver's and passenger's knees. Described in more detail in **BMW features**.
- **Additional tensioning of safety belts**. In addition to BMW's customary tensioning of the belts via their latches, the belts are pyrotechnically tensioned at their retractor reels.
- **Head protection via side-impact airbags**. Shared with 3 and 6 Series Convertibles, this feature deploys seat-mounted side-impact airbags upward to provide head as well as thorax protection.
- **Rollover Protection**. Between the reinforced A-pillars and windshield frame and the standard rollbars, the Z4 Roadster has what it takes to maintain a "survival space" above its open cockpit. With the hardtop raised, there's additional rollover protection.

Packages & options

Packages

Sport Package

(28i only, code ZPS)
Popularity of the M Sport Package has led to the discontinuance of this milder package on the 35i. Offered for a lower price than ZMP, it remains available for the 28i.

Included are:

- **Adaptive M Suspension**, a version of BMW's familiar Electronic Damping Control. With this appealing Z4 enhancement, drivers can choose between two settings for the electronically controlled shock absorbers, one favoring crisper handling (Sport) and the other a more comfortable ride (Comfort). Selection is via the Driving Dynamics Control on the console. Also lowers the vehicle by 10 mm/0.4 in. For details on the various versions of this system, see **BMW features**.
- **Sport wheels and tires²**. Z4 base equipment is already sporty; these make the Roadsters more so, plus visually more striking. The wheels are 18 x 8.0 front/18 x 8.5 rear in 5-spoke Star Spoke design #276, with 225/40R-18 front / 255/35R-18 performance tires. Code 2B9.
- **Increased top-speed limiter**, instead of the standard 130-mph limiter, code 840.
- **Sport seats** (code 481) feature more prominent side bolsters on cushions and backrests, power-adjustable backrest width, and manually adjustable thigh support. With power seats newly standard in the 28i, these also have 8-way

power adjustments including cushion tilt.

When combined with either of the Exclusive esthetics packages (Canyon Brown or Citrus Yellow), this package's price is decreased because they also include sport seats.

M Sport Package

(28i & 35i, code ZMP; see below for combination & color restrictions)

An "even sportier Sport Package." In addition to the Adaptive M Suspension, sport seats and increased top-speed limiter of the 28i ZSP, it includes an ample range of handling and esthetic enhancements and is identical for the 28i and 35i; all its contents, plus additional sports features, are standard on the 35is.

- **Sport wheels and tires²**. 18-in. wheels and performance tires as with ZSP, but in the 5-spoke M Star Spoke design #325M. These are code 2MU.
- **M aerodynamic exterior treatment**, code 715. A more aggressive, sportier front end, with black honeycomb screening in all three air inlets. At the rear, the bumper/apron ensemble is also unique to this package; its center section, in Dark Shadow Metallic finish, sets an expressive accent to the body-color main surfaces.
- **M doorsill trims** featuring M colors and logo; this is part of the factory M Sport Package, option code 337.

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. Z4 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions; snow chains cannot be fitted.

6 – The capacity of these varies according to vehicle options.

Z4 key features

Except as noted, all current Z4 models offer the following features:

- Aluminum-trimmed M driver's footrest, also part of 337
- M Aluminum Carbon Shadow interior trim, a technologically elegant material; code 4MW
- BMW Individual Anthracite-color headliner, as in most of BMW's sportiest packages and models. Code 775.
- M sport steering wheel with black spokes, rim stitching in M colors, and the BMW M logo on the bottom spoke. Code 710; with automatic transmission (28i) or Double-Clutch Transmission (35i), 7XA.
- M gearshift knob in leather for the manual transmission, part of 337.
- Higher-grade and additional speakers. The additional ones (beyond the standard 11) include –
- Rear center midrange behind seats – 1 speaker
- Rear center tweeter behind seats – 1 speaker
- Front center tweeter in dash – 1 speaker
- Satellite Radio with 1-year subscription, code 655.

Cold Weather Package (all models, code ZCW)

For all models, this Package includes:

- Headlight cleaning system, code 502. High-intensity jets, normally retracted, pop out to spray the lights with washer fluid.
- Heated steering wheel, an especially appropriate offering for top-down driving in chilly weather. Code 248.
- Heated seats, code 494. Also available as a stand-alone option.
- Storage package, Code 493, consisting of –
- Nets on the seat backsides and in the passenger's footwell
- Compartment in the bulkhead behind the seats
- Clothes hooks on the Roll-over Protection bars
- Tiedown straps in the trunk.

Exclusive Canyon Brown Package

(all models, code ZBP; also includes code 753)

This lavish upholstery/trim package provides Z4 customers a path to individuality via –

- Premium Merino and Nappa leather, code LKWT. An Extended treatment applies Merino to seat facings, partial backsides and sides; and head restraints. Nappa, another

of BMW's premium leather grades, appears on door armrests, pulls and upholstery inserts; center armrest; the center console's right side; and a dash insert. A third grade, Oregon, is applied to the doors' upper trim panels, upper dash trim and the sun visors. One high-wear area, the center console's left side, is done in leatherette.

- Anthracite Fine Line wood interior trim, code 4CE; this elegant, contemporary wood is available only with Canyon Brown.

For the 28i, where they are not standard, the package adds –

- Sport seats

– and is priced accordingly.

The sparkling metallic color Mineral White is available only on Z4s equipped with this Package or its M Sport Package combination.

Exclusive Citrus Yellow Package

(all models, code ZYP; also includes code 7SM)

An equipment group for those who don't mind being bold. In addition to or in place of the ZBP content, this package includes:

- Alcantara/Nappa Leather upholstery in black with yellow accents, codes GN + 7SM. Although nominally Black, its Citrus Yellow name derives from this mix: The Alcantara is black on the seats' center sections, perforated with yellow highlight; all-yellow on the doors' upholstery inserts; and black in an instrument-panel insert. Yellow appears also on the lower dash areas and glovebox door.
- BMW Individual Piano Black interior trim, that ultra-glossy material that's also available in

7 Series Individual Composition interiors.

- Special velour floor mats.

For the 28i, where they are not standard, the package adds –

- Sport seats – and is priced accordingly.

This package may be ordered with any Z4 exterior color, but for customers who want to go all the way, the ultra-bold, non-metallic Atacama Yellow is available with ZYP or its M Sport-combination counterpart ZMY. To make this whole concept even more exclusive and eye-catching, with Atacama the exterior mirror shells are in body color rather than the standard Oxide Silver finish.

M Sport/Canyon Brown or Citrus Yellow Package (28i & 35i, codes ZMB or ZMY)

These packages combine all non-overlapping M Sport Package equipment with the esthetic flourishes of the Canyon Brown and Citrus Yellow groups respectively. They are priced differently from each other, and between models.

Each of these packages is subject to the same color selection as the ZMP, except that ZMY is additionally available with Atacama Yellow.

Stand-alone options

8-speed STEPTRONIC Sport Automatic transmission (28i, code 2TB)

Described under performance & efficiency, the 8-speed is BMW's most sophisticated, advanced and efficient "conventional" automatic (i.e. torque-converter transmission). Here it appears in Sport form, enhancing the performance and efficiency

Z4 key features

Except as noted, all current Z4 models offer the following features:

of the N20 engine. It includes extra-quick shifting, rpm matching and Direct Selection of the Manual mode. For detailed descriptions, see these subjects in **BMW features**:

- **BMW automatic transmissions**
- **Series-specific transmission features**
- **Sport automatic transmission.**

The automatic is optional at no extra cost, as are the shift paddles that are a separate option, but required (2XA for the sport steering wheel, 7XA for the M Sport wheel.

7-speed Double-Clutch Transmission

(optional 35i, standard 35is; code 2TC)

This advanced and sporting transmission is standard on the Z4 35is, and optional on 135i and 335is models as well as the Z4 35i.

DCT functions equally well as a manual or automatic, even improving performance over a 6-speed manual gearbox. It is also more direct and less “cushioned” than a conventional automatic transmission. Thus it is especially appropriate for a sporting vehicle like the Z4.

See **BMW features** for a description of BMW’s Double-Clutch Transmissions, which come in three forms: this type for non-M models, and the more elaborate and sporting versions offered on the M3, M5 and M6. The steering-wheel shift paddles are carried as a separate, no-extra-cost item (again, code 2XA), but are included when DCT is ordered. If the vehicle is equipped with any of the M Sport Packages and DCT, shift paddles are also included and the code is 7XA.

19-in. wheels & tires²

(35i & 35is, codes 2KW & 2MV)
In addition to those in the 28i Sport Package and the M Sport Package, and as the only wheel/tire option for the 35is, the following stand-alone wheel/tire equipment is available as follows:

- 35i – 19 x 8.0 front/19x 9.0 rear V Spoke wheels #296 in front/rear differentiated sizes with 225/35R-19 front / 255/30R-19 rear performance tires, code 2KW. These require M Sport or either of the combined M Sport/Exclusive Packages, and are thus upgrades to these packages.
- 35is – 19-in. M Double Spoke wheels #326 and performance tires, same sizes as 2KW; code 2MV.

Park Distance Control

(all models, code 508)

PDC employs four ultrasonic sensors each in the front and rear bumpers to detect when the vehicle is approaching obstacles that may not be visible to the driver. A warning tone emanates from the front or rear of the cabin respectively, increasing in frequency as the vehicle approaches the obstacle until the tone becomes constant.

When combined with the Navigation/iDrive option, PDC includes a plan-view vehicle diagram in the iDrive monitor, which graphically depicts obstacles’ location relative to the vehicle.

Metallic paint

(all models, color codes)

The beauty of BMW metallic paint – indeed, of all BMW paintwork – needs no introduction. Seven metallics are offered on Z4s, including –

- Orion Silver, a light rose-toned hue; available only on 28i and 35i
- Mineral White, available only in combination with Canyon Brown Packages.

Kansas leather upholstery

(optional 28i, standard 35i & 35is; codes LY)

This “standard” Z4 leather grade comes in Black, Beige, Coral Red and Walnut, the latter three with attractively contrasting Black elements.

Extended Kansas Leather upholstery

(35i & 35is, codes PA)

Available in the same colors as the “regular” Kansas treatment, this stylish and luxurious interior is described on page 563.

Alternate interior trim

(available as described; code 4AD, 4BN or 4CE)

While galvanic trim materials for accents and functional elements such as shift paddles appear in all Z4s, customers have appealing choices in the trim that graces these interior elements:

- the panel that sweeps rightward from the steering column and holds the start/stop button and climate controls
- a surface at the front door tops that encompasses the interior door handle
- much of the center console’s top surface.

Availability is as follows:

- **Brushed Aluminum**, code 4AD; standard 28i and 35i, no extra cost 35is
- **Ash Grain wood**, code 4BN; optional at no extra cost in all models

Further trims, 4MW Aluminum Carbon Shadow, 4CE Anthracite

wood and 4ML BMW Individual Piano Black, are available as part of the Exclusive and combined Exclusive + M Sport Packages as described under those headings.

Heated seats

(all models, code 494)

Available as this stand-alone option or via the Cold Weather Package, the heated seats provide impressive features:

- **Large heated area**, including cushion, backrest and the side bolsters for both
- **High heating power**, fully 130 watts.

Navigation system + iDrive

(all models, code 609)

The storage compartment at dashtop center is replaced by a retracting iDrive monitor. A controller sits on the clean, uncluttered console behind the shift lever. The entire system is BMW’s full-featured CIC (Car Information Computer) with –

- 8.8-in. Control Display, high-resolution with 1280 x 480 pixels
- Controller on console, with surrounding direct-select keys
- GPS Navigation with hard-drive database
- Voice Command system
- Programmable Memory Keys, which enable users to program frequently used functions and recall them with a single key-stroke.

This option also includes BMW Assist (also available separately,

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. Z4 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions; snow chains cannot be fitted.

Z4 key features

Except as noted, all current Z4 models offer the following features:

see next page). iDrive and BMW's Navigation system are described in greater detail in **BMW features**.

Satellite Radio with 1-year subscription

(all models, code 655)

See **BMW features** for details. Also available as part of the Premium Sound Package for 28i and 35i.

6-disc DVD changer

(all models, code 696)

Yet another way to bring aural entertainment into the Z4.

BMW Apps

(all models, code 6NR; includes Smartphone Integration)

BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function is released, users can customize their vehicle's infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party app. Further details are presented in **BMW features**.

BMW Assist

(all models, code 639; includes Enhanced Bluetooth mobile-device interface, code 6VC)

In addition to being included with the Navigation/iDrive option, BMW Assist is also available as this stand-alone option. BMW Assist is BMW's comprehensive system of customer services and in-car telematics; see CenterNet or the **BMW Assist** pages for the latest program details. The option price includes a 4-year subscription to BMW Assist Safety Services.

Automatic high beams

(all models, code 5AC)

Switches automatically between low and high headlight beams. Turns on the high beams whenever traffic conditions allow, relieving the driver of this duty and ensuring that the driver always has the best possible forward vision at night. The driver can also take over at any time by using the steering-column beam control. For more detailed information, see **BMW features**.

BMW center-installed accessories

Among the many accessories available for the Z4 are:

- Performance Black (all-black) kidney grilles
- Carbon-fiber front chin splitters
- Nose mask
- Paintwork edge-protection foil
- Valve-stem caps with BMW lettering or logo
- Mud flaps
- Car covers, outdoor and in-door types
- Windshield UV sunshade
- Illuminated doorsill trims
- Floor mats, carpet with embroidered Z4 logo and piping; or all-weather
- Stainless-steel-trimmed pedal pads

- Snap-in adapter with USB interface for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
 - Snap-in adapter for BMW Apps and various media
 - Connection and charging cables of various types
 - BMW Bluetooth headset
 - CD/DVD storage sleeve
 - Cool bag
 - Portable navigation system
 - Seat-backrest storage pocket
 - Collapsible cargo box
 - Trunk mats, anti-slip and fitted types
 - BMW Mobility Kit
 - BMW umbrella with LED light
 - LED hand lamp
- For details and a complete listing, see the latest **Accessories** listing for the Z4 on bmwusa.com.

Standard & optional features

2013 Z4

Bold within table indicates new feature for 2013.

Exterior design & function	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Front & rear body-color bumpers:			
Front – black mesh air-intake screens	S	–	–
Front – black mesh air-intake screens, matte-aluminum outboard intake frames	NA	S	–
Rear – all body-color	S	S	–
BMW M aerodynamic front & rear bumpers:			
Front – body-color with all-black air-intake screens, honeycomb center screen	ZMP/ZMB/ZMY	ZMP/ZMB/ZMY	–
Rear – body-color with full-width Dark Shadow insert including diffuser section	ZMP/ZMB/ZMY	ZMP/ZMB/ZMY	–
Front – as ZMP plus matte-aluminum lateral bars in outboard air intakes	–	–	S
Rear – body-color with full-width body-color insert, Dark Shadow diffuser section	–	–	S
Xenon Adaptive headlights with luminous rings & dynamic auto-leveling	S	S	S
Automatic headlight control	S	S	S
Automatic High Beams	OPT	OPT	OPT
Daytime Running Lamps front & rear, front via luminous rings	S	S	S
Cornering lights	S	S	S
Welcome Light via outer headlights' luminous rings	S	S	S
Retractable high-intensity headlight cleaning system	ZCW	ZCW	ZCW
Ground lighting at exterior door handles	S	S	S
Rain-sensing windshield wipers & heated washer jets	S	S	S
Exterior mirrors in body color	S	S	–
Exterior mirrors in Oxide Silver Matte finish	NA	NA	S
Power-folding exterior mirrors	S	S	S
Park Distance Control, front & rear	OPT	OPT	OPT
Adaptive brakelights	S	S	S
Metallic paint	OPT	OPT	OPT
Vertical grille slats & lower outer air-intake frames	Black	Matte aluminum	Matte aluminum
Fully automatic power-retracting aluminum hardtop	S	S	S
Matte-chrome dual exhaust tips	2 x 72 mm, left side	2 x 80 mm, left & right	2 x 80 mm, left & right

S – Standard
OPT – Optional

NA – Not available
– – Not applicable

ZMP – M Sport/Canyon Brown Package
ZMY – M Sport/Citrus Yellow Package
ZM – M Sport Package

Standard & optional features

2013 Z4

Bold within table indicates new feature for 2013.

	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Performance & efficiency			
2.0-liter TwinPower Turbo 4-cylinder engine	S	–	–
3.0-liter twin-turbo 6-cylinder engine	–	S	–
3.0-liter twin-turbo higher-output 6-cylinder engine	–	–	S
Engine features:			
Aluminum construction	S	S	S
Cylinder technology	Arc-electroplated steel coating	Cast-iron liners, cast into block	Cast-iron liners, cast into block
Twin-scroll turbocharger	S	–	–
Twin turbochargers	–	S	S
Dual balance shafts	S	–	–
High Precision direct fuel injection	S	–	–
High Precision direct fuel injection with piezo injectors	–	S	S
Valvetronic system	S	–	–
Double VANOS ¹ steplessly variable valve timing	S	S	S
Electronically controlled engine cooling	S	S	S
Electric coolant pump	S	S	S
Auxiliary radiator	–	–	S
Oil cooler	NA	ZMP/ZMB/ZMY	S
Direct ignition system with knock control	S	S	S
Exhaust system	Single	Dual	Dual, special tuning
Automatic engine start/stop	S ²	NA	NA
Driving Dynamics Control – 2 settings for engine response, (automatic) transmission shift characteristics, steering assist (Comfort & Sport); additional setting (Sport+) switches DSC to DTC	S	S	S
6-speed manual transmission	S	S	NA
8-speed Sport automatic transmission	NC	NA	NA
7-speed Double-Clutch Transmission (DCT)	NA	OPT	S
Shift paddles on steering wheel	NC ³	NC ³	S
Double-pivot-type strut front suspension with forged-aluminum dual lower arms & steering knuckles, hydraulic cushions	S	S	S
Front subframe, aluminum	S	S	S
Central Link rear suspension with cast-aluminum upper transverse links	S	S	S
Rear subframe on 4 mounts, with acoustically decoupled mounting of suspension system	S	S	S
Rear thrust plate, steel	S	S	S
Acoustically decoupled final drive with hydraulic rear mount	S	S	S
Front & rear anti-roll (stabilizer) bars	S	S	S
Twin-tube gas-pressure shock absorbers	S	S	S
Adaptive M Suspension	ZSP/ZMP/ZMB/ZMY	ZMP/ZMB/ZMY	S

1 – VANOS = **V**ariable **N**ockenwellen
 Steuerung = variable camshaft control, or variable valve timing.

2 – Manual transmission only.
 3 – Included with Sport automatic (28i) or Double-Clutch Transmission (35i).

S – Standard
 OPT – Optional
 NC – No extra cost
 NA – Not available
 – – Not applicable

ZMB – M Sport/Canyon Brown Package
 ZMP – M Sport Package
 ZMY – M Sport/Citrus Yellow Package
 ZSP – Sport Package

Standard & optional features

2013 Z4

Bold within table indicates new feature for 2013.

Performance & efficiency (cont.)	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Vehicle-speed-sensitive electric power steering	S	S	S
4-wheel ventilated disc brakes, vacuum-assisted	S	S	S
Aluminum/cast-iron composite front rotors	NA	S	S
Electromechanical parking brake	S	S	S
Brake Energy Regeneration	S	S	S
Dynamic Stability Control with electronic limited-slip differential	S	S	S
17 x 8.0 alloy wheels, Star Spoke design #290	S	–	–
18 x 8.0 front/18 x 8.5 rear alloy wheels: Star Spoke design #276	ZSP	–	–
Multi-Spoke design #293	NA	S	–
Star Spoke design #295	NA	NA	S
Star Spoke design #325M	ZMP/ZMB/ZMY	ZMP/ZMB/ZMY	–
19 x 8.0 front/19 x 9.0 rear alloy wheels: V Spoke design #296	NA	OPT ⁴	NA
Double Spoke design #326M	NA	NA	OPT
Run-flat performance tires ⁵ : 225/45R-17 front & rear	S	–	–
225/40R-18 front / 255/35R-18 rear	ZSP/ZMP/ZMB/ZMY	S	S
225/35R-19 front / 255/30R-19 rear	NA	OPT ⁴	OPT
Tire Pressure Monitor	S	S	S
Comfort & convenience	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Vehicle & Key Memory with Personal Profile user-specific settings	S	S	S
Comfort Access, including Comfort Loading	S	S	S
Doorsill trim plates: Black, with BMW lettering	S	–	–
Silver, with chrome trim & BMW lettering	NA	S	–
Silver, with M logo	ZMP/ZMB/ZMY	ZMP/ZMB/ZMY	S
Dual power/heated exterior mirrors	S	S	S
Auto-dimming/power-folding exterior & auto-dimming interior rearview mirror	S	S	S
Digital compass in interior mirror	S	S	S
Automatic tilt-down of right exterior mirror for visibility of low obstructions when backing up	S	S	S
BMW Universal Transceiver (3-function garage-door opener)	S	S	S

4 – Require M Sport, M Sport/Canyon Brown Package or M Sport/Citrus Yellow Package.

5 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and

consequential damages. Z4 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions; snow chains can not be fitted.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable

ZMP – M Sport/Canyon Brown Package
ZMY – M Sport Package
ZMY – M Sport/Citrus Yellow Package
ZSP – Sport Package

Standard & optional features

2013 Z4

Bold within table indicates new feature for 2013.

Comfort & convenience (cont.)	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Comprehensive lighting amenities: Welcome Light (automatic switch-on of front luminous rings & ground lighting upon unlocking & locking vehicle)	S	S	S
Ambiance Lighting group, including front overhead, at interior door handles & door bins, in footwells; door exit lighting, left/right reading lamps, glove compartment, dashtop storage compartment, footwells, rack behind seats, Pathway Lighting ⁶	S	S	S
Sun Reflective leather-wrapped tilt/telescopic sport steering wheel with thumb contours on rim, fingertip audio controls; 14.2-in. diameter	S	S	-
M sport steering wheel	ZMP/ZMB/ZMY	ZMP/ZMB/ZMY	S
Heated steering wheel	ZCW	ZCW	ZCW
M aluminum-trimmed driver's footrest	ZMP/ZMB/ZMY	ZMP/ZMB/ZMY	S
Floormats	S	S	-
Special velour floormats	ZYP/ZMY	ZYP/ZMY	-
Floormats, carpet with piping in M colors, "sDrive35is" script	NA	NA	S
Dynamic cruise control	S	S	S
Check Control vehicle monitor system, with information displayed in main instrument cluster	S	S	S
Electronic analog main instrumentation	S	S	S
LCD main & trip odometers	S	S	S
4-function On-board Computer	S	S	S
Condition-Based Service system	S	S	S
12-way power seats including 4-way lumbar support	S	S	S
14-way power sport seats including 4-way lumbar support, power-adjustable backrest with & manually adjustable thigh support	ZSP/ZMP/ZMB/ZMY	S	S
Memory system for driver's seat & exterior mirrors (2 settings per user)	S	S	S
Center armrest	S	S	S
Dual cupholders below center armrest	S	S	S
Additional cupholder, stores in glove compartment & attaches to side of console	S	S	S
3-stage, thermostatically controlled heated seats	ZCW/OPT	ZCW/OPT	ZCW/OPT
Storage provisions: Lockable glove compartment, closable door bins, center dash compartment, open & closeable trays in center console, large center compartment, cross-rack with lashing eyes behind seats	S	S	S
Nets in passenger footwell & behind seats, center storage compartment behind seats, clothes hooks on rollover bars, elastic hold-down straps in trunk	ZCW	ZCW	ZCW

6 - Duration adjustable via Vehicle & Key Memory or (if present) iDrive.

S - Standard
OPT - Optional
NA - Not available
- - Not applicable

ZCW - Cold Weather Package
ZMB - M Sport/Canyon Brown Package
ZMP - M Sport Package

ZMY - M Sport/Citrus Yellow Package
ZSP - Sport Package

Standard & optional features

2013 Z4

Bold within table indicates new feature for 2013.

Comfort & convenience (cont.)	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Leatherette upholstery	S	–	–
Leather upholstery with Sun Reflective Technology:			
Kansas leather	OPT	S	S
Extended Kansas leather	NA	OPT	OPT
Canyon Brown Merino leather, extended	ZBP/ZMB	ZBP/ZMB	ZBP
Black Alcantara/Nappa leather	ZMY/ZYP	ZMY/ZYP	ZYP
Brushed Aluminum interior trim	S	S	NC
Ash Grain wood interior trim	NC	NC	NC
Anthracite wood interior trim	ZBP/ZMB	ZBP/ZMB	ZBP
BMW Individual Piano Black interior trim	ZMY/ZYP	ZMY/ZYP	ZYP
M Aluminum Carbon Shadow interior trim	ZMP	ZMP	S
Power windows with key-off operation, 1-touch opening on all windows, 1-touch opening & closing + anti-trapping protection on door windows, opening & closing from exterior door lock	S	S	S
Power door-window sealing system	S	S	S
All-window switch with 1-touch open	S	S	S
Automatic climate control with separate left/right temperature settings, knee-level air outlets, activated-charcoal microfilter ventilation, Convertible mode, automatic recirculation control, mist control, bi-directional solar sensor, Heat at Rest	S	S	S
Fully automatic power-retracting hardtop	S	S	S
BMW Individual anthracite-color headliner	ZMP/ZMB/ZMY/ZYP	ZMP/ZMB/ZMY/ZYP	S
iDrive system with retracting 8.8-in. high-resolution control display, GPS Navigation; direct-select radio, CD, phone & Navigation menus; 6 Programmable Memory Keys, Voice Command, Real Time Traffic Information & other features	OPT	OPT	OPT
Anti-theft AM/FM/HD/CD/MP3 audio system with 11 speakers including 2 subwoofers, Radio Data System (RDS), in-dash single-disc CD player, auxiliary input & FM diversity antenna system	S	S	–
Anti-theft premium audio system with 14 speakers including 2 subwoofers, digital sound processing ⁷ , Surround Sound simulation; increased audio power, upgraded componentry throughout & all features of 11-speaker system	ZPS	ZPS	S
80-GB hard drive providing data storage for Navigation, audio system, phonebook & Voice Command; ripping capability from CD & DVD players	OPT ⁸	OPT ⁸	OPT ⁸
iPod/USB Adapter	S	S	S
BMW Apps including Smartphone Integration	OPT ⁹	OPT ⁹	OPT ⁹
Satellite Radio with 1-year subscription	ZPS/OPT	ZPS/OPT	OPT
6-disc DVD changer	OPT	OPT	OPT
Bluetooth mobile-device interface	S	S	S
Enhanced Bluetooth functionality (combox controller)	OPT ¹⁰	OPT ¹⁰	OPT ¹⁰

7 – When combined with Navigation/⁹ iDrive option. 9 – Requires Navigation/iDrive option.
8 – Included with Navigation/iDrive option. 10 – Included with BMW Assist.

S – Standard
OPT – Optional
NA – Not available
NC – No extra cost
– – Not applicable

ZMB – M Sport/Canyon Brown Package
ZMP – M Sport Package
ZMY – M Sport/Citrus Yellow Package
ZPS – Premium Sound Package
ZYP – Exclusive Citrus Yellow Package

Standard & optional features

2013 Z4

Bold within table indicates new feature for 2013.

Comfort & convenience (cont.)	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Accessory power outlets in center console compartment & passenger footwell	S	S	S
Wind deflector	S	S	S
Fully finished trunk with electric interior release, variable hardtop storage compartment, closeable storage trays at sides, soft-close trunklid	S	S	S
Through-loading system with integrated cargo bag	S	S	S
Variable hardtop storage compartment	S	S	S
Safety & security	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Dynamic Stability Control (DSC), including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Brake Fade Compensation, Brake Standby, Brake Drying, Start-off Assistant & electronic limited-slip differential	S	S	S
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S	S
Automatic safety-belt tensioners & force limiters; tensioners act on lap & shoulder areas	S	S	S
Active Knee Protection	S	S	S
Front-seat side-impact airbags, seat-mounted with head protection	S	S	S
Rollover Protection	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S
Post-impact safety measures:			
Unlocking of central locking system	S	S	S
Switch-on of hazard flashers	S	S	S
Switch-on of interior lighting	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S
BMW Assist, including Enhanced Automatic Collision Notification, SOS button, Enhanced Roadside Assistance, TeleService ¹¹ , BMW Assist Safety Plan ¹¹	OPT	OPT	S
Central locking system with selective unlocking	S	S	S
Coded Driveaway Protection	S	S	S
Alarm system with operation from remote	S	S	S

11 – Requires BMW Assist annual fee after 4th year. S – Standard

OPT – Optional

Technical specifications

2013 Z4

Bold within table indicates new specification for 2013.

General	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Curb weight, lb.:			
Manual transmission	3263	3494	–
Automatic transmission or DCT	3307	3527	3549
Weight distribution, front/rear, %:			
Manual transmission	47.3/52.7	48.6/51.4	–
Automatic or DCT	47.7/52.3	49.1/50.9	49.4/50.6
Wheelbase, in.	98.3 ¹		
Track, front/rear, in.	59.5/61.4 ²	59.5/60.5 ^{2,3}	
Length, in.	166.9 ¹		
Width, in.	70.5 ¹		
Height, in.	50.8 ⁴	50.8 ⁴	50.6
Body	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Type	2-seat Roadster ¹		
Aerodynamic drag coefficient (C _D)	0.34	0.35 ³	
EPA size classification	2-Seater ¹		
Accommodations	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Seating capacity, persons	2 ¹		
Head room, in.	39.1 ^{1,5}		
Leg room, in.	42.2 ¹		
EPA passenger-compartment volume, cu ft.	50.9 ^{1,5}		
EPA cargo volume, hardtop lowered/raised, cu ft.	6.0/8.0 ¹		
Engine & electrical	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Engine type	DOHC inline 16-valve 4-cylinder, aluminum construction with arc-electroplated steel cylinder surfaces, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁶ steplessly variable intake- & exhaust-valve timing	DOHC inline 24-valve 6-cylinder, aluminum construction with cast-iron cylinder liners cast into block, twin turbochargers, Double VANOS ⁶ steplessly variable intake- & exhaust-valve timing ³	
Bore x stroke, mm/in.	84.0 x 90.1/3.31 x 3.55	84.0 x 89.6/3.31 x 3.53 ³	
Displacement, cc/cu in.	1997/122	2979/182 ³	
Compression ratio	10.3:1	10.2:1 ³	
Power @ rpm, hp	240 @ 5000-6000	300 @ 5800	335 @ 5900
Torque @ rpm, lb-ft.	260 @ 1250-4800	300 @ 1400-5000	332 @ 1500 ⁷

1 – Specification applies to all models.
 2 – With standard wheels.
 3 – Specification applies to 35i & 35is models.

4 – With hardtop raised; with ZSP, ZMB, ZMP or ZMY, 50.6 in.
 5 – With hardtop raised.

6 – VANOS = **V**ariable **N**Ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

7 – Overboost function increases maximum torque to 370 lb-ft. for brief periods.

Technical specifications

2013 Z4

Bold within table indicates new specification for 2013.

Engine & electrical (cont.)	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Engine-management system	MEVD 17.2.4 with knock control (2 sensors); direct fuel injection, Valvetronic, variable valve timing, engine cooling & other functions included in control strategy	MSD 80 with knock control (2 sensors); direct fuel injection, variable valve timing, engine cooling & other functions included in control strategy ³	MSD 81
Fuel requirement	Premium unleaded ¹		
Fuel capacity, U.S. gal.	14.5 ¹		
Battery capacity, amp-hr.	70 ¹		
Alternator output rating, amp./W	170/2380 ¹		

Drivetrain	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Drive system	Front engine/rear-wheel drive ¹		
Manual transmission	6-speed, Type I-350-Turbo	6-speed, Type G	NA
Ratios: 1st	3.68:1	4.06:1	–
2nd	2.06:1	2.40:1	–
3rd	1.31:1	1.58:1	–
4th	1.00:1	1.19:1	–
5th	0.81:1	1.00:1	–
6th	0.68:1	0.87:1	–
Reverse	3.35:1	3.68:1	–
Final drive ratio	3.08:1	3.08:1	–
Automatic transmission or DCT	8-speed torque-converter automatic, 8 HP 45	7-speed Double-Clutch Transmission (DCT), DKG 436 ³	
Ratios: 1st	4.71:1	4.78:1 ³	
2nd	3.14:1	3.06:1 ³	
3rd	2.11:1	2.15:1 ³	
4th	1.67:1	1.68:1 ³	
5th	1.29:1	1.39:1 ³	
6th	1.00:1	1.20:1 ³	
7th	0.84:1	1.00:1 ³	
8th	0.67:1	–	
Reverse	3.30:1	4.45:1 ³	
Final drive ratio	3.73:1	2.56:1 ³	

1 – Specification applies to all models.

NA – Not available

3 – Specification applies to 35i & 35is models.

– – Not applicable

Technical specifications

2013 Z4

Bold within table indicates new specification for 2013.

Chassis	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Body/frame construction	Unitized steel ¹		
Front suspension	Struts, double-pivot lower arms, coil springs, twin-tube gas-pressure shock absorbers, tubular anti-roll bar, subframe; aluminum lower arms, steering knuckle & subframe ¹ (ZSP, ZMB, ZMP, ZMY, 35is: Adaptive M Suspension w/electronically controlled shock absorbers)		
Rear suspension	Multi-link system with Central Links, upper & lower lateral links (upper link of cast aluminum), coil springs, twin-tube gas-pressure shock absorbers, anti-roll bar, steel thrust plate & V-brace ¹ (ZSP, ZMB, ZMP, ZMY, 35is: Adaptive M Suspension w/electronically controlled shock absorbers)		
Rack-&-pinion steering	Vehicle-speed-sensitive electric power assist ¹		
Overall ratio	14.4:1 ¹		
Turns lock-to-lock	2.75 ¹		
4-wheel ventilated disc brakes, vacuum-assisted:			
Front diameter x thickness, mm/in.	330 x 24/13.0 x 0.95	348 x 30/13.7 x 1.18 ³	
Rear diameter x thickness, mm/in.	300 x 20/11.8 x 0.79	324 x 20/12.8 x 0.79 ³	
Rotors, front	Cast iron	Aluminum/cast iron composite ³	
Rotors, rear	Cast iron ¹		
Calipers, front/rear	Aluminum/cast iron ¹		
Cast-alloy wheels:			
17 x 8.0	Standard	–	–
18 x 8.0 front/18 x 8.5 rear	ZSP/ZMB/ZMP/ ZMY	Standard	Standard
19 x 8.5 front/19 x 9.0 rear	NA	ZMB/ZMP/ZMY + OPT	OPT

1 – Specification applies to all models.
3 – Specification applies to 35i & 35is models.

OPT – Optional
NA – Not available
– – Not applicable

ZMB – M Sport/Canyon Brown Package
ZMP – M Sport Package
ZMY – M Sport/Citrus Yellow Package
ZSP – Sport Package

Technical specifications

2013 Z4

Bold within table indicates new specification for 2013.

Chassis (cont.)	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Run-flat performance tires ⁸ : 225/45R-17	Standard	–	–
225/40R-18 front / 255/35R-18 rear	ZSP/ZMB/ZMP/ZMY	Standard	Standard
225/35R-19 front / 255/30R-19 rear	NA	ZMB/ZMP/ZMY + OPT	OPT
Stability-enhancement system	Dynamic Stability Control, including electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Traction Control, Dynamic Brake Control, Brake Fade Compensation, Brake Standby, Brake Drying, Start-up Assistant, electronic limited-slip differential ¹		
Performance data	Z4 sDrive28i	Z4 sDrive35i	Z4 sDrive35is
Acceleration, 0-60 mph, sec. ⁹ : Manual transmission	5.5	5.1	–
Automatic transmission or DCT	5.6	5.0	4.8
Top speed, mph ¹⁰ : Standard	130	130	155
Sport & M Sport Packages	155 ¹		
EPA estimated MPG, city/highway/combined: Manual transmission	22/34/ 26	19/26/21	–
Automatic transmission or DCT	24/33/ 26	17/24/19 ³	

1 – Specification applies to all models.

3 – Specification applies to 35i & 35is models.

8 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. Z4 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions. Snow chains cannot be fitted and to please wear your safety belt at all times.

9 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle; road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

10 – Electronically limited.

OPT – Optional
NA – Not available
– – Not applicable

ZMB – M Sport/Canyon Brown Package
ZMP – M Sport Package
ZMY – M Sport/Citrus Yellow Package
ZSP – Sport Package

2013 M5 & M6:

BMW M's trio of ultimate performance machines, back in all-new form and more magnificent than ever.

For the M5, which was BMW M's first true production model, the new model is the 5th generation. For the M6 pair, it is the 3rd generation, although there was no Convertible in the 1st. For all three models, the new generation once again presents the answer to the question, "Can it really get any better?"

Yes, of course it can; this is, after all, BMW. More to the point, it is BMW M. And as wonderful as the previous M5 and M6 were, the new ones are even more so.

Each in its unique way, the three models are the ultimate BMW M performance machine:

- **M5** – the 4-door Sedan. Termed "the original executive express" by *Automobile* (August '11), the M5 offers a unique blend of spectacular road capabilities and practical 5-passenger transportation.
- **M6 Coupe** – essentially the same road capabilities, wrapped in a lower-built, more overtly sporty 4-passenger Coupe body.
- **M6 Convertible** – adding the pleasures of top-down driving.

The **what's new** summary here encapsulates how the new M5 and M6 models contrast to their predecessors, last offered in 2010. By contrast, the remainder of this section of **Fast Facts 2013** focuses on the features and attributes that distinguish the three models from their 550i and 650i counterparts. These are summarized in the **key features summary** beginning on page 596, then illuminated in detail in **M5 & M6 key features**.

What's new for 2013

As of 3/12 (M6 Convertible) or 7/12 (M5, M6 Coupe) production:

- **All-new**, based on the recently all-new generations of 5 Series (launched in '11) and 6 Series ('12). All the innovations of those new platforms – F10 5 Series, F12-13 6 Series – flow into the new M5 and M6 models; BMW M takes it from there with its own cornucopia of innovations and progress.
- **Powered by a new engine concept**, bringing TwinPower Turbo and Valvetronic technology to the M5 and M6 M for the first time. Their 4.4-liter twin-turbocharged V8 engine contrasts sharply with the 5.0-liter naturally aspirated¹ unit that powered the previous M5 and M6s. The new engine produces even more power (560 hp vs. 500) and torque (500 lb-ft. vs. 383) – yet also delivers higher fuel efficiency.
- **Adopts a new transmission concept**. Their predecessors featured a 7-speed Sequential Manual Gearbox, which employed manual-transmission-like gearsets, shifted them via an electrohydraulic mechanism and provided 11 shift programs for the driver to choose from. The new generation retains 7 speeds but adopts an M Double-Clutch Transmission (M DCT) that shifts from gear to gear with no interruption of power flow. This type of transmission is already employed in M3s. (The M5 continues to offer a traditional 6-speed manual transmission as an alternative.)

- **Introduces a new type of limited-slip differential**. The predecessors employed the M Variable Differential Lock, which apportioned driving torque between the two rear wheels in cornering by purely mechanical means. A new Active M Differential serves the same function via new means: an internal multi-plate clutch, electronically controlled to engage progressively according to cornering conditions.
- **A choice of two MDrive presets** vs. previous one. The driver can set up two preferred combinations of vehicle dynamics encompassing engine response, steering assist, M DCT shift program, M Dynamic Damping Control (suspension) and DSC mode; and recall them via two M buttons on the steering wheel.
- **Driver-assistance and safety-oriented features** not available on previous models, including

Lane Departure Warning, Active Blind Spot Detection, Full LED Forward Lighting (M6 only), side- and top-view cameras, and Speed Limit Info.

- **Comfort/convenience and connectivity amenities** including expanded integration of smartphones and music players, BMW Apps, 4-zone climate control (M5 only), Active Ventilation and Active Support front seats.
- **New state-of-the-art audio** in the form of the optional Bang & Olufsen system first seen in the 2012 6 Series. Rear Seat Entertainment newly available in M5.
- **Expanded choices of upholstery and interior trim**, including Extended and Full Merino leather, BMW Individual trims.
- **BMW Individual exterior paints**, available as P1 options; M5 and M6 selections differ.

1 – In a "naturally aspirated" engine, air is drawn into the engine by the pistons' downward, or "suction," stroke. By contrast, a supercharger or turbocharger compresses and supplies the engine's air in what is known as "forced induction."

M5 & M6 key features summary

The following summarizes key features and attributes that distinguish the M5 and M6 from their 550i and 650i counterparts. Unless otherwise noted, these features are present in all M5-M6 models.

Exterior design & function

- Eight metallic paint colors, of which four are exclusive M colors; M5 and M6 blue selections differ; non-metallic Alpine White also available
- BMW Individual metallic colors available as Priority 1 options; M5 and M6 color selections differ
- Gloss-black vertical grille slats (single slats on M5, paired slats on M6s)
- Exclusive front bumper/spoiler ensemble, with three large air intakes, air-channeling flaps at outer intakes
- Standard Xenon Adaptive headlights with LED accent strips, luminous rings and turn signals; Full LED Forward Lighting optional on M6 models. Foglights omitted to maximize air-intake capacity.
- High-gloss Shadowline trim around side windows (M5, M6 Coupe) or at beltline (M6 Convertible)
- Prominently flared wheel arches; body width at front flares increased by 0.8 inch
- Exclusive wheel designs, M Double Spoke or Star Spoke: 19-in. standard, 20-in. forged optional
- M side gills, with M5 or M6 logo; 3-dimensional look, incorporate side marker lights
- M-sculpted side sills
- M exterior mirrors, body color upper/gloss-black lower surfaces
- Discreet but effective trunklid spoiler
- Exclusive rear bumper/apron ensemble with diffuser at lower bottom for optimum under-body airflow

- Quad exhaust outlets, round chrome, two at each side
- Model badge on trunklid can be deleted as Priority 1 option

Performance & efficiency

- S63 TU 4.4-liter V-8 shares basic architecture and displacement of 650i's N63 TU engine, but is extensively modified by BMW M to deliver 560 hp/500 lb-ft. torque vs. 650i's 445 hp/480 lb-ft. Both engines newly adopt Valvetronic variable intake-valve lift and direct fuel injection; M5-M6 S63 TU employs two twin-scroll turbochargers (vs. S63's twin single-scroll), entirely new cylinder heads, and M's patented crossover exhaust manifolding as well as unique pistons, camshafts, cooling and lubrication systems.
- Contrast is sharper between S63 TU and 550i's continuing N63 unit, which does not get Valvetronic or direct fuel injection for '13; that engine delivers 400 hp/450 lb-ft.
- All M5-M6 models come standard with 7-speed M Double-Clutch Transmission (M DCT); M5 offers 6-speed manual transmission as no-cost option. 550i offers choice of 8-speed torque-converter-type automatic or 6-speed manual transmission; 650i models come exclusively with 8-speed automatic.
- 0-60 mph is achieved in 4.2 sec. by M5 with M-DCT, 4.1 by M6 Coupe and 4.3 for M6 Convertible. These times contrast with 5.0 sec. for 550i with automatic and 4.5 for both 650i models (all RWD²).

- New Active M Differential employs electronically controlled multi-plate clutch to achieve extremely precise, quick-acting limitation of slip at drive (rear) wheels in cornering
- Developed on basis of the 5 and 6 Series' outstanding suspension systems, M5-M6 suspension is extensively performance-engineered by BMW M via specific kinematics and new forged-aluminum components. At the front, a steel reinforcing plate is welded in to strengthen the suspension attachment; at the rear an aluminum thrust plate is added and the subframe is bolted directly to the main structure rather than via rubber mounts. Such modifications enhance handling precision at some diminution of riding comfort – as appropriate in these ultimate performance vehicles.
- Additional underbody reinforcements and enhanced heat insulation at central underbody panels, center tunnel, fuel tank and trunk
- Standard on all M5-M6 models, M Dynamic Damping Control adjusts the shock absorbers to road and driving conditions in real time and gives the driver three choices of firmness. In virtually all its parameters, M DDC is purpose-engineered and -calibrated to the M5-M6 and thus differs in detail from the Dynamic Damping Control that's standard on 650i and optional on 550i.
- In contrast to the electric power steering of RWD 550i and 650i models, the Ms retain hydraulic power steering because

it remains the best system for extreme performance vehicles. Like the M DDC, it provides three settings for different driving conditions and driver preferences.

- Continuing the M tradition of ultra-powerful brakes to match their ultra-powerful performance, M5 and M6 get 15.7-in. front brakes, vs. 550i/650i 14.7 in.; rears 15.6 in. vs. 13.6 in. At the front, 6-piston fixed calipers provide ultra-precise pedal feel; 550i and 650i have (also highly effective) single-piston floating calipers all around. And the Ms have full compound rotor construction – another ultimate performance attribute – vs. the 550i/650i composite rotors. Bottom line: take what's great, make it even better.
- In place of the standard Dynamic Stability Control system's Dynamic Traction Control (DTC) setting, the Ms substitute an M Dynamic Mode, which allows more oversteer and wheelspin; this can be useful to an expert driver on a track.
- Whereas 550i and 650i models rely on run-flat performance tires, the Ms employ out-and-out performance tires³ without run-flat capability. Standard 19-in. wheel widths and tire sizes also differ from 550i/650i 19-in: 19 x 9.0 front/19 x 10.0

2 – Rear-wheel drive.

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M5 and M6 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

M5 & M6 key features summary

The following summarizes key features and attributes that distinguish the M5 and M6 from their 550i and 650i counterparts. Unless otherwise noted, these features are present in all M5-M6 models.

rear with 265/40R-19 front / 295/35R-19 rear vs. 19 x 8.5 front/19 x 9.0 rear with 245/40R-19 front / 275/35R-19 rear. M5 standard 19-in. wheel design is M Double Spoke #345M; M6 design is forged/polished M Star Spoke #344M. An M Mobility System for temporary tire repairs is included in the Ms.

Comfort & convenience

- Doorsill trims with the M logo and colors welcome the driver and passengers.
- Stainless-trimmed M footrest and special versions of the iconic M sport steering wheel, which for the first time sports not one but two M buttons. Steering-wheel design details differ between M5 and M6.
- Black Panel instrumentation as in 550i/650i models, but with M red pointers and white illumination, appropriately calibrated dials and M logo in tachometer
- M-specific digital displays: M Dynamic Mode, MDrive 1 / MDrive 2, vehicle speed, currently engaged gear, Drive-logic mode; engine, Dynamic Damping Control and M Servotronic steering settings
- Navigation system includes MDrive menu, where MDrive settings and those of available M Head-up Display can be chosen
- 20-way (M6) or 18-way (M5) power/heated M Multi-Function sport seats. These are similar to the Multi-Contour seats standard in 650i and optional in 550i models, but are distinguished by the Ms' exclusive Merino leather upholstery,

distinctive stitching and embossed M on head restraints.

- Extended Merino leather standard, vs. Dakota leather in 550i/650i. Two of three color choices are exclusive to M5-M6: Silverstone and Sakhr Orange/Black. See **packages & options** for extensive further leather choices.
- M-specific storage tray in center console, trimmed in Merino leather
- Aluminum-framed M DCT E-shift and vehicle-dynamics selectors
- Exclusive M interior trim materials. In M5, a new Aluminum Trace is standard; in M6s, Carbon Fiber Black makes debut. Many optional trims offered.
- In M5 and the M6 Coupe, Alcantara headliner is standard (550i Z11; 650i ZMP or Z11)
- 16-speaker Logic7 premium audio system standard (550i Premium Sound Package, standard in 650i models)

Packages & options

- Packages and stand-alone options generally less extensive because of M models' higher level of standard equipment
- Two packages vs. six for 550i, eight for 650i models (including Z11)
- Driver Assistance Package identical to that of 650i Coupe and Convertible; 550i doesn't offer ZDA
- M6 Executive Package differs considerably from that of 650i models; 550i doesn't offer ZEC
- More extensive Merino leather options. Beyond standard Extended Merino in three colors, these are offered:

- Full Merino in three (M5) or four colors (M6)
- BMW Individual Merino in five color combinations (M5 and M6 choices differ)
- More extensive choices of interior trim. Beyond standard Aluminum Trace (M5) or Carbon Fiber Black (M6), these are offered:
 - M5 – Fine Line Ash, Fine Line Anthracite woods; BMW Individual Dark Red Sycamore or Walnut Honey wood, Piano Finish Black
 - M6 – Fine Line Oak, Gray Poplar; BMW Individual Dark Red Sycamore or White Ash Grain wood, Piano Finish Black
- Other stand-alone options, all models:
 - 20-in. wheels, forged/polished M Double Spoke

#343M, 20 x 9.0 front/ 20 x 10.0 rear with 265/35R-20 front / 295/30R-20 rear tires. 550i/650i 20-in. equipment is 20 x 8.5 front/20 x 9.0 rear with 245/35R-20 front / 275/30R-20 rear.

- M Head-up Display
- Bang & Olufsen audio system
- BMW Apps
- Night Vision with Pedestrian Detection
- BMW Individual Satin Aluminum exterior trim
- Delete trunklid badge
- M5 only:
 - Manual transmission
 - Rear Seat Entertainment
- M6 only:
 - Front ventilated seats (these are in M5 ZEC)

M5 & M6 key features

Except as noted, M5 and M6 models differ from their 550i and 650i counterparts in these features, described in detail:

Exterior design & function

In the great tradition established by their predecessors, the M5 and M6 models are based on the most powerful 5 and 6 Series models, and depart from that basis via esthetic details and modifications that visually express the M5's and M6's even greater performance capabilities. Though the three body types are distinct from each other, the M treatment is essentially the same for all three unless otherwise noted.

At the front. In its overall theme and contours, all three models feature M's traditional large-area triple intakes supplying massive volumes of air to the 560-hp TwinPower Turbo V-8. The rounded-trapezoidal center intake, more rectangular outer openings feeding air to the huge front brakes, "flaps" at these wide-set scoops helping channel airflow at the lower edges and under the car – all serve the critical purpose of unsurpassed performance.

Less readily apparent is a contour lip at the very bottom, which helps guide air flowing under the vehicle to the horizontally mounted engine oil cooler. It then flows along the engine shield until it hits the front of the underbody venturi, angled to counteract undesirable turbulence around the underbody.

There's a new difference in the traditional vertical slats of the "kidneys" grilles. On the M5, there are 11 slender black slats per side; on M6s six double slats per side, also black, plus an M6 badge in the left grille impart a look never before seen on a BMW.

The front lighting clusters are also shaped differently between

M5 and M6, with a "hooked" bottom line on the M5, a smooth line on M6s. All models come standard with Xenon Adaptive headlights, with their signature LED luminous rings functioning as position lights and Daytime Running Lamps. Turn signals are served on the M5 by a cluster of LEDs at the outer edges, on M6s by a row of LEDs under the headlights.

Full LED Forward Lighting, included in the M6s' Executive Package, introduces new technology and unique design elements to the front end. As also available on regular 6 Series models, these provide even whiter, more powerful forward illumination; and incorporate an additional lateral light source for low-speed cornering and maneuvering. All forward lighting functions, including turn signals and Daytime Running Lamps, are LED-sourced; all four main lights provide the differing lighting power of low and high beams. LED "eyebrow" strips put bright accents over the headlights; at the bottom are the multiple-LED strips that form the turn signals.

In profile, each model differs from its regular-production counterpart in diverse ways:

- **Dramatically flared bodywork** to accommodate wider wheels and ultra-low-profile tires
- **Characteristic M gills,** chrome-framed with inset side indicator light and M5 or M6 logo; left-side gill enhances heat dissipation from the cooling system's expansion tank.
- **M-design mirrors,** aerodynamically optimized, with high-gloss black base and bridge; body-color main cap separated by a horizontal contour.

- **Distinctively sculpted side sills** (some call them rocker panels), shaped to "point toward" the wider-than-front driving wheels and tires that are part of the M rear-wheel-drive concept.
- **BMW Individual high-gloss Shadowline trim,** standard on all M5-M6 models; around the M6 Coupe and M5 side windows, at the M6 Convertible's beltline.

At the rear, each M5-M6 model has a bumper/apron/diffuser ensemble that's completely different from either the standard or M Sport Package 550i-650i design. Although the M5 and M6 designs are similar, the aerodynamically shaped "flaps" above the dual circular chrome exhaust outlets at each side are positioned higher on M6s; the M5 trunk reaches deeper into the bumper contours. Essentially the same on all M5-M6 models is the diffuser at bottom center in contrasting dark finish. LED taillights on all models correspond to those of their regular-production counterparts.

On all models a slim, discreet spoiler is positioned atop the trunklid to add stabilizing aerodynamic downforce at high speeds. **Carbon-fiber roof,** visible from most viewing angles of the M6 Coupe, saves weight at the vehicle's highest point and thus further optimizes handling. It also adds esthetic value with its natural-color, patterned dark surface; a central longitudinal recess, somewhat reminiscent of the roofline of coupes shaped by Italian designer Zagato⁴, is another distinctive esthetic touch.

BMW has staked out a leadership position in this weight-saving, strength-adding material via

strategic alliances with specialist firms and its own production facility in Landslut, Germany. In the future, we will see more and more of it contributing to BMW's weight efficiency and performance.

Exterior colors depart from those of their 550i/650i stablemates. In addition to the non-metallic Alpine White, standard metallic paints are the same for all M5-M6 models except that the M5 includes Monte Carlo Blue, the M5s the darker San Marino Blue. Priority 1 metallics, all BMW Individual special paints at extra cost, are more specific to the models:

- **M5** – Azureite Black, Moonstone, Amazonite Silver, Champagne Quartz
- **M6** – Ruby Black, Moonstone, Tanzanite Blue
- **All** – Citrin Black.

Performance & efficiency

These two new models represent the pinnacle of M performance and roadability. Both are powered by an extensively revised version of the S63 engine first seen in the X5-X6 M models; both feature a new, heavier-duty version of the 7-speed Double-Clutch Transmission that made its debut in current M3 models. Both ride on BMW M's interpretation of chassis technology that's already outstanding, that of the 5 and 6 Series. And both feature a new, even more effective version of the former M Variable Differential Lock, namely the new, electronically controlled Active M Differential.

4 – At a recent Concours d'Elegance in Italy, BMW showed an elegantly sporting, Z4-based coupe show car designed by and named for Zagato.

M5 & M6 key features

Except as noted, M5 and M6 models differ from their 550i and 650i counterparts in these features, described in detail:

This section focuses on what sets the M5 and M6 apart from their capable 5 and 6 Series counterparts. First the new S63 TU engine:

S63 TU M TwinPower Turbo V-8 engine: adding Valvetronic to an already sensational power concept

Now that there are two versions of this fantastic engine – S63 with conventional valvetronic in the X5-X6 Ms, S63 TU with Valvetronic and other new refinements in the M5-M6 – the detailed description of these engine's shared attributes and their contrasts – will be found in **BMW features**. Here we focus on what's new about the S63 TU. (TU means Technically Updated.)

This brief recap of the S63 concept:

- **V-8 engine**, sharing its bore, stroke, displacement and basic architecture with the N63 unit found in 5, 6 and 7 Series models. That engine, by the way, also comes in a TU version in the 2013 5 GT, 6 and 7 Series, with Valvetronic, a new type of fuel injection and other new details.
- **Twin turbochargers**, twin-scroll type, positioned between the two cylinder banks
- **Crossover exhaust manifold**, connecting cylinders of opposite banks whose ignition firing is separated by 360° of crankshaft rotation
- **Direct fuel injection**
- **555 hp, 500 lb-ft. torque.**

In its update to TU status, the new engine version that powers M5-M6 introduces the following new features and engineering changes:

- **Valvetronic variable intake-valve timing**, with lighter and more compact components

that enable its use in a high-revving M engine for the first time

- **7200-rpm redline** vs. 7000 for S63
- **Enlarged turbochargers**, some 10% larger and increasing boost from 17.4 psi (lb./sq.in.) to 21.8
- **Higher compression ratio**, 10.0:1 vs. 9.3:1
- **Larger intercoolers** to limit intake-air temperatures for higher air density
- **New-type fuel injectors**, centrally positioned between valves and employing multiple injections to achieve highly precise mixing of fuel and air
- **Higher-performance cooling system**, with separate low- and high-temperature circuits; and two electric coolant pumps that continue running for a time after the engine is shut off, to protect the turbochargers from excessive heat. In all, there are 10 cooling modules in the circuits for engine coolant and oil, transmission oil, turbocharger and charge air, power-steering fluid and the electronic engine control unit.
- **Bigger exhaust pipes**, 3.1 vs. 2.7 in.
- **560 hp, 500 lb-ft. torque**
- **Automatic engine start/stop.**

Now, in case the reader has noticed that there is no appreciable change in power or torque, here are the principal benefits:

- **Reduced fuel consumption** thanks to the Valvetronic, higher compression ratio and automatic engine start/stop. However, this cannot be quantified because the S63 engine has not been installed in comparable models before.

- **Higher performance** because this engine is installed in lighter vehicles. Which leads us to a more pertinent comparison:

New TwinPower Turbo V-8 vs. previous M5-M6 engine

This comparison will interest owners of the previous-generation (2006-10) M5 and M6; those who are familiar with the M tradition of high-revving engines; and just generally those who want to understand the progress BMW M has made with the new generation.

The "old" and new M5-M6 engines are dramatically different from each other, but their purpose and capabilities are very much the same:

- Provide ultra-high performance in a sporty, exciting way
- Create a "soundtrack" that is pleasing and exciting to hear
- Incorporate cutting-edge technology
- Meet the demands of ordinary everyday driving with ease and refinement.

Here's how their "stats" compare:

	2006-10 M5 (E60)	2012 M5 (F10)
Engine type	V-10	V-8
Engine features:		
Aluminum construction	Yes	Yes
Dual overhead camshafts (DOHC)	Yes	Yes
4 valves/cylinder	Yes	Yes
Valvetronic variable intake-valve lift	No	Yes
Double VANOS variable valve timing	Yes	Yes
Number of throttles	10	None (Valvetronic)
Induction system	Naturally aspirated via 1 throttle per cylinder	Two twin-scroll turbochargers, driven via crossover exhaust manifold
Fuel injection	Intake ports	Direct to cylinders
Exhaust system	Dual	Dual
Power @ rpm, hp	500 @ 7750	560 @ 5750-7000
Torque @ rpm, lb-ft.	383 @ 6100	500 @ 1500-5750
Maximum engine speed, rpm (redline)	8250	7200
Engine weight, lb.	538	529
Acceleration, 0-60 mph, sec. ⁵ :		
Manual transmission	4.5	4.3
SMG or M DCT ⁶	4.5	4.2
EPA estimated MPG, city/highway ⁷ :		
Manual transmission	11/17	15/22
SMG or M DCT ⁶	11/17	14/20

5 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle, road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges

you to obey all posted speed limits and to please wear your safety belt at all times.

6 – SMG = Sequential Manual Gearbox (2006-10 M5); M DCT = M Double-Clutch Transmission (2013 M5).

7 – Preliminary data.

M5 & M6 key features

Except as noted, M5 and M6 models differ from their 550i and 650i counterparts in these features, described in detail:

Put into less technical/objective terms, the contrast between the previous and new engines is “ultra-high-speed, naturally aspirated V-10” and “high-speed, TwinPower Turbo V-8.” In terms of performance characteristics, the contrast plays out thus:

- The V-8 delivers fully 31% greater peak torque, thus a more muscular response to the accelerator pedal at just about any speed.
- Whereas the V-10 needed high revs to achieve its maximum torque – that 6100 rpm for the peak – the new V-8 delivers its peak all the way from a low 1500 to a 5750 rpm that’s not far from the V-10’s peaking speed. Thus the driver will be less obligated to “keep up the revs” to get a strong response.
- 10 cylinders make an exotic sound, and the 8250-rpm redline certainly meant auditory thrills. But the crossover exhaust manifolding plays a key role in the new engine’s multi-layered collage of sound, and 7200 rpm is plenty thrilling.
- To make the new V-8’s sound even more exciting, M engineers added Active Sound Design (ASD). Like the engine itself, ASD derives its enhancement from the V-8’s firing order and the exhaust system’s frequency characteristics – and does so more aggressively in the Sport and Sport Plus modes of MDrive. Further, it provides an even spread of engine sound across all seats in the cabin, while holding to legal restrictions on outside exhaust sound.
- Torque defines response at any given engine speed (rpm); power is the result of torque

- + rpm, and it’s power that plays out into such data as the 0-60-mph time. Power is up by 12% over the V-10, and this is the main reason the new M5 – despite weighing 375 lb. more than the predecessor, thanks to its increased dimensions and new amenities – is 0.3 sec. quicker to 60 mph.
- Most dramatic of all is the increase in fuel economy: look at those figures, 27% higher in the EPA city test, 18% higher in the highway test⁷. Though fuel economy is unlikely to be the M5 or M6 owner’s top priority, higher efficiency along with higher performance is welcome. Another boost: by replacing the 5 and 6 Series’ 18.5-gallon fuel tank of 4-mm-thick plastic with a 0.7-mm steel one, M engineers got a 21.1-gal. capacity and thus some extra range between fillups.
- Another facet of the driving experience (and fuel economy) is the new engine’s **auto start/stop** function. As now included on many BMW models including M3, this eliminates much of the fuel consumption that occurs during idling. For yet another measure of efficiency, M5-M6 models also include Brake Energy Regeneration with its function indication set into the M tachometer.

7-speed M Double-Clutch Transmission

(standard all M5-M6)
Presently, the 550i is available with an 8-speed torque-converter automatic or 6-speed manual transmission; 650i models come with the automatic only. Previous M5-M6 models offered a 7-speed Sequential Manual

Gearbox (SMG) or 6-speed manual transmission.

All new M5-M6 models come standard with a 7-speed M Double-Clutch Transmission (M DCT) that is new to them, but essentially identical to the M DCT available in M3s except that –

- Its gears are specially treated; gearsets and internal clutches are redesigned to handle the higher torque of the M5-M6 engine.
- Because the M5-M6 engine has a different rpm range (max. 7200 rpm, vs. M3’s 8250), its gear ratios are completely rearranged, with 5th as the direct gear (1.00:1) vs. 7th in the M3. (The final drive ratio hasn’t changed.)
- Its Drivelogic control system provides 6 shift modes vs. the M3s’ and previous M5-M6s’ 11.

The principal advantage of DCT over SMG is that it executes up- and downshifts without interrupting engine power; SMG briefly “let off the gas” during shifts. Additional functions of the M3-M5-M6 DCT include Launch Control for maximum acceleration from rest, and Low-Speed Assistant for moving along at very low vehicle speeds. For this function, the driver taps the accelerator lightly; to stop it, taps the brake pedal. (This is not the “creep” function of non-M DCTs in other BMW models, which provides low vehicle speeds when the driver lets off the brake pedal at rest.)

The M5-M6 DCT E-shift lever is short; its illuminated shift pattern puts R at left top, N at left, and D/S (Automated/Sequential) toggling to the right. In addition to

the steering-wheel shift paddles, upshifts and downshifts can be executed by tipping the lever rearward or forward respectively. Park is engaged via a separate button atop the knob.

BMW currently offers DCT as follows:

- **M3** – optional; Drivelogic with five shift programs in the Automated (D) mode, six in the Sequential (S) mode.
- **M5-M6** – standard; Drivelogic with three shift programs each in the Automated (D) and Sequential (S) modes.
- **135i and Z4 35i** optional, **335is and Z4 35is** standard – Automated (D), Sport (S) and Manual (M) modes, plus an additional Sport mode via the Driving Dynamics Control; thus four programs.

These various versions of DCT are described in detail in **BMW features**.

6-speed manual transmission (optional M5)

Along the M5 continues to offer a traditional manual transmission, as a no-extra-cost option. This is the heavy-duty Type G 6-speed that BMW reserves for high-performance models, including 335is, RWD 550i Sedan, Z4 35i and M3.

M5-M6 suspension: BMW M’s magic touch

The 5 and 6 Series’ suspension, a masterful combination of multi-link front and rear systems, is the basis for BMW M’s magic touch. From this starting point, BMW M’s engineers performed an all-around rework to accommodate the M5-M6s’ additional power and for absolutely optimal

⁷ – Preliminary data.

M5 & M6 key features

Except as noted, M5 and M6 models differ from their 550i and 650i counterparts in these features, described in detail:

sports-car handling:

- **M-specific suspension geometry.** Virtually all the “set-tings” – the angles that the wheels take as they work up and down – have been tailored specifically for track capability and fine-tuned via extensive testing on Germany’s famous Nürburgring track.
- **Lighter suspension components.** Although there are already aluminum components in the suspension of regular BMW RWD models, M developed new lateral links all around – of forged aluminum, which is costlier but both stronger and lighter than cast. Indeed, all suspension components and rubber bushings are M-specific and new.
- **Reinforced, more direct attachment to vehicle structure.** To handle the increased acceleration, cornering and braking forces encountered in at-the-limit track driving, M tightened the connection between suspension and main structure. At the front, a reinforcing plate augments the existing subframe. The rear subframe, which on the regular production models attaches to the structure via rubber mounts, is bolted directly to the structure. This allows more differential and road noise into the vehicle – a compromise BMW believes M5-M6 drivers will accept for the heightened handling precision it brings. Additionally, an aluminum thrust plate has been added at the rear.
- **M-specific springs,** firmer than those of the 550i/650i models.
- **M Dynamic Damping Control.** BMW’s system of electronically controlled variable shock

absorbers (dampers) is optional on 550i, standard on 650i models. On M5 and M6 it is standard, plus being the M version specifically calibrated to these sports vehicles. M-DDC provides three settings: Comfort, Sport and Sport Plus in order of increasing firmness.

Active M Differential: precision torque distribution for fantastic handling

Beginning with the E46 M3 introduced in 2001, BMW equipped M Cars with the M Variable Differential Lock, which via entirely mechanical means apportions torque to the rear wheels for optimum handling on varying road surfaces. This continues on the M3.

For the new M5-M6, the new Active M Differential (AMD) goes a step further in this important sports function with an electronically controlled multi-plate clutch. (The xDrive system of BMW’s all-wheel-drive models apportions front and rear driving torque via a similar clutch.) Working with inputs from the vehicle’s Dynamic Stability Control and engine controls, this clutch applies locking action between the two rear wheels (from zero to 100%) for optimum traction and stability in cornering on varying road surfaces – i.e. the same function as that of the earlier device but even more precise and finely tuned. Networking with DSC also provides that differential locking is coordinated with the DSC’s M Dynamic Mode (itself a feature of M Cars) when the driver has selected it.

M Servotronic variable power steering

True to M philosophy, these Ms retain hydraulic power assist instead of going to electric, because M considers its feel superior for the kind of maneuvering of which these models are capable. For M5-M6, BMW M has for the first time adopted a vane-type hydraulic pump that enhances power-steering energy efficiency while retaining the sports advantages of hydraulic assist. Its ratio (the degrees of turning at the steering wheel for 1° of steering at the front wheels) retains the mechanical variability of standard 5 and 6 Series models, but at a mean of 13.1:1 is 27% “quicker” than them. Steering-wheel turns lock-to-lock are 2.6, vs. 3.0 for the regular models. Power assist is also variable, as is that of any BMW Servotronic system. The overall effort level is variable in three settings: Comfort, Sport, Sport Plus.

Immensely powerful, fade-resistant compound, cross-drilled brakes

Powerful, highly fade-resistant brakes are always a BMW strength – even more so with M Cars, which take all aspects of BMW performance to an even higher level.

So it is that the M5 and M6s have compound, cross-drilled brakes. These have evolved, in that the cast-iron portion of the rotors has been enlarged and the weight of the aluminum center portion has been further reduced. The dimensions are, unsurprisingly, huge:

- Front – 400-mm diameter x 36-mm thickness (15.7 x 1.42 in). The 550i/650i front brakes are

348 mm/13.7 in. in diameter with the same thickness.

- Rear – 396 x 24 mm/15.6 x 0.94 in. (550i/650i: 345-mm/13.6-in. diameter, same thickness).

Their front brakes have 6-piston fixed calipers, whose advantage over conventional single-piston “floating” calipers is an ultra-firm, ultra-linear feel at the brake pedal that is especially reassuring to expert drivers in track driving. See **BMW features** for more detailed coverage of high-performance calipers.

Finished in Dark Metallic Blue and carrying the M logo, the M5-M6 calipers are attractively visible through the M-designed wheels (next). An electromechanical parking-brake function, actuated by the typical BMW console switch, acts via the rear brakes.

Wheels and tires: ultimate grip in style in 19- and 20-in. sizes³, three wheel designs, high-performance/ultra-low-profile tires

19-in. equipment is standard on all models, in sizes of 19 x 9.0 front/19 x 10.0 rear wheels and 265/40R-19 front / 295/35R-19 rear. The tires are “summer” pure performance, non-run-flat, as always specially developed for these cars’ immense capabilities: Michelin Pilot Super Sport, Z-rated. An M Mobility System kit is carried in a compartment under the trunk floor.

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M5 and M6 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

M5 & M6 key features

Except as noted, M5 and M6 models differ from their 550i and 650i counterparts in these features, described in detail:

There are two designs for the standard 19-in. wheels: M Double Spoke #345M for the M5, with 10 pairs of slender spokes; and M Star Spoke #344M for the M6s, with seven pairs of slender spokes. (For an additional premium touch, these are forged and polished.)

For details on the optional 20-in. equipment, see **packages & options**.

MDrive in its latest form: driver-selected vehicle character

In the previous M5-M6 generation, the driver could go to the MDrive menu, select various vehicle-dynamics parameters, and program these onto an M button on the steering wheel. Then, when the driver wanted to have all these preferred settings at once, a touch of the M button recalled them.

For the new generation, BMW M has simplified this process. Surrounding the gearshift lever (which with M DCT is an E-shift) are five vehicle-dynamics selectors, plus switches for the front/rear Park Distance Control and side-view cameras. The vehicle-dynamics selectors, in counter-clockwise order, are:

- **DSC mode** – mainly for selecting the M Dynamic mode that allows more wheelspin for more spirited track driving. Also cycles through the full-DSC and DSC-off modes.
- **Engine response** – three settings – Efficient, Sport, Sport Plus – determine the engine's response to the accelerator pedal. Also controls Active Sound Design, changing the engine sound appropriately to the setting.

- **M Dynamic Damping Control** – Comfort, Sport and Sport Plus settings vary the level of steering effort.
- **Servotronic steering** – same settings as M DDC, progressively increasing the level of steering effort.
- **M DCT Drivelogic** – three settings in the transmission's automated mode, D1-D3 in order of sportiness, holding lower gears longer, making shifts quicker and harder; three settings in Sequential mode, S1-S3, same except driver controls the shifts. This is a rocker switch with marks for the three modes; toggling the shift lever chooses D or S.

As the user cycles through the settings with each button, they appear in the instrument cluster's central digital display or at the bottom of the tachometer. Then, a long push on the M1 or M2 button – there are now two instead of one, so one can program two configurations – and the settings are captured and displayed in the instrument cluster. (The PDC and camera settings, whose switches are also in this area, are not captured on the M buttons.) Upon the next engine startup (not via auto start-stop), all settings revert to a default configuration that favors fuel efficiency and riding comfort.

(For safety reasons, any setup that includes switching DSC to "MDM" or "DSC off" requires the driver to confirm by pressing the MDrive button a second time.

Comfort & convenience

Each of M5-M6 model starts with its regular-production counterpart's excellent ergonomic design and abundant comfort/convenience amenities, then adds the special M details that make it a superb place to enjoy high-performance driving. This section focuses on just those details and features.

Upon entering...

Driver and passengers are immediately alerted that they're entering an M Car by the BMW M colors and model logo on the doorsill trims. Upon settling into the M Multi-Function seat, the driver's field of vision encompasses the elaborately aluminum-trimmed M footrest and model-specific M sport steering wheel. But there's more, much more, to set the M5 and M6 apart from their beautiful regular-production counterparts...

Features, functions and esthetics

BMW M's treatment of the M5-M6 interiors is multi-faceted. Here are more features, functions and esthetic details that set them apart:

M sport steering wheel, two designs. M5 and both M6s share an M logo at the bottom spoke, Nappa-wrapped/extra-thick rim with stitching in M colors, galvanized-finished shift paddles and dual M buttons on the left spoke plus the customary audio, Voice Command, cruise and phone controls. Distinctions between M5 and M6 include a rounded-trapezoidal center section in M5, extensive galvanic trim and round center in M6s.

M instrumentation. Speedometer and tachometer calibrated to M performance capabilities; white numerals and red pointers in all four circular instruments (the smaller ones are fuel level and engine-oil temperature). Tachometer has M logo, includes Brake Energy Regeneration and Auto Start/Stop indications for the first time in M5-M6 models. Black Panel displays for the entire instrument cluster, as in regular 5 and 6 Series.

Special BMW M E-shift transmission selector (M DCT only). Shorter than the standard E-shift and with its shift pattern illuminated.

M vehicle-dynamics selectors, surrounding the E-shift toward the driver, these set five dynamics variables as described under **performance & efficiency**. Selectors for Park Distance Control and the side-view cameras are to the right.

iDrive/Navigation display. Recessed into dash center in M5, free-standing in M6s; adds an M menu in all.

Audio amenities. In an upgrade from its 550i counterpart, the M5 comes standard with the 16-speaker Logic7 premium audio system; this is also standard in M6s (16 speakers in Coupe, 12 in Convertible) as it is in 650i models. The Bang & Olufsen system, with the same speaker count but ultra-audio-ophile technology and features, is optional in all M5-M6 as it is in 550i/650i models. This magnificent system, with 1200 watts and retracting center-fill speakers, is described in the **2012 6 Series** section and **2013 BMW features**.

M5 & M6 key features

Except as noted, M5 and M6 models differ from their 550i and 650i counterparts in these features, described in detail:

Upholsteries. Abundant choices await M5 and M6 customers. Here they are, working from standard up to the most lavish treatments:

- **Standard** – Extended Merino leather (codes LK) in three color schemes: Silverstone II LKA9, Sakhir Orange/Black LKDA, Black LKSW.
- **Optional** – Full Merino leather (X3) in same three color schemes, plus (M6s only) Zandvoort Beige X3DZ. Additional leather content includes rear sides of front backrests and their storage pockets, door panels, sides of center console, upper dash⁸; headliner (M5, M6 Coupe) is Alcantara instead of standard knitted cloth.
- **P1 option** – BMW Individual Extended Merino (M5, code ZA) or Full Merino (M6s, code ZB) leather. M5 colors are Platinum/Black ZAC8, Champagne/Black ZAP6, Silk Gray/Black ZAP7, Graphite/Black ZAP8 and Cohiba Brown/Black ZAWT. M6 colors are Amaro Brown ZBP5, Champagne ZBP6, Platinum/Black ZBC8, Opal White ZBOW and Canyon Brown ZBWT. Both schemes add Merino to the front-seat backrests and their pockets, head restraints, door panels, center-console sides and lower dash, but the M6s get a Nappa-leather upper dash. Also included on M5 and M6 Coupe are Alcantara in the upholstery color for headliner, sun visors and A-, B- and C-pillars⁸. Contrast stitching is included with these interiors.

Interior trim materials. Each of these trims appears on the dash,

doors, (M6) rear side panels and center console; M5 and M6 choices differ:

- **M5 standard** – Aluminum Trace, textured in a distinctly technical way
- **M6 standard** – Carbon Fiber Black, a new version of the Carbon Fiber material already seen in recent sporting BMWs
- **M5 optional** at no extra cost – High-gloss Dark Ash or Anthracite wood
- **M6 optional** at no extra cost – Gray Poplar or Fine Line Oak wood
- **BMW Individual trims** at extra cost (Priority 1):
 - All models – Dark Red Sycamore wood or Piano Finish Black
 - M5 only – Walnut Honey wood
 - M6 only – White Ash wood

M Multi-Function front seats

Standard in all M5 and M6 models are these newly developed seats, designed for strong lateral support during cornering, yet a high level of comfort at all times. They have especially prominent cushion and backrest bolsters; head restraints integrated into the backrests; eye-catching stitching that delineates the various seat segments; two vertical pleats and an M logo embossed onto the head restraint. Power adjustments include:

- Fore-aft
- Height
- Cushion angle
- Backrest angle
- Angle of upper backrest, separately
- Head-restraint height (fore-aft position manually adjustable)
- Spread of backrest side bolsters (M6 models only)

- 4-way power lumbar support
- Thigh support.

2-position memory is included for both seats. Head restraints are Active; in the M6 Convertible the safety belts are integrated into the seats themselves, meaning unimpeded entry into the rear seats.

Safety & security

M5-M6 safety and security features are identical to those of their regular-production 550i and 650i counterparts; for information on these see the 6 Series and 5 Series sections as well as BMW features.

Packages & options

As these models are generally more abundantly standard-equipped than their regular-production counterparts, their selection of packages and options is less extensive. The following is a complete listing of packages and stand-alone options for the three M5-M6 models.

Packages

Driver Assistance Package

(all models, code ZDA; requires Executive Package)

This Package enhances M5-M6 active safety in three ways, and adds the important factor of speed-limit information:

- **Lane Departure Warning**, code 5AD. Employing a camera near the interior rearview mirror, monitors road lane markings. If the vehicle begins to move across a lane without the turn signals activated, LDW vibrates the steering wheel. Details in **BMW features**.

- **Active Blind Spot Detection**, code 5AG. Radar sensors at the rear of the vehicle monitor traffic in adjacent lanes, taking in an area from the driver's blind spot rearward about 200 ft. An illuminated triangular warning LED appears in the exterior mirror if there is a vehicle in this critical area; if the driver activates a turn signal, the LED blinks and, as with Lane Departure Warning, the steering wheel vibrates to warn the driver.

- **Side- and Top-view cameras (Surround View)**, code 5DL. Side-view cameras, one at each side of the front bumper, provide an early view of approaching traffic for pulling out from building exits or crossing intersections with limited visibility to one or both sides. Activated by pushbutton on console. Top-view consists of two video cameras, one in each exterior mirror housing; activated when the selector lever is moved to the "R" position, or manually by pushbutton. The combination of these four cameras' views is shown in the iDrive control display as a plan view, i.e. as if the vehicle were being viewed from above.
- **Speed Limit Info**, code 8TH. Via the same camera used by Lane Departure Warning, captures current speed-limit and other signage, such as "no passing," and shows it on the iDrive display.

⁸ – Content varies somewhat among M5-M6 models. Alcantara headliner is listed as stand-alone option XD5, but is at no extra cost and requires the ZA and ZB interiors; it is not available with all ZB colors.

M5 & M6 key features

Except as noted, M5 and M6 models differ from their 550i and 650i counterparts in these features, described in detail:

Executive Package

(all models, code ZEC)

This package is being offered in various 2013 models. In M5-M6 models it consists of:

All models:

- **Soft-close doors**, code 323. Familiar from other high-end BMW models but offered on 6 Series for first time. The user closes the door gently; an electric mechanism draws it fully in. More details in **BMW features**.
- **Heated steering wheel**, code 248
- **Active Support front seats**, code 455
- **M Head-up Display**, code 610. 2nd generation of this unique BMW system with full-color, 3D-effect projection of relevant driving information on the windshield in front of the driver, plus M-specific information:
 - Standard displays: current speed, Speed Limit Info + road warnings if 8TH is present, road warnings, navigation guidance, cruise-control speed setting, Lane Departure Warning if present, Night Vision if present, Check Control alerts
 - M displays: tachometer, shift lights, currently engaged gear (M DCT only).
- **Automatic High Beams**, code 5AC (included in Head-up Display option for M5, Full LED Forward Lighting option for M6s)
- **Satellite Radio with 1-year subscription**, code 655
- **BMW Apps**, code 6NR, plus Smartphone Integration, code 6NF. As described in **BMW features**.

M5 only:

- **Comfort Access keyless entry**, code 322 (standard on M6s)
- **Active Ventilation** on both front seats, code 453. Described in **BMW features**.
- **4-zone automatic climate control**, code 4NB. Described in **BMW features**.
- **Heated rear seats**, code 496.
- **Power rear-window + manual rear door-window sunshades**, code 416
- **Automatic trunklid opening + closing**, code 316

M6 Coupe only:

- **Power rear-window sunshade**, code 415.

M6 Coupe and Convertible:

- **Full LED Forward Lighting**, code 552. See 6 Series section.

Stand-alone options

6-speed manual transmission (M5 only; code 2MA)

For those customers who prefer to shift gears in the traditional way, this option is offered at no extra cost. Its ratios are optimized for acceleration, pulling ability in the individual gears, and fuel efficiency; and controlled by a short shift lever with leather knob and illuminated shift pattern. Acceleration data and EPA mileage ratings differ from those for the standard 7-speed M DCT; see **technical specifications**.

20-in. wheels and tires

(all models, code 2NZ)
This option replaces the standard 19-in. equipment (M5 cast, M6 forged wheels; designs differ) with 20-in. forged wheels in M Double Spoke design #343M, forged/polished with five pairs of slender curved spokes.

Alternate softtop colors

(M6 Convertible only, code 3YA or 3YE)

Black is standard; Beige and the distinctive Moonlight Black are available at no extra cost.

Active Ventilation on front seats

(M6 models only, code 453)

This amenity is included in the M5 Executive Package but available in M6s as a stand-alone option. It is described in **BMW features**.

Bang & Olufsen sound system

(all models, code 6F2)

After its debut in the 2012 6 Series, this ultra-audiophile system is now available in a greater range of BMWs, including all M5 and M6 models. See the 6 Series section of **Fast Facts 2012** or **BMW features** in this edition.

M Head-up Display

(all models, code 610)

Described in this section under **Executive Package**, the M HUD is also available as a stand-alone option.

Rear Seat Entertainment

(M5 only, code 6FH)

This most elaborate system, termed Professional in BMW nomenclature, is an upgrade of the 6FG system heretofore offered in some other models. It encompasses:

- DVD player for rear-seat viewing
- Two 9.2-in. screens, high-resolution and adjustable for viewing angle
- Remote control
- Connections for MP3 player, game consoles and headphones

- Access to vehicle entertainment functions including radio, DVD changer if present
- Access to GPS Navigation and online services.

Wireless headphones are available as a separate accessory.

BMW Apps

(all models, code 6NR; includes Smartphone Integration)

As part BMW's ConnectedDrive strategy, BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function is released, users can update and customize their vehicle's infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party app. Further details are presented in **BMW features**.

Alternate interior trims

(all models, codes as described)

The entire selection of interior trim materials is described under **interior trim materials**. Here are the ones that are available as regular stand-alone options; BMW Individual trims are listed under **Priority 1 stand-alone options**:

- Gray Poplar wood – code 4AS, for M6 models
- Fine Line Oak wood, code 4CV, for M6 models
- Fine Line Ash wood, code 4BN, for M5
- Fine Line Anthracite wood – code 4CE, for M5.

Night Vision with Pedestrian Detection

(all models, code 6UK)

Via an infrared camera, Night Vision scans a range up to 1600 ft. ahead of the vehicle over a 36-degree-wide range, variable according to the road's path and driver input. As offered on all

M5 & M6 key features

Except as noted, M5 and M6 models differ from their 550i and 650i counterparts in these features, described in detail:

current 5, 6 and 7 Series models, Night Vision incorporates recognition of the direction a pedestrian near the roadway is moving. For details, see **BMW features**.

Priority 1 stand-alone options⁹

BMW Individual Satin Aluminum exterior trim

(all models, code 3MB; requires BMW Individual exterior colors)

As a subtle esthetic refinement, this option places Satin Aluminum on the side-window framing (M5, M6 Coupe) or beltline moldings (M6 Convertible). It also includes high-gloss black trim on the exterior mirror caps, mounting bridges and triangles (all models); and the B-pillar and rear door-window guide (M5 only). On vehicles with Comfort Access keyless entry (M5 Executive Package, M6 standard), chrome is added to the exterior door-handle recesses.

Badge delete

(all models, code 320)

Deletion of the M5 or M6 trunklid badge is available at no extra cost.

BMW Individual interior trim

(all models, codes & availability as described)

Available without restriction as to exterior or interior colors:

- **Dark Red Sycamore** wood, code XE5; available in all models
- **Piano Finish Black**, code XE7; all models
- **Walnut Honey** wood, code XE6; M5 only
- **White Ash Grain** wood, code XEX; M6 models only.

Gray/Black. Alcantara headliner in Anthracite color is standard in these models.

BMW center-installed accessories

Among the accessories available for the 2013 M5 and M6 models are:

- **Wheel locks**
- **Tire valve-stem caps** with BMW lettering or logo
- **Mud flaps**
- **License-plate frames**
- **Car covers**, outdoor and indoor types
- **UV sunshade**
- **Floor mats**, all-weather
- **Snap-in adaptor with USB interface** for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna

- **Snap-in adaptor** for BMW Apps and various media
- **Connection and charging cables** of various types
- **BMW Bluetooth headset**
- **CD/DVD storage sleeve**
- **Cool bag**
- **BMW umbrella** with LED light
- **LED hand lamp**
- **Multi-function luggage mat + storage box** and other trunk accessories

For details, see the latest Original BMW Accessories listing for M5-M6 models on bmwusa.com.

⁹ – Priority 1 options accurate at time of publication but subject to change. For current model-specific Priority 1 standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guide.

Standard & optional features

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

Exterior design & function	M5	M6 Coupe	M6 Convertible
Aluminum hood, front spring towers, front side panels (fenders) & doors	S	S	S
Xenon Adaptive headlights with luminous rings as position/parking lights & Daytime Running Lamps, dynamic auto-leveling, cornering lights	S	S	S
LED turn signals	S	S	S
Full LED Forward Lighting (high & low beams, 3-segment turn signals & Daytime Running Lamps; LED accent strips at top)	NA	ZEC	ZEC
Automatic headlight control	S	S	S
Retractable high-intensity headlight cleaning system	S	S	S
Gloss-black vertical grille slats	S	S	S
Rain-sensing windshield wipers & heated washer jets	S	S	S
Power-folding exterior mirrors, BMW M design	S	S	S
Distinctive M front bumper/spoiler ensemble, side sills, side gills with M logo, rear bumper/apron, rear spoiler	S	S	S
Metallic paint, including special M colors	S	S	S
BMW Individual Xirallic paint	P1	P1	P1
Carbon-fiber roof	NA	S	–
Fully automatic, fully lined softtop, choice of Black, Beige or Moonlight Black	–	–	S/NC
Park Distance Control, front & rear with graphic display	S	S	S
Rear-view camera	S	S	S
Side- & top-view cameras (Surround View)	ZDA	ZDA	ZDA
Ground lighting at door handles	S	S	S
Welcome Light ¹	S	S	S
Adaptive brakelights	S	S	S
High-gloss Shadowline exterior trim	S	S	S
BMW Individual Satin Aluminum exterior trim²	P1	P1	P1
Chrome outlets, round, 2 each left & right	S	S	S
Exterior badge delete	P1	P1	P1

1 – Upon unlocking of vehicle, activation for 20 sec. of ground lighting and interior lights; all turn signals flash twice.

2 – On M5, includes high-gloss black exterior mirrors, B-pillar and rear-door-window divider bar; on M6

Coupe and Convertible, high-gloss black exterior mirrors only. If vehicle is equipped with Comfort Access keyless entry, adds chrome accents to door handles. Requires BMW Individual exterior colors, also P1.

S – Standard
 NC – No extra cost
 P1 – Priority 1 option
 NA – Not available
 – – Not applicable

ZDA – Driver Assistance Package (requires Executive Package)
 ZEC – Executive Package

Standard & optional features

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

Performance & efficiency	M5	M6 Coupe	M6 Convertible
4.4-liter BMW M TwinPower Turbo V-8 engine (Twin Turbo/Twin Scroll)	S	S	S
Engine features:			
Aluminum construction with silicon-impregnated cylinders	S	S	S
High Precision direct fuel injection	S	S	S
Valvetronic variable intake-valve lift	S	S	S
Double VANOS ³ variable intake- & exhaust timing	S	S	S
Two twin-scroll turbochargers	S	S	S
Cross-bank exhaust manifolds	S	S	S
Variable throttle response (3 settings)	S	S	S
Electronically controlled engine cooling with dual coolant circuits, electric main pumps & auxiliary pumps for turbocharger bearings & intercooler	S	S	S
Volume-controlled, g-sensitive oil pump + dual return pumps	S	S	S
Direct ignition system with knock control	S	S	S
Dual exhaust system with Active Sound Design	S	S	S
Electronic sensing of oil level & condition	S	S	S
Automatic engine start/stop with function indication in tachometer	S	S	S
Upshift lights	S	S	S
7-speed Double-Clutch Transmission (M DCT) with 6 Drivelogic shift programs, steering-wheel shift paddles, Launch Control	S	S	S
6-speed manual transmission	NC	NA	NA
Liquid-cooled alternator	S	S	S
Aluminum front subframe + welded steel reinforcement	S	S	S
Aluminum rear thrust plate	S	S	S
Rigid mounting of rear subframe to main structure	S	S	S
Specially equipped & calibrated BMW M suspension:			
Aluminum multi-link double-wishbone front suspension	S	S	S
Aluminum 4-link Integral rear suspension (Integral IV)	S	S	S
M Dynamic Damping Control with Comfort, Sport & Sport Plus modes	S	S	S
M Servotronic vehicle-speed-sensitive, variable-ratio rack-&-pinion power steering with 3 selectable levels of power assist	S	S	S
4-wheel compound, ventilated & cross-drilled disc brakes, 6-piston fixed front calipers; M logo & Dark Metallic Blue finish on calipers	S	S	S
Active M Differential	S	S	S
Brake Energy Regeneration with function indication in tachometer	S	S	S

3 – VANOS = **V**ARiable **N**Ockenwellen
Steuerung = variable camshaft control,
or variable valve timing.

S – Standard
NC – No extra cost

NA – Not available

Standard & optional features

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

Performance & efficiency (cont.)	M5	M6 Coupe	M6 Convertible
MDrive system with variable engine response, steering assist, M DCT Driveline, Dynamic Damping Control & Dynamic Stability Control, programmable for instant recall of driver's preferred settings via 2 MDrive buttons (M1 & M2)	S	S	S
Electromechanical parking brake	S	S	S
M Dynamic Stability Control with M Dynamic Mode	S	S	S
Cast-alloy wheels, 19 x 9.0 front/19 x 10.0 rear:			
M Double Spoke design #345M	S	–	–
M Star Spoke design #344M, forged	–	S	S
M Double Spoke forged-alloy wheels (design #343M), 20 x 9.0 front/20 x 10.0 rear	OPT	OPT	OPT
Performance tires 4:			
265/40R-19 front / 295/35R-19 rear	S	S	S
265/35R-20 front / 295/30R-20 rear	OPT	OPT	OPT
Tire Pressure Monitor	S	S	S
Comfort & convenience	M5	M6 Coupe	M6 Convertible
Vehicle & Key Memory with Personal Profile user-specific settings	S	S	S
Mobile Profile for export or import of user settings to/from another so-equipped vehicle	S	S	S
Multi-function remote control with switch for turning on side lights for approx. 40 sec.	S	S	S
Comfort Access keyless entry	ZEC	S	S
3-position door checks	S	S	S
Soft-close doors	ZEC	ZEC	ZEC
Dual power/heated exterior mirrors	S	S	S
BMW M doorsill trims with M colors & logo	S	S	S
Auto-dimming interior & exterior mirrors	S	S	S
Automatic tilt-down of right exterior mirror for backing up	S	S	S
BMW Universal Transceiver (3-function garage-door opener)	S	S	S
Comprehensive lighting amenities:			
Welcome Light (automatic switch-on of exterior & interior lights upon unlocking vehicle)	S	S	S
Door exit/entry lighting	S	S	S
Fade-in/fade-out operation of interior lights	S	S	S
Left/right reading lamps	Front & rear	Front	Front
Front footwell lighting	S	S	S
Illuminated visor vanity mirrors	S	S	S
BMW Ambiance Lighting, including interior door handles, console, door &/or rear side panels & storage compartments	S	S	S

4 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M5 and M6

models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

S – Standard
OPT – Optional
– – Not applicable

ZEC – Executive Package

Standard & optional features

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

Comfort & convenience (cont.)	M5	M6 Coupe	M6 Convertible
Leather-wrapped power tilt/telescopic M sport steering wheel with fingertip cruise, audio & phone controls, shift paddles, dual M buttons , auto tilt-up for entry & exit	S	S	S
Heated steering wheel	ZEC	ZEC	ZEC
BMW M driver's footrest	S	S	S
Dynamic cruise control	S	S	S
Condition-Based Service system	S	S	S
Integrated owner's manual via iDrive	S	S	S
Speed Limit Info	ZDA	ZDA	ZDA
Power/heated M Multi-Function front seats: M5 18-way, M6 20-way	S	S	S
Memory system for both front seats, steering wheel & exterior mirrors, 2 settings per user	S	S	S
Active Support feature, both front seats	ZEC	ZEC	ZEC
Active Ventilation, both front seats	ZEC	OPT	OPT
Heated rear seats	ZEC	NA	NA
Black Panel instrument cluster with special M instrumentation, white illumination & red pointers	S	S	S
Check Control vehicle monitor system, information displayed in main instrument cluster	S	S	S
Extended Merino leather upholstery	S	S	S
Full Merino leather upholstery	OPT	OPT	OPT
BMW Individual Extended Merino leather interior	P1	–	–
BMW Individual Full Merino leather interior	–	P1	P1
Aluminum Trace interior trim	S	NA	NA
Carbon Fiber Black interior trim	NA	S	S
High-gloss Dark Ash wood interior trim	NC	NA	NA
Anthracite wood interior trim	NC	NA	NA
Gray Poplar wood interior trim	NA	NC	NC
BMW Individual interior trims: Dark Red Sycamore	P1	P1	P1
Walnut Honey wood	P1	NA	NA
Piano Finish Black	P1	P1	P1
White Ash wood trim	NA	P1	P1
Power windows with key-off operation, 1-touch open/close & anti-trapping function	S	S	S
All-window switch	NA	NA	S
Power front door-window sealing system	–	S	S
Power retractable rear window	NA	NA	S

S – Standard
OPT – Optional
NC – No extra cost

P1 – Priority 1 option
NA – Not available
– – Not applicable

ZDA – Driver Assistance Package (requires Executive Package) ZEC – Executive Package

Standard & optional features

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

	M5	M6 Coupe	M6 Convertible
Comfort & convenience (cont.)			
Dual-zone automatic climate control with left/right temperature & air-distribution controls, automatic recirculation control, bi-directional solar sensor, 5 intensity settings, activated-charcoal interior air filtration, Heat at Rest, ALL function & other features	S	S	S
Automatic ventilation function for use in parked vehicle	S	S	S
Additional climate-control features for driving Convertible with top down: speed-dependent air-volume control, ambient-temperature-sensitive interior-temperature control	–	–	S
4-zone automatic climate control with full left/right temperature & air-distribution controls front & rear, additional air outlets in B-pillars, draft-free air delivery, plus all features of standard dual-zone system	ZEC	NA	NA
Alcantara headliner in Anthracite color	S	S	–
Alcantara headliner in upholstery color	NC ⁵	NC ⁵	–
2-way power Contour moonroof with 1-touch opening & closing, anti-trapping function, opening from remote, power-operated interior shade	S	NA	–
iDrive system with 10.2-in. (diagonal) high-resolution control display, GPS Navigation, Voice Command, Real Time Traffic Information, On-board Computer, automatic ventilation; direct-select radio, media & phone ⁶ menus + Back & Option keys, 8 Programmable Memory keys & many other functions	S	S	S
M Head-up Display	ZEC/OPT	ZEC/OPT	ZEC/OPT
Logic7 AM/FM/HD/CD/MP3 audio system with 16 (M5 & M6 Coupe) or 12 speakers (M6 Convertible), Radio Data System (RDS), in-dash single-disc CD player, auxiliary audio input, FM diversity antenna system, Dirac Live Sound Processing, Surround Sound & other features	S	S	S
Bang & Olufsen premium audio system with 16 speakers, Dirac Dimensions™ acoustic signal processing, Surround Sound, illuminated aluminum speaker bezels; front center-fill midrange & tweeter retract when system is off; includes upgraded audio power & componentry, all features of standard premium system	OPT	OPT	OPT
80-GB hard drive providing data storage for Navigation, audio system, phonebook & Voice Command; ripping capability from CD & DVD players	S	S	S
iPod/USB Adapter	S	S	S
BMW Apps including Smartphone Integration	ZEC/OPT	ZEC/OPT	ZEC/OPT
Rear Seat Entertainment with dual monitors	OPT	NA	NA
Satellite Radio with 1-year subscription	ZEC	ZEC	ZEC
Enhanced Bluetooth mobile-device interface with high-capacity phonebook download (Combox Controller)	S	S	S

5 – Requires BMW Individual Extended Leather upholstery in Platinum/Black, Champagne/Black or Silk Gray/Black (M5); or BMW Individual Full Leather in Platinum Black, Amaro Brown or Champagne (M6 Coupe).

6 – Phone controls active when approved mobile device is paired with Bluetooth interface.

S – Standard
OPT – Optional
NC – No extra cost

NA – Not available
– – Not applicable
ZEC – Executive Package

Standard & optional features

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

Comfort & convenience (cont.)	M5	M6 Coupe	M6 Convertible
Power outlets in front console, glove compartment, passenger's footwell, rear of center console & trunk	S	–	–
Power outlets in front console, front center storage compartment	–	S	S
Storage bins or compartments in center console, under front center armrest, in doors, on backs of front-seat backrests; storage net in passenger's footwell	S	S	S
Split folding rear seats	S	NA	NA
Power rear-window & manual rear door-window sunshades	ZEC	–	–
Power rear-window sunshade	–	ZEC	–
Floor mats, front & rear	S	S	S
Fully finished trunk with inside trunk release	S	S	S
Variable softtop storage compartment	–	–	S
Ski bag	S	S	S
Automatic trunk opening & closing	ZEC	NA	NA
Safety & security	M5	M6 Coupe	M6 Convertible
Dynamic Stability Control (DSC), including M Dynamic Mode , electronic brake proportioning, antilock braking, cornering/braking stability enhancement, Brake Standby, Brake Drying, M Active Differential	S	S	S
Night Vision with Pedestrian Detection	OPT	OPT	OPT
Rear-view camera	S	S	S
Side- & Top-view cameras (Surround View)	ZDA	ZDA	ZDA
Automatic High Beams	ZEC/OPT	ZEC	ZEC
Lane Departure Warning	ZDA	ZDA	ZDA
Active Blind Spot Detection	ZDA	ZDA	ZDA
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags with variable venting	S	S	S
Active head restraints, front seats	S	S	S
Safety belts at all seating positions: Front – with automatic tensioners, 2-stage adaptive force limiters & belt stoppers Rear outboard – with force limiters & belt stoppers	S	S	S
Seat-integrated front safety belts with power belt-height adjustment	NA	NA	S
LATCH attachments in rear seat for installation of child restraint seats	S	S	S
Interlocking door anchoring system for side impacts	S	S	S
Front- & rear-seat Head Protection System	S	S	S
Front-seat side-impact airbags	S	S	S
Active Knee Protection for driver & front passenger	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S

S – Standard
OPT – Optional

NA – Not available
– – Not applicable

ZDA – Driver Assistance Package (requires Executive Package)
ZEC – Executive Package

Standard & optional features

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

Safety & security (cont.)	M5	M6 Coupe	M6 Convertible
Post-impact safety measures:			
Unlocking of central locking system	S	S	S
Switch-on of hazard flashers	S	S	S
Switch-on of interior lighting	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S
BMW Assist, including Enhanced Automatic Collision Notification, SOS button, Enhanced Roadside Assistance, TeleService ⁷ , BMW Assist Safety Plan ⁷	S	S	S
Central locking system with selective unlocking	S	S	S
Coded Driveway Protection	S	S	S
Pathway Lighting ⁸	S	S	S
Alarm system with operation from remote, interior motion detector	S	S	S

7 – Requires BMW Assist annual fee after 4th year. 8 – Duration adjustable via iDrive.

S – Standard

Technical specifications

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

General	M5	M6 Coupe	M6 Convertible
Curb weight, lb.:			
Manual transmission	4354	NA	NA
M Double-Clutch Transmission	4387	4255	4508
Weight distribution, front/rear, %:			
Manual transmission	52.3/47.7	–	–
M Double-Clutch Transmission	52.5/47.5	52.6/47.4	50.9/49.1
Wheelbase, in.	116.7	112.2¹	
Track, front/rear, in.	64.1/62.3	64.2/63.5¹	
Length, in.	193.5	193.0¹	
Width, in.	74.4	74.8¹	
Height, in.	57.4	54.1	53.7
Accommodations	M5	M6 Coupe	M6 Convertible
Seating capacity, persons	5	4 ¹	
Shoulder room, front/rear, in.	58.3/56.2	56.9/49.7	56.9/49.6
Head room, front/rear, in.	39.1/38.0	40.0/35.7	40.3/36.5
Leg room, front/rear, in.	41.4/36.1	42.1/30.5 ¹	
EPA passenger volume, cu ft.	101.5	86.8	87.9
EPA cargo volume, cu ft.	14.0 ²	13.0	11.0 ³
Body	M5	M6 Coupe	M6 Convertible
Type	4-door sedan	2-door coupe	2-door convertible
Aerodynamic drag coefficient	0.33	0.32	0.33
EPA size classification	Compact	Subcompact ¹	
Engine & electrical ⁴	M5	M6 Coupe	M6 Convertible
Engine type	DOHC (4-cam) 32-valve V-8, aluminum construction with silicon-impregnated cylinders, direct fuel injection, two twin-scroll turbochargers, Valvetronic variable intake-valve lift, crossover exhaust manifold , Double VANOS ⁵ variable intake- & exhaust-valve timing		
Bore x stroke, mm/in.	89.0 x 88.3/3.50 x 3.48		
Displacement, cc/cu in.	4395/268		
Compression ratio	10.0:1		
Power @ rpm, hp	560 @ 5750-7000		
Torque @ rpm, lb-ft.	500 @ 1500-5750		
Engine-management system	Dual Motronic MEVD 17.2.8 with knock control, Valvetronic, variable valve timing, engine cooling, Active Sound Design & other functions included in control strategy		
Fuel requirement	Premium unleaded		
Fuel capacity, U.S. gal.	21.1		
Battery capacity, amp-hr.	105		
Alternator output, amp./watt	209/2926		

1 – Specification applies to both M6 models.

2 – Expandable via split folding rear seats, which are standard.

3 – With softtop raised.

4 – Specification applies to all models.

5 – VANOS = **V**ARiable **N**Ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

Technical specifications

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

Drivetrain	M5	M6 Coupe	M6 Convertible
Drive system	Front engine/rear-wheel drive ⁴		
Manual transmission	Type G, 6-speed	NA	NA
Ratios: 1st	4.06:1		
2nd	2.40:1		
3rd	1.58:1		
4th	1.19:1		
5th	1.00:1		
6th	0.87:1		
Reverse	3.68:1		
Final drive ratio	3.15:1		
M Double-Clutch Transmission	M-DKG 436, 7-speed⁴		
Ratios ⁴ : 1st	4.81:1		
2nd	2.59:1		
3rd	1.70:1		
4th	1.28:1		
5th	1.00:1		
6th	0.84:1		
7th	0.67:1		
Reverse	4.17:1		
Final drive ratio	3.15:1⁴		
Chassis	M5	M6 Coupe	M6 Convertible
Body/frame construction	Unitized all-steel structure with aluminum hood, front spring towers & side panels (fenders), doors ⁴		
Front suspension	BMW M multi-link double-wishbone system: upper & lower lateral links (double-pivot lower links) & steering knuckle of forged aluminum; coil springs, anti-roll bar; M Dynamic Damping Control, reinforced subframe⁴		
Rear suspension	BMW M 4-link Integral IV suspension with forged-aluminum upper & lower links & wheel carriers, coil springs, anti-roll bar; M Dynamic Damping Control; subframe mounted directly to main structure, reinforced by aluminum thrust plate⁴		
Servotronic steering system	Rack & pinion, vehicle-speed-sensitive hydraulic power assist with 3 levels of power assist⁴		
Overall ratio	Mechanically variable; mean ratio is 13.1:1⁴		
Turns lock-to-lock	2.6⁴		
Turning circle, ft.	41.3	39.7¹	
4-wheel disc brakes	Compound, ventilated & cross-ventilated; vacuum-assisted; 6-piston fixed calipers front, single-piston calipers rear⁴		
Front diameter x thickness, mm/in.	400 x 36/15.7 x 1.42⁴		
Rear diameter, mm/in.	396 x 34/15.6 x 1.34⁴		

¹ – Specification applies to both M6 models.

⁴ – Specification applies to all models.

Technical specifications

2013 M5 & M6

Bold within table indicates distinction from 550i & 650i model respectively.

Chassis (cont.)	M5	M6 Coupe	M6 Convertible
Alloy wheels: standard	19 x 9.0 front/19 x 10.0 rear⁴		
optional	20 x 9.0 front/20 x 10.0 rear⁴		
Performance tires: standard	265/40R-19 front / 295/35R-19 rear^{4,6}		
optional	265/35R-20 front / 295/30R-20 rear^{4,6}		
Stability-enhancement system	BMW M-calibrated Dynamic Stability Control (DSC), including all-speed traction control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Brake Control, Brake Drying & Start-off Assistant; M Dynamic Mode, M Active Differential⁴		
Performance & efficiency data	M5	M6 Coupe	M6 Convertible
Acceleration, 0-60 mph, sec. ⁷ : Manual transmission	4.3	–	–
M Double-Clutch Transmission	4.2	4.1	4.3
Top speed, mph ⁸ :	155 ⁴		
EPA estimated MPG, city/highway/combined: Manual transmission	15/22/17	–	–
M Double-Clutch Transmission	14/20/16⁴		

4 – Specification applies to all models.

6 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M5 & M6 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

7 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle, road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

8 – Electronically limited.

2013 M3:

“BMW M within reach” – the amazing high-revving V-8 M Car, available as Coupe & Convertible.

When the current M3 was introduced as an all-new generation, BMW M broke the mold of existing stereotypes and limitations. This new M3 was even quicker, even more talented at conquering curves and corners, even more responsive to its driver's demands – and yet it was also more refined and sophisticated in the creature comforts it offers.

The intervening years haven't diminished the M3's superiority among European performance machines one bit. On the contrary: right up to the present, it was still winning hearts and minds. For example:

- *Automobile* December '12, in a comparison test with Audi RS5, Mercedes-Benz C63 AMG and Porsche Boxster S (see top of next column): “After driving the Audi and the Mercedes, the BMW reveals a lightness and agility that you might otherwise take for granted. Its svelte chassis is beautifully complemented by surprisingly light steering that guides the car with pinpoint accuracy, while the suspension is planted but subtle. The M3 is the embodiment of everything that BMW stands for: a potent engine, a balanced chassis, clairvoyant steering, and – the key differentiator – how they're all seamlessly integrated together.”

“That's exactly what makes the M3 our pick over the Mercedes-Benz and the Audi. It's not just a faster 3 Series, it is a totally different car. A better car. While AMG and Quattro add speed and sound, M adds emotion. We're feeling it.”

(Being a 2-seater sports car, the Boxster was not evaluated as a direct competitor to the other three models.)

- *Automobile* January '12, along with the regular 3 Series, named one of the magazine's All-Stars: "...18 distinct models of coupes, sedans, convertibles and station wagons powered by five engines ranging from a 36-highway-mpg diesel to the 414-hp V-8 screamer in the M3. But all 3 Series, whether targeted at hausfraus or would-be racers, share two characteristics: they're rewarding to drive, and they're happy to be driven hard.”
- *Car and Driver* January '12, also along with the 3 Series, named one of its 10Best: “Don't forget the M3, either, which remains magnificent in the twilight of a celebrated life, thanks largely to that lusty 414-hp, 8300-rpm V-8.”
- *Motor Trend*, January '11: “Finding another car that pleases its driver in such myriad forms might as well be the quest for the Holy Grail; the only obvious replacement for our M3 is the next one. The World's Greatest All-Around Car? Unquestionably.”
- *AutoWeek* online, December 2, 2010: "...this is one of the best and most practical performance cars on the planet.”

For 2013, the M3 line again consists of Coupe and Convertible; an M3 version of the current, all-new 3 Series Sedan is under development. This M3 section of **Fast Facts** focuses on the attributes and features that distinguish the two M3 models

from their 335i/s counterparts. Consult the **3 Series Coupes & Convertibles** section for a comprehensive listing and descriptions of the key attributes and features they share with the M3. In addition to modest changes in the regular-production 2013 M3s, there are two new limited-production models, described below and on the next page.

What's new for 2013

As of 7/12 production:

New standard equipment

Both models:

- Smoker's Package returns, placing a convenient accessory power outlet at the forward end of the center console

Revised standard equipment

- Rearranged icons on adjusting controls of manual front seats (Coupe only)

Revised options

- BMW Individual Composition no longer offered on Convertible

Changes shared with other Series

- Climate controls: “snowflake” symbol changed to “A/C,” AUC (automatic recirculation) supplemented by “M” (manual) setting, blower control adds “OFF” label
- “CD” key at iDrive controller changed to “Media” (with Navigation/iDrive option)

Two limited-production special editions

M3 Coupe Lime Rock Park Edition. Developed in collaboration with racing driver Skip Barber and the historic Connecticut race track Lime Rock Park, which Barber now owns. 200 copies of this special edition were built

during the summer; each modified and equipped as follows:

- **Fire Orange exterior paint**
- **Carbon-fiber aerodynamic components** consisting of “chin splitters” in the outboard front air intakes and trunklid spoiler in contrasting, “natural” gray color. The standard carbon-fiber roof panel, which saves weight and lowers the Coupe's center of gravity, is retained.
- **Competition Package** as described under **packages & options**
- **Lightweight Inconel/titanium muffler.** Inconel is a family of nickel-chromium-based super-alloys suited to high-temperature applications (such as the exhaust system of a high-performance automobile).
- **Cloth/leather upholstery,** the standard M3 Coupe treatment in Anthracite cloth and Black leather, as described under **unique upholstery choices.**
- **Alcantara-wrapped, flat-bottom steering wheel** with blue index stripe
- **Numbered plaque** on center console, special decal on left rear-quarter window and certificate of authenticity.

During production, most packages and stand-alone options from regular production were available, so that individual vehicles may have been differently equipped. Certain options – moonroof, non-black interior color and non-standard interior trim – were not available.

M3 Coupe Frozen Limited Edition. This model, of which just 150 examples are available to U.S. customers beginning with January '13 production, is fitted

out to be a real eye-catcher with these distinctive treatments and features:

- **BMW Individual Frozen exterior paint** in a choice of Red, White or Blue. Compared to conventional exterior paints with gloss finish, the sculptural character of this paint highlights the M3 Coupe's athletic contours. To achieve this effect, a special BMW-developed silk-matte clearcoat is applied over the metallic base coat. Among other current production models, only 6 Series Gran Coupes are available in Frozen colors at the time of publication.
- **Competition Package**, but with matte-black wheels instead of this package's regular silver finish

- **High-gloss black kidney grilles, side gills and exhaust tips**
 - **Extended Novillo leather upholstery** with contrast stitching in the exterior color on seats, head restraints, door inserts, armrests, center console and door pulls
 - **Carbon Leather interior trim** with edge stitching in the exterior color
- Like the Lime Rock Park edition, the Frozen Limited retains the standard carbon-fiber roof panel; it also comes with the normally optional Premium Package and can be further individualized with a selection of the regular-production options as desired by customers.

M3 models & key features

This information lists major features, and helps position and distinguish the two models from each other. For a comprehensive summary of features, see pages 658-665.

M3 Coupe

The "core" M3 model: there has always been a 2-door, closed-body M3 while other body styles haven't always been offered. Like all current M3s, it is powered by the magnificent 4.0-liter, 414-hp BMW M V-8 engine via either a 6-speed manual transmission or the spectacular 7-speed M Double-Clutch Transmission (M DCT) with Drivelogic. As the listing here shows, the Coupe leads the way with an impressive array of key attributes and features. Like this section overall, the listing here focuses on the features and attributes that differentiate the M3 model from its 335i or 335is counterpart (in this case the 335is Coupe).

Exterior design & function

- Front bumper/spoiler ensemble with 3 large lower air intakes; foglights omitted for maximum airflow
- Aluminum hood, entirely different from 3 Series, with –
 - "Power dome," making space for engine's voluminous induction system
 - Additional air intake, to left of power dome (simulated intake on right side for visual symmetry)
 - 18-in. BMW M Double Spoke wheels (design #219M)
- More extensive underbody fairing, with special cooling airflow to differential
- Traditional BMW M side "gills" with M3 logo and integrated side blinkers
- Unique side sills (rocker panels) with sharp accent lines
- Standard Satin Chrome Shadowline side-window trim
- M exterior mirrors, shaped to enhance aerodynamics and reduce wind noise; distinctive

appearance too, with body-color shell, contrasting black base and double-bridge connection to body¹

- Carbon-fiber roof
- Discreet but effective trunklid spoiler lip
- Rear bumper/spoiler/diffuser ensemble
- Four polished stainless-steel exhaust outlets

Performance & efficiency

- BMW M 4.0-liter V-8 engine – 414 hp, 295 lb-ft. torque (335is: 3.0-liter twin-turbo inline 6-cylinder; 320 hp, 332 lb-ft., 370 lb-ft. in Overboost mode)
- Automatic start/stop function for engine
- 6-speed manual transmission, Type G
- Optional M Double-Clutch Transmission with Drivelogic (M DCT Drivelogic)
- Larger fuel tank than in 3 Series: 16.6 gal., vs. 16.1
- M Variable Differential Lock
- Specially modified and calibrated front and rear suspension, almost completely distinct from 3 Series
- Special M3 steering system: "quicker" than 3 Series, with Servotronic vehicle-speed-sensitive power assist (Servotronic available on 335i/is models only in connection with optional Active Steering. Active Steering not available on M Cars).
- Compound, cross-ventilated disc brakes with black-painted calipers; larger dimensions than 335i/is

1 – With Black paint colors, there is less contrast here.

M3 models & key features

This information lists major features, and helps position and distinguish the two models from each other. For a comprehensive summary of features, see pages 658-665.

- 18 x 8.5 front/18 x 9.5 rear M Double Spoke wheels (#219M) with 245/40R-18 front / 265/40R-18 rear performance tires²
- BMW M-calibrated Dynamic Stability Control (DSC)
- MDrive system

Comfort & convenience

- Doorsill trims with M3 logo
- M sport steering wheel with extra-thick rim, thumb rests, M logo on bottom spoke
- Unique speedometer and tachometer dials with –
 - Titanium-finish outer rings
 - Red indicator needles
 - Specific scales (speedometer to 200 mph/330 km/h, tachometer to 9000 rpm)
- M logo on tachometer face
- Oil-temperature gauge, also in tachometer face
- Color-coded variable warning segment on tachometer, yellow/red; with M DCT, Upshift Lights added at top of tachometer
- Short shift lever with illuminated shift pattern and M logo, Nappa-leather grip; with M DCT, an even shorter E-shift lever
- Power and DSC switches adjacent to shift lever; EDC switch added in vehicles so equipped
- M front sport seats with power-adjustable backrest width and manual thigh-support adjustment
- Cloth/Novillo leather upholstery in Anthracite/Black
- Titanium Shadow interior trim standard; other trims optional
- Wirkvelours headliner in Anthracite color

Packages & options

- Available option packages:
 - Competition (M Electronic Damping Control, sport mapping for EDC/DSC, lowered suspension, 19-in. wheels and performance tires)
 - Premium (auto-dimming, power-folding exterior mirrors, Park Distance Control (rear), digital compass in interior rearview mirror, Comfort Access keyless entry, BMW Universal Transceiver, 14-way power M sport seats, Novillo leather upholstery, choice of 3 interior trims, Navigation system + iDrive, power rear-window sunshade. Special Novillo colors and Extended Novillo leather at upgrade cost)
 - Cold Weather (retractable headlight cleaning system, heated front seats, ski bag)
- Stand-alone options:
 - 7-speed M Double-Clutch Transmission with Drivelogic (M DCT Drivelogic)
 - M Electronic Damping Control
 - 19-in. wheels and performance tires²
 - Automatic High Beams
 - Park Distance Control, rear
 - Comfort Access keyless entry
 - 2-way power moonroof
 - Novillo leather upholstery
 - Extended Novillo leather upholstery³
 - Blue-Gray Brushed Aluminum, Carbon Leather or Sycamore Anthracite trim
 - Heated front seats
 - Navigation system + iDrive + BMW Assist + Enhanced Bluetooth/USB connectivity
 - BMW Individual Enhanced Premium Sound System

- Satellite Radio with 1-year subscription
 - BMW Apps + Smartphone Integration
 - Power rear-window sunshade
 - Priority 1 stand-alone option⁴
 - Rear-spoiler delete

M3 Convertible

With this M3 model, our customers can truly have it all: M3 performance, plus all the dazzling M3 technology and luxury, plus the beautifully functional retractable hardtop for glamour, open-air driving enjoyment and Coupe-like weather protection. Key points of differentiation from M3 Coupe include:

- Power retracting hardtop, fully automatic. Lowers in just 22 seconds, including the side windows; raises in 23 sec.
- Underbody reinforcements
- Performance and fuel economy slightly affected by greater weight of Convertible (+441 lb.)
- Rear side windows open, include 1-touch opening; vs. Coupe's fixed windows
- Leather upholstery standard, cloth/leather not available. Sun Reflective Technology significantly reduces solar heating of leather; this treatment not available in Coupe.
- Variable AM/FM antenna position, hardtop raised/lowered
- 1-piece folding rear backrest; converts rear seat into additional cargo space, with hooks for grocery bags. Split folding rear seats not available.
- Storage compartment behind rear backrest
- Variable trunk space with top up/down
- Front seat-integrated safety belts; belt presenters not necessary
- Side-impact airbags deploy

upward for head protection, vs. Coupe's Head Protection System deployed from roof

- Rollover Protection System
- Active Knee Protection
- Rear head restraints differ
- Same packages and options as for M3 Coupe, except:

- Competition Package not offered
- Premium Package – leather and power front seats not included, as standard; no upholstery upgrades within package
- Cold Weather Package – through-loading system replaces Coupe's ski bag, can hold 2 small golf bags
- Comfort Access keyless entry includes Comfort Loading (intermediate hardtop position for easy trunk loading)
- Special Novillo colors and Extended Novillo leather offered only as stand-alone options, not as Premium Package upgrades (because leather is standard)
- Through-loading system as stand-alone option
- Navigation system adds Convertible climate mode
- BMW Individual Enhanced Premium Sound System has 12 speakers, vs. 16
- Moonroof not available
- Power rear-window sunshade not available

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

3 – Requires Navigation system.

4 – Priority 1 options accurate at time of publication but subject to change. For current model-specific Priority 1 standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

M3 key features

Except as noted, both current M3 models offer the following features:

Exterior design & function

Familiar 3 Series shapes, expressive M details

The two 3 Series body types on which M3s are based – Coupe and Convertible – are plenty sporty; after all, they're BMWs. From these shapes, BMW M has crafted two models that express M3 capability in a consistent way, "showing what an M3 can do" by its functional and esthetic distinctions from the 3 Series counterparts.

At the front

Extensive changes here; every panel from the A-pillars forward is M3-exclusive. Three large openings, spanning essentially the entire width of the front bumper/spoiler ensemble, supply the 414-hp V-8 with the large volumes of air it requires; they also supply air to the cooling systems for engine, steering and transmission fluid. These air intakes are shaped to harmonize with the headlight units; at the spoiler's outer edges are downward extensions that could be called "flaps" and have the function of optimizing airflow around the wide tires.

The hood is not only shaped differently from that of 3 Series models, but also made of aluminum (3 Series: steel) to save weight and enhance weight distribution. It includes a "power dome" that clears the engine's big air plenum. This is flanked by an air intake on the left that provides extra air for the engine; a simulated intake on the right is there for visual symmetry.

In profile

Evidence of M3 distinction is ample and dramatic. The distinctive nose,

dropping lower at the very front, is visible in side view. So is the projection of the main side character line into the front side panels, where it wraps into side gills with a chrome "fin" integrating the side blinker and M3 logo.

Strongly profiled side sills (rocker panels) lend visual energy too, while M Double Spoke wheels and ultra-low-profile performance tires (18-in. standard, 19-in. optional) make a decisive connection to the road. On the Coupe only, the carbon-fiber roof panel forms a curved line that becomes the rear window's edge; a discreet but effective trunklid spoiler adds a functional and esthetic accent to the Coupe's tail, and can be deleted at no extra cost.

At the rear

On the Coupe, the trunklid spoiler is much in evidence. On both models, an expressly sporty bumper/spoiler ensemble forms a central diffuser and, below that, frames the four chrome exhaust outlets that speak M Power so eloquently.

Special M exterior colors

Exclusive BMW M colors further enhance M3 distinctiveness. In addition to three standard colors, the M3s offer five of these:

- Interlagos Blue – a deep blue
- Silverstone – a bluish-gray tone, silver-like
- Le Mans Blue – a bright medium blue
- Jerez Black – adding sparkle to a traditional favorite
- Melbourne Red – warm red with copper-like cast.

Each of these M color names refers to a famous race course on the Formula 1 circuit: Interlagos

in Brazil, Silverstone in England, Le Mans in France, Jerez in Spain, and Melbourne for the location of Australia's Albert Park race course.

Also offered are Mineral White, an elegant metallic first seen on the 7 Series and now more widely available among BMW vehicles; Space Gray, also a metallic; and the standard (non-metallic) Alpine White and Jet Black.

Performance & efficiency

4.0-liter DOHC (4-cam) 32-valve V-8 engine

Today's M3, the 4th generation, advanced over its predecessor not only in cylinder count (8) but also in power (414 hp) and revving capability (8400 rpm). Called S65, this V-8 employs exotic sports features and attributes to achieve such dramatic results:

Weight-efficient aluminum construction with bedplate-type cylinder block for immense strength, yet moderate weight.

4.0-liter displacement, less than in some M3 competitors. This relates to the engine's...

High-rpm path to performance.

To increase an engine's power, engineers can enlarge it or increase its rotational speed. The latter path, chosen by BMW M, saves weight in the powertrain (engine, transmission, driveshaft, differential) and vehicle as a whole, enhancing agility. It also makes for a sportier driving experience, featuring the sound of a finely honed engine at high rpm and encouraging the driver to "use the gears" for peak performance.

Induction system. A single induction path and throttle for

each cylinder. The previous M5/M6 V-10 engine shared this M-definitive feature as well as the high-rpm strategy.

Low-inertia valvetrain. Like other M engines, the S65 does not employ the Valvetronic variable valve lift of most of BMW's current engines. Its 4 valves per cylinder are opened via barrel-type hydraulic lifters derived from racing practice. Combined with hollow camshafts, the valves are ultra-light to reduce valvetrain inertia and enhance engine response.

Low-pressure M Double VANOS system. Uniquely in a high-rpm M engine, the extra-rapid variation of valve timing necessary at engine speeds over 8000 rpm is achieved without a separate oil pump. This reduces weight and internal power loss.

Advanced electronics, with ionic-current knock control. This technology enables quicker, more precise and cylinder-specific sensing of, and response to, incipient knock; the engine can "edge closer" to its full potential in the upper power and rpm reaches.

No air-mass meter. Conventionally, an engine's air intake is measured by a meter through which incoming air flows. This is accurate, but imposes a slight restriction on that airflow. To eliminate this little impediment, M engineers took advantage of the engine electronics' extremely high computing power to calculate air mass from intake air pressure and engine speed without a meter.

Lubrication system: g-sensitive lubrication with two oil sumps and two pumps for effective

M3 key features

Except as noted, both current M3 models offer the following features:

lubrication even at the high cornering performance the M3s can achieve.

Ultra-efficient exhaust system, with elaborate headers at the engine, dual pipes leading rearward, and quad outlets. Resistance to exhaust flow is minimized.

Via the console-mounted Power button, the M3 driver can choose between two levels of response to the accelerator pedal: Normal, already quick and pleasing; and Sport, ultra-quick and exploiting the V-8's inherent reflexes. When the M3 is equipped with its Navigation/iDrive option, an additional mode, Sport Plus, is available in the MDrive submenu of iDrive.

In its December '09 issue, *Motor Trend* editors summed up the beauty and versatility of the M3 engine and its Power button: "You can slink about town and everything is sane and sedate. Pull it over to [M DCT's] paddle mode, hit the power buttons, and it is so on. I crave that exhaust note, not your typical V-8 growl but far from wimpy...The V-8 is magical: smooth, powerful, torquey, delivering sublime pipe music."

6-speed manual transmission (standard)

Standard in both M3s is a 6-speed manual transmission, with BMW's typical precise, driver-pleasing shift linkage and short shift lever. For always-sufficient lubrication, this "gearbox" has its own oil pump and oil cooler.

A dual-mass, hydraulically damped flywheel between engine and clutch helps ensure

smooth engagement. The clutch itself is also "dual" in that it has two discs so as to be able to transmit the M3 engine's tremendous performance without taking up too much space or demanding undue effort from the driver's left foot. (This is not to be confused with the M DCT's dual clutches, next.)

Each primary clutch plate is made of forged steel for high strength. The clutch is self-adjusting, maintaining consistent pedal forces over its service life; this helped the engineers achieve the required high torque capacity with reasonable pedal effort.

The gearbox is the high-capacity Type G, as also used in BMW's other top-performance models, and has the same gear ratios as in those models.

7-speed M Double-Clutch Transmission with Drivelogic (M DCT Drivelogic) (optional)

Double-clutch transmissions (DCT) are a significant development, a "coming thing" especially for sporting vehicles. The M3 was the first BMW model to offer this highly versatile and efficient form of transmission; as such it employs a BMW M version, called M DCT Drivelogic.

Currently, several "regular" BMW models – 135i, 335is and Z4 35i/is – offer a less elaborate version, called simply DCT. The new M5 and M6 employ an evolved M DCT version with fewer shift programs than the M3's. All DCT versions have 7 forward speeds and share their basic operating principles; see **BMW features** for a detailed presentation of how DCT works, what it's like to drive

a vehicle with DCT, and how the various versions differ. Particulars of the new M5/M6 M DCT are explained in those models' section of this **Fast Facts** edition.

Automatic start/stop function (standard both models)

As BMW's first non-hybrid U.S. model to incorporate this function, M3 models have benefited from an increase in fuel efficiency, particularly in stop-and-go conditions and at traffic lights. Under certain defined conditions, the engine shuts off when the vehicle comes to a stop, and re-starts in a fraction of a second for drive-off.

As of the 2013 model year, a wide range of BMW models include auto start/stop, though the M3s' 3 Series Coupe-Convertible counterparts do not yet offer it; the system's functioning is described in **BMW features**.

M3 suspension system: purpose-engineered and -built for performance driving

Working from the outstanding concept of the 3 Series' suspension system, BMW M's chassis engineers changed virtually every detail to achieve M Car handling and roadability. All its links, except one in the rear suspension, are M3-specific. There's more aluminum in the rear suspension. Some of the rubber bushings have been replaced with firmer, more precise balljoints. And every facet of calibration and fine-tuning has been determined and specified for M3 alone.

One thing that doesn't change from regular 3 Series models: typical BMW weight distribution, varying no more than 2.8% from the ideal 50% front/50% rear

weight distribution for both M3 models.

Front suspension

M3 front suspension is conceptually 3 Series, but fully "conquered over" by BMW M for ultimate handling on the track.

It's BMW's time-honored double-pivot strut-type system, with two lower arms to provide great stability under all road conditions and space for extra-large brake discs. Both of these lower arms are of light, yet strong forged aluminum. Additionally, on M3s only, the strut tubes are of aluminum.

A **thrust plate** is added behind the suspension subframe. Made of thick aluminum, this reinforcement handles the immense lateral thrust generated by the M3's tires in hard cornering.

All M3s' front track is 60.6 in., fully 1.5 in. greater than that of the already sporty and competent 335is Coupe and Convertible models. And finally, every aspect of the front suspension system – spring rates, shock-absorber tuning, anti-roll-bar diameter and all links – has been exhaustively tested and calibrated to help give M3s what inspired *Motor Trend* to rave, "The M3 is also gifted with a chassis that borders on the sublime," in its September '09 issue.

Rear suspension

M3 rear suspension is analogous to M3 front suspension in that it retains the 3 Series' elaborate, sophisticated 5-link concept while changing virtually every component to suit M3 handling priorities. Actually, aside from the retention of one per side, all rear suspension links

M3 key features

Except as noted, both current M3 models offer the following features:

have been changed from steel to aluminum and so have the shock-absorber tubes. Three of the regular models' rubber bushings – themselves chosen and finely calibrated to the more general usage of those 3 Series models – are replaced by firmer, more precise steel balljoints that contribute to M3s' razor-sharp handling response. The M3 rear track is a full inch greater than that of 335is models.

Of course here, as at the front, all calibrations – of spring rates, shock-absorber tuning, anti-roll-bar diameter and the remaining rubber bushings – are M3-specific and arrived at through intense testing and development. Long V-braces are added to reinforce the M3 body structure in the area of the rear suspension.

M Electronic Damping Control (optional)

One of several versions of BMW's electronically variable shock absorbers, this system is described in detail in **BMW features**. Here's what the September '09 issue of *Motor Trend* had to say about it: "The M3 is gifted with a chassis that borders on the sublime. Electronic Damping Control (with Comfort, Normal and Sport modes) constantly adjusts the shocks; the handling is always ultra-precise and controlled, yet the ride doesn't beat you up, even in Sport mode."

M Variable Differential Lock: putting power to the road, the BMW M way

Mechanical limited-slip differentials are part of the BMW M tradition of ultimate road handling. BMW M engineers developed a more capable mechanical "l-s diff"; called

the M Variable Differential Lock, this concept appears in earlier M5 and M6 models as well as current M3s. For an explanation of how this ingenious device works, see **BMW features**.

M3 steering system: M precision, two choices

M3 models come standard with a steering system specially engineered to guide these sporting vehicles precisely and with strong road feel. Its features:

- **Hydraulic power assist** as on all M models to date.
- **Servotronic car-speed-sensitive power assist**. To keep the effort level low in parking and low-speed maneuvers, Servotronic delivers maximum assist at a standstill, then progressively decreases assist with increasing vehicle speed to preserve road feel.
- **Quicker ratio**: 12.5:1 overall steering ratio vs. 335is models' 16.0:1, or about 22% quicker. This means less turning of the steering wheel for any given maneuver.
- **Driver-selectable assist level**. Via the M button or the MDrive submenu of iDrive, the driver may choose between two overall levels of power assist and capture the selected setting on the M button. The Normal (default) setting gives a level of assist most drivers will perceive as sporty, but not greatly different from that of regular-production BMW models. The Sport setting gives a noticeably higher level of driver effort to convey an impression of greater sportiness. In either setting, Servotronic varies assist as described above. These settings are associated

with either the M button (which always selects the Sport mode in vehicles without Electronic Damping Control or iDrive) or the Electronic Damping Control modes as described on following pages under MDrive.

Immensely powerful, fade-resistant compound, cross-drilled brakes

Powerful, highly fade-resistant brakes are always a BMW strength; even more so with the M Cars, which take all aspects of BMW performance to an even higher level.

So it is that M3s include compound, cross-drilled brakes as standard equipment. Their dimensions are:
Front – 360-mm diameter/
30-mm thickness (14.2/1.18 in.)
Rear – 350-mm diameter/
24-mm thickness (13.8/0.94 in.).
For comparison, 335i and 335is Coupes and Convertibles come with 348 x 30 front / 336 x 22-mm rear brakes (13.7/1.18 in. front / 13.2/0.87 in. rear) that are internally ventilated, but not cross-drilled nor of compound construction. The brake calipers – highly visible through the open-design wheels – are painted in an eye-catching, heat-resistant semi-gloss black.

For an explanation of compound, cross-drilled brakes as used on M3, M5 and M6 models, see **BMW features**.

Wheels and tires: ultimate grip in style in 18- and 19-in. sizes², three wheel designs, high-performance tires

18-in. equipment continues as standard on both M3 models. The standard M Double Spoke wheels (design #219M, 10 pairs of spokes) are sized 18 x 8.5 front/18 x 9.5 rear and wear 245/40R front / 265/40R rear tires. These compare with standard 18 x 8.0/18 x 8.5 wheels with 225/40 / 255/35 tires for the 335is models.

19-in. equipment comes in two forms for the M3s:

- **M Double Spoke wheels** of design #220M, also with 10 pairs but more closely spaced spokes. Widths are 8.5 front/9.5 rear, same as for the standard 18s. These elegant forged wheels are a stand-alone option for both models.
- **M Y Spoke wheels** of design #359M. With eight sets of ultra-open Y spokes, these are part of the Coupe's optional Competition Package. Widths are 9.0 front/10.0 rear, a half-inch wider than the stand-alone option.
- Both 19-in. wheel designs carry 245/35R-19 front / 265/35R-19 rear tires.

These M3 19-in. sizes compare with 335is models' optional 8.0-in front/9.0-in. rear widths and 225/35 front / 255/30 rear tires. Thus M3 wheels and tires embody not just extra-distinctive M designs, but also wider sizes:

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

M3 key features

Except as noted, both current M3 models offer the following features:

- For the 18s, half-inch wider front wheels, a full inch wider rears, and 20-mm wider front/10-mm wider rear tires.
- Comparing 19s, the stand-alone M3 wheels are a half-inch wider front and rear and the Competition Package wheels are a full inch wider. The tire-width increment of M3 vs. 335is is again 20 mm front/10 mm rear.

Interesting here: M3 tires have the same aspect ratio front/rear: 40 for the 18s vs. 40/35 for the 335is; 35 for the 19s vs. 35/30 for the 335is. The M3s' front/rear tire-width difference is also less: 20 mm, vs. 30 mm on the 335is models. Without going into the technical reasons for this, suffice it to note that the M engineers tailor such details to BMW M's specific philosophy and targets for handling characteristics.

Specially calibrated, variable Dynamic Stability Control

DSC is standard on all current BMW models; on M models, this electronic traction and stability system is complementary to the M Variable Differential Lock.

Additionally, the DSC incorporates M-specific programming and provides an M Dynamic Mode, which can be useful to an expert driver on a track. This is described in **BMW features**. With the Competition Package, programming of DSC and the M EDC that comes with this package is even sportier.

MDrive: M technology at the driver's disposal

Via the MDrive system, the driver has myriad control settings to choose from – and an MDrive button (labeled “M”) on the

steering wheel that allows 1-touch selection of the driver's preferred combination of same. Here's how it all works.

What they mean:

Throttle response. A standard console button labeled POWER provides 2 levels of throttle response, Normal and Sport. This button doesn't affect maximum power output.

Transmission. The M Double-Clutch Transmission's Drivelogic provides 5 automated programs in Drive, D1-D5; 6 programs in Sequential, S1-S6, selectable by the DCT console switch. These of course do not apply to the available manual transmission.

M Electronic Damping Control, if present (it is optional on both models, or part of the Coupe's Competition Package), 3 settings: Normal, Comfort and Sport. Steering power assist is linked to these settings: Its Comfort mode (more power assist) goes only with the EDC Comfort setting. The steering's Sport mode (less assist) accompanies EDC's Normal and Sport modes. Comfort is the default mode.

Dynamic Stability Control. 3 settings: Normal, M Dynamic Mode and de-activated (though ABS always remains active). Fully de-activating DSC requires a long push of its console control.

Setting modes without iDrive. Settings for standard variables are permanently called up by the MDrive button: steering Sport, DCS' M Dynamic Mode, (Double-Clutch Transmission only) Upshift Lights On. These settings cannot be changed. The Power setting and those for the optional M EDC and M DCT can be captured on the MDrive button

by first setting them to preference, then pressing the button for a longer period of time. The button is now programmed to recall these settings until the driver changes them again.

Setting modes with iDrive.

All the above variables can be pre-configured in the MDrive submenu of iDrive. Once this is done, regardless of which individual settings have been selected previously by their hard controls, all variables are instantly set to the selections the driver has programmed in MDrive by pressing the MDrive button. The previously chosen individual settings will be restored when the MDrive button is pressed again. There are 3 Power settings in iDrive, vs. 2 via the console button.

Comfort & convenience

Every BMW is an Ultimate Driving Machine – yet some BMW driving machines are more Ultimate than others. That's where M Cars in general, and the M3s in particular, come in.

More than even their illustrious forebears, today's M3s elevate the already outstanding 3 Series driving and riding experience to even higher levels of driver involvement and passenger enjoyment of the BMW experience. Power front sport seats, standard in the Convertible and optional in the Coupe, include variable backrest width; their basic contours and padding are specifically M-firm, yet ergonomic and comfortable.

Instrumentation is specially designed, and calibrated to M performance parameters. Driver commands are transmitted via

a thick-rimmed M sport steering wheel, a short manual shift lever or the DCT E-shift (both with illuminated shift pattern), and M3-specific console switches for tailoring vehicle characteristics to drivers' preferences (see MDrive, previous page and at left).

Distinctive door-panel design, upholstery materials and color configurations plus a selection of special M interior trims complete a cockpit that combines “sport” and “luxury” in unique and elegant ways – while retaining the everyday practicality that has always accompanied M3 driving excitement.

M3 interiors are based on their 3 Series counterparts; for basic features please refer to the **3 Series Coupes & Convertibles** section. Here are some details that distinguish the M3s:

Special M instrumentation

Except for the road ahead, the M3 driver's focus will often be the instrument cluster. Into the basic 3 Series cluster design, BMW M sets special instruments that both display and enable M performance. White illumination, traditional red pointers and an M logo on the tachometer face highlight the main dials, as do M-appropriate scales: 200-mph speedometer, 9000-rpm tachometer. Oil temperature (gauge at bottom of tach) is the controlling factor for the engine redline, which can be as low as 6800 rpm with a cold engine and rising to the full 8400 rpm with a completely warmed-up engine. A rotating disc behind the tachometer face provides this variable rpm limit and displays the yellow warning zone and red “no-go” zone. (Cruise-control set speed

M3 key features

Except as noted, both current M3 models offer the following features:

is shown in a similar manner on the speedometer.)

In M3s with the available M DCT Drivelogic, seven Upshift Lights atop the tachometer illuminate sequentially to alert the driver to upshift by the 8400-rpm redline. The first five are yellow, the last two red; given the engine's eagerness to get there, this is certainly no frill.

In M3s the central Multi-Information Display takes on additional display and information functions; in the DCT version it shows which shift program is selected and which gear is currently engaged.

M sport steering wheel

The M3 steering wheel is sized, proportioned and designed to be "as sporty as it gets." Its distinctions include –

- Thick rim, padded leather with M-color stitching
- Thumb contours at 10 and 2 o'clock
- M logo on bottom spoke
- DCT paddles above lateral spoke: right upshift, left downshift; illuminated at night⁵
- MDrive button replaces one of the 3 Series' standard buttons.

As in the 3 Series, the steering wheel has manual tilt/telescopic adjustment.

Illuminated shift lever, special console controls

Typically BMW M: the transmission shift pattern (6-speed manual or M DCT Drivelogic) is illuminated, adding function and style. Naturally the M logo is also present on the knob. Logically and functionally clustered around the shift lever are other tools that give the M3 driver a high degree of control over vehicle dynamics:

POWER selector for engine response; DSC OFF for expert driving on the track; M EDC (if present) to select settings of the optional Electronic Damping Control; and program selector for the available M DCT Drivelogic.

Unique upholstery choices

All upholstery choices are uniquely M3. There are now five treatments:

- **Cloth/leather** – maintaining an M3 tradition, the Coupe comes standard with this treatment, available in Anthracite cloth/Black leather. Novillo, M3's exclusive leather grade, covers outer seat portions; seat middle section are in cloth; console face and door-panel center inserts are in Novillo. Traditional Nappa leather appears on the shift knob, handbrake grip and handbrake boot. The headliner is Wirkvelours (a velour-like material) in Anthracite color.
- **Novillo leather** – optional in Coupe (Premium Package or stand-alone), standard in Convertible; available in exclusive M colors Palladium Silver, Fox Red, Bamboo Beige and Black. Here the entire seat facings are in Novillo, including head restraints with embossed M logo; Novillo also appears on door armrests and pulls and the front center armrest.
- **Novillo leather in special colors** – as stand-alone options (both models) or upgrades to Premium Package (Coupe) in two combinations: Palladium Silver/Black/Black and Fox Red/Black/Black. In both schemes, additional Black Novillo replaces the main color on the head restraints, thigh supports, upper backrest center panels and door armrests.

- **Extended Novillo leather** – optional in both models; same four "regular" colors as for Novillo, without the two special colors. Novillo is extended to the lower dash, glove-compartment door and door pulls.

Special interior trim choices

This refers to the various trim materials that set off the dash, doors and rear side panels (those panels flanking the rear seats). Here's the availability scheme:

- **Titanium Shadow** – standard, for a "technical" look that's quite appropriate to M3s.
- **Carbon Leather** – a highly distinctive BMW M material. Available as one of three choices in the Premium Package of both models, or as a stand-alone option.
- **Blue-gray Brushed Aluminum** – another Premium Package choice that's also available as a stand-alone option.
- **Sycamore Anthracite wood** – one of the gray-toned woods BMW has offered in various models in recent years; elegant and contemporary, with high-gloss finish. Yet another Premium Package choice, or a stand-alone option.

M3 audio systems

Parallel to their 3 Series counterparts, both M3s come standard with an 8-speaker system with 180 watts of audio power. Its speaker array consists of:

- Midrange, 4 speakers –
 - Doors, 2
 - Rear side panels, 2
- Tweeters, 2 speakers –
 - Front-door mirror triangles, 2
- Subwoofers, 2 speakers –
 - Under front seats, 2

An audiophile BMW Individual Enhanced Premium Sound System is optional, and is described in **packages & options**; detailed information on this system as it appears in various BMW M models is presented in **BMW features**.

M sport seats, standard

The standard Coupe seats have 10-way manual adjustment plus power-adjustable backrest width and 4-way power lumbar support. With the power seats (optional Coupe, standard Convertible), 8 of the 10 manual adjustments are powered, only the high support remaining manual; the power backrest width and lumbar support are unchanged. Both models also have easy-entry for rear-seat passengers; the Coupe adds safety-belt presenters to make "buckling up" easier for front-seat occupants.

With power seats, the easy-entry function is powered; each driver's preferred power adjustments (along with the power exterior mirrors) are stored in Vehicle & Key Memory and are set to those adjustments when the driver unlocks the vehicle with his or her remote.

The Convertible adds:

- **Seat-integrated safety belts**, which further optimize the belts' fit on the occupant and ease entry into the rear seats
- **Power-adjustable head-restraint/shoulder-belt height**.

Otherwise, the Convertible's power adjustments correspond to those of the Coupe. Because the seat-integrated belts are out of the way when the seat

5 – Applies only to vehicles equipped with M DCT Drivelogic.

M3 key features

Except as noted, both current M3 models offer the following features:

is folded over, the Convertible doesn't have the belt presenters of the Coupe.

Sophisticated concept: the Convertible's retractable hardtop

Thanks to the refined engineering and design of its fully automatic retractable hardtop, the M3 Convertible offers the all-weather comfort and anti-theft traits of a closed coupe, combined with the open-air pleasures of a convertible. This advanced concept is described in detail in the **3 Series Coupes & Convertibles** section.

Safety & security

M3 safety and security features are shared with those of other BMW Series, and are identical to those of the two M3 models' 3 Series counterparts.

Packages & options

Packages

Competition Package (Coupe only, code ZCP)

This Package further adds to M3s' sportiness by combining:

- **M Electronic Damping Control**, the M3-specific version of BMW's proven EDC as described in **BMW features**. Code 223.
- **Suspension lowered** all around by 10 mm/0.4 in. Part of the factory package, code 7MA.
- **19-in. wheels and tires**. An M3-specific wheel design, M Y Spoke #359M, that is different from the 19-in. wheels offered as a stand-alone option. Wheel sizes are 19 x 9.0 front/19 x 10.0 rear, each a half-inch wider

than the stand-alone 19ers; tires are 245/35R-19 front / 265/35R-19 rear², naturally performance-rated and identical to those of the stand-alone option. Code Z59.

- **Sport programming** of M EDC and DSC, even sportier than what's already standard. This is also part of the factory package, code 7MA. EDC's Sport mode differs from that of the non-ZCP version; whereas the regular version sets the shock absorbers at a fixed 75% of their maximum firmness, the ZCP version varies their firmness according to road and driving conditions as in the other modes – but firmer than in those modes. DSC programming is changed to accommodate the package's wider 19-in. wheels and lowered suspension.

Premium Package (both models, code ZPP)

A comprehensive all-around enrichment of the two M3 models' luxury and esthetics.

Both models:

- **Auto-dimming exterior mirrors** (an auto-dimming interior rearview mirror is standard in M3s). Code 313.
- **Power-folding exterior mirrors**. A valued convenience for parking in tight spaces and for navigating some car washes. Included in code 313.
- **Park Distance Control** rear-only, code 507
- **Comfort Access** keyless entry, code 322
- **Digital compass** in interior rearview mirror, code 4NA
- **BMW Universal Transceiver**, the 3-function device for garage doors and other external

electrical devices or systems. Its controls are positioned in the interior rearview mirror's frame. Code 319.

- **Novillo leather in special colors** as an upgrade to the Novillo that's included in this package for the Coupe, standard in the Convertible. The colors are Palladium Silver/Black/Black (code NCH4) and Fox Red/Black/Black (code NCH5). Also described under **unique upholstery choices**.
- **Choice of interior trims**: Blue-gray Brushed Aluminum (code 4MX), Carbon Leather (4MY) or Sycamore Anthracite (4MZ)
- **Navigation system + iDrive** with all the expanded features and functions of this familiar BMW amenity. Code 609.
- **Enhanced Bluetooth and USB connectivity**, offering the expanded functionality described in **BMW features**.
- **BMW Assist**, BMW's customer-services and in-vehicle telematics system. For details, see CenterNet or the **BMW Assist** pages.

The Coupe adds:

- **Novillo leather upholstery**, as described under **unique upholstery choices**; codes NC. (This is standard in the Convertible). Combined with the Premium Package, Extended Novillo, codes ND, can be added as a Package upgrade at an option price lower than that for non-ZPP-equipped vehicles.
- **Power M sport seats**, replacing the Coupe's standard 8-way manual adjustments with power; retaining the power backrest adjustment and 4-way power lumbar support as well as the manual

tigh-support adjustment of the standard seats. Code 459; not in the Convertible package because standard there.

- **Power rear-window sunshade**, code 415.

Cold Weather Package (both models, code ZCW)

For both models, includes:

- **Headlight cleaning system**. High-intensity jets, normally retracted, pop out to spray the lights with washer fluid. Code 502.
- **Heated front seats**, code 494. Also available as a stand-alone.

The Coupe adds:

- **Ski bag**, code 464.

The Convertible adds:

- **Through-loading system**, with a cargo bag that's larger than the traditional ski bag. Code 4UT.

Stand-alone options

M Double-Clutch Transmission (M DCT) with Drivelogic (optional both models, code 2MK)

Ultra-sporting M version of this especially sporty transmission concept includes 11 shift programs, Launch Control and other special features. Described in detail in **BMW features**.

M Electronic Damping Control (both models, code 223)

Though included in the Coupe's Competition Package, this ride-and handling-enhancing system is also available as a stand-alone

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

M3 key features

Except as noted, both current M3 models offer the following features:

option. This M version and other versions of BMW's EDC system are described in **BMW features**.

19-in. wheels and tires (both models, code 2MT)

Forged/polished 19-in. wheels and even lower-profile tires² are optional; the wheel design is M Double Spoke #220M. Rim and tire widths are the same as the standard 18-in. equipment, but the tires are lower-profile so that vehicle height is essentially the same: 245/35R-19 front / 265/35R-19 rear.

Like the standard wheels, these have 10 double spokes; but this design, with slender, closer-set spokes, is distinctive from the standard M Double Spoke. It also differs from the Y Spoke design of the Competition Package wheels.

Metallic paint

(both models, color codes)
The beauty of BMW metallic paints needs no introduction. The M3 selection includes five exclusive M colors: Silverstone, Interlagos Blue, Jerez Black, Melbourne Red and Le Mans Blue, each named for an internationally famous motor-racing venue. Also available are the regular BMW metallics Space Gray and Mineral White.

Park Distance Control (both models, code 507)

The rear-only system, employing four ultrasonic sensors in the rear bumper to detect when the vehicle is approaching obstacles that may not be visible to the driver. A warning tone emanates from the rear of the interior, increasing in frequency as the vehicle approaches the obstacle until the tone becomes constant.

Automatic High Beams (both models, code 5AC; requires Premium Package)

Assumes the task of switching between high and low beams, eliminating a source of distraction for drivers and likely increasing the proportion of nighttime driving in which the high beams are used.

Comfort Access keyless entry (both models, code 322)

Though included in both models' Premium Package, this popular amenity is also available as this stand-alone option.

2-way power glass moonroof (Coupe only, no extra cost; code 403)

BMW's moonroof design is described in **BMW features**. It is offered as a no-extra-cost option because it changes the M3 Coupe's standard carbon-fiber roof panel to less costly steel.

Novillo leather upholstery (Coupe only, codes NC)

This "basic" leather treatment is standard in the Convertible, included in the Coupe Premium Package, and also available as this stand-alone option for the Coupe only.

Two special color schemes – Palladium Silver/Black/Black and Fox Red/Black/Black – are offered at extra cost over the standard Novillo colors. In both schemes, the "Black/Black" refers to additional Black Novillo surfaces replacing the main color on the head restraints, thigh supports, upper backrest center panels and door armrests.

Extended Novillo leather upholstery (both models, codes ND; requires Navigation option)

This more extensive leather interior is available as a stand-alone option in both models; in combination with the Coupe Premium Package and for the Convertible its option price is reduced. Described under unique upholstery choices.

Interior trim choices (both models; codes 4MX, 4MY or 4MZ)

As alternatives to the standard Titanium Shadow interior trim, three optional choices are available as part of the Premium Package or as stand-alone options:

- Blue-gray Brushed Aluminum, code 4MX
- Carbon Leather, a highly distinctive BMW trim material; code 4MY
- Sycamore Anthracite wood – one of the gray-toned woods BMW has offered in various models in recent years; elegant and contemporary, with high-gloss finish. Code 4MZ.

The beauty and appeal of these materials lie not just in the materials, but in the diverse choices they offer our customers.

Heated front seats (both models, code 494)

Available as this stand-alone option or as part of the Cold Weather Package, the heated seats have impressive features:

- Large heated area, extending to the side bolsters
- High heating power, fully 130 watts.

Through-loading system (Convertible only, code 4UT)

In addition to being part of the Convertible's Cold Weather Package, this option is available on a stand-alone basis. It enhances load-carrying versatility beyond the standard fold-down

rear backrest and small opening. Larger than the customary BMW ski bag; can accommodate one large or two small golfbags. It is accessible through the pass-through opening that's also part of this option.

Navigation system + iDrive (both models, code 609)

With this option, the instrument panel gains a "second wave" that houses the iDrive monitor, and a controller sits on the clean, uncluttered console behind the shift lever. The entire system is BMW's familiar and acclaimed iDrive, as described in **BMW features**. Ordering 609 adds BMW Assist and Enhanced Bluetooth/USB connectivity to the order.

Hard drive for data storage: high capacity, fast retrieval (included with Navigation + iDrive option)

An 80-gigabyte hard drive is included with the iDrive system; it provides data storage for the iDrive system, GPS Navigation, entertainment systems, Voice Command and phone system. See **BMW features** for details on this amenity.

BMW Individual Enhanced Premium sound system (both models, code 752)

Both M3 models come standard with the same 8-speaker audio system as in the 3 Series. This optional audiophile system from BMW Individual offers M3 customers high-end speakers with

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

M3 key features

Except as noted, both current M3 models offer the following features:

Neodymium magnetic drives and lightweight, extremely stiff hexacone membranes as well as dramatically increased audio power and an extensive range of other high-tech audio features. See **BMW features** for a detailed description of this system, which is also offered in the X5 and X6 M models.

Speakers contrast with those of the standard system as follows:

Standard system, 8 speakers –

- Midrange, 4 speakers –
 - Doors, 2
 - Rear side panels, 2
- Tweeters, 2 speakers –
- Front-door mirror triangles, 2
- Subwoofers, 2 speakers –
 - Under front seats, 2

Enhanced Premium system, 16 (Coupe) or 12 speakers (Convertible) –

Retains all these speaker categories and locations but with the high-end Neodymium technology, and adds:

- Coaxial midrange+tweeter, count as 2 –
 - Dash center (both models)
- Coaxial midrange + tweeters, count as 4 –
 - Rear shelf (Coupe)
- Separate tweeter, count as 2 –
 - Rear side panels (both models)

Satellite Radio with 1-year subscription

(both models, code 655)

See **BMW features** for details on this popular option.

BMW Apps

(both models, code 6NR; includes Smartphone Integration)

This element of BMW's ConnectedDrive strategy is now available on all BMW models; see **BMW features** for a description.

Power rear-window sunshade (Coupe, code 415)

The power rear-window shade is conveniently controlled from a console switch.

Priority 1 option⁴

Deletion of rear spoiler (Coupe only, code 326)

Available at no extra cost for customers who prefer a more understated rear-end appearance. The Convertible does not have a rear spoiler.

BMW center-installed accessories

Among the many accessories available for 2013 M3 models are:

- Wheel locks
- Tire valve-stem caps with BMW lettering or logo
- Tire Mobility Kit and tire sealer kit
- Performance Black kidney grilles
- Wind deflector for Convertibles
- Sun/wind deflector for Coupe moonroof
- Dark-lens (“smoked”) tail-lights
- Mud flaps
- Roof and storage systems
- License-plate frames, M and M3 types
- Car covers, outdoor and indoor types
- UV sunshade
- Doorsill trims, illuminated

- Special pedals and footrests
- Floor mats, all-weather
- Snap-in adapter with USB interface for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- Snap-in adapter for BMW Apps and various media
- Connection and charging cables of various types
- BMW USB memory stick in style of vehicle remote
- BMW Bluetooth headset and speaker
- CD/DVD storage sleeve
- Cool bag
- BMW umbrella with LED light
- LED hand lamp

For details and additional items, see the latest **Accessories** listings for 2013 M3 models on bmwusa.com.

4 – Priority 1 options accurate at time of publication but subject to change. For current model-specific Priority 1 standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

Standard & optional features

2013 M3

Bold within table indicates distinction from 335is model.

Exterior design & function	M3 Coupe	M3 Convertible
Front & rear BMW M bumper/spoiler ensemble with: Extra-large front air intakes	S	S
Rear diffuser	S	S
Aluminum hood with power dome	S	S
Underbody fairing	S	S
Xenon Adaptive headlights with luminous rings & auto-leveling	S	S
Cornering lights	S	S
Automatic headlight control	S	S
High-intensity headlight cleaning system	ZCW	ZCW
Daytime Running Lamps via luminous rings	S ¹	S ¹
Rain-sensing windshield wipers	S	S
Power-folding, heated M exterior mirrors, body-color with black double bridge	S	S
Heated windshield-washer jets	S	S
Park Distance Control, rear only	ZPP/OPT	ZPP/OPT
Ground lighting in door handles	S	S
Adaptive brakelights	S	S
Metallic paint, including special M colors	OPT	OPT
Welcome Light	S	S
Chrome vertical grille slats	S	S
Fully automatic power-retracting hardtop	–	S
Carbon-fiber roof panel	S	NA
Side gills with M3 logos	S	S
High-gloss Shadowline exterior trim	S	Matte aluminum
Trunklid spoiler	S ²	NA
Polished stainless-steel exhaust tips	S	S

Performance & efficiency	M3 Coupe	M3 Convertible
4.0-liter DOHC 32-valve V-8 engine: Aluminum cylinder block & heads, bedplate construction	S	S
Double VANOS ³ steplessly variable valve timing	S	S
8 individual throttles, electronically controlled, with variable throttle response	S	S
Machined intake ports & combustion chambers	S	S
Special MS S60 electronic engine management system	S	S
Direct ignition system with pencil coils & knock control	S	S
Ionic-current knock control	S	S
Semi-dry-sump, G-sensitive lubrication system	S	S
Dual exhaust system	S	S
Automatic engine start/stop	S	S
6-speed manual transmission	S	S
7-speed Double-Clutch Transmission (M DCT) with Drivelogic & 11 shift programs	OPT	OPT
Paddle shifters on steering wheel	OPT ⁴	OPT ⁴
Specialty equipped & calibrated BMW M suspension system: Double-pivot-type aluminum front suspension	S	S
5-link aluminum rear suspension	S	S
Lowered suspension (10 mm/0.4 in.)	ZCP	NA
Front & rear anti-roll (stabilizer) bars	S	S
Aluminum front/steel rear subframes	S	S
Aluminum front thrust plate	S	S
Rear V-braces, subframe to body	S	S
Convertible-specific underbody reinforcements	–	S
Twin-tube gas-pressure shock absorbers	S	S
M Electronic Damping Control (EDC) w/Normal, Comfort & Sport modes	ZCP/OPT	OPT
Special sport programming	ZCP	NA

1 – Selectable via Vehicle & Key Memory System.

2 – May be deleted at no extra cost.

3 – VANOS = **V**ariable **N**Ockenwellen

Steuerung = variable camshaft control, or variable valve timing.

4 – Included with M DCT Drivelogic.

S – Standard

OPT – Optional

NC – No extra cost

NA – Not available

– – Not applicable

ZCP – Competition Package

ZCW – Cold Weather Package

ZPP – Premium Package

Standard & optional features

2013 M3

Bold within table indicates distinction from 335is model.

Performance & efficiency (cont.)	M3 Coupe	M3 Convertible
Vehicle-speed-sensitive variable-assist power steering (Servotronic)	S	S
Normal & Sport levels of power assist	S	S
4-wheel compound, ventilated & cross-drilled disc brakes, calipers finished in heat-resistant black	S	S
M Variable Differential Lock	S	S
M Double Spoke alloy wheels (design #219M), 18 x 8.5 front/18 x 9.5 rear	S	S
M Double Spoke forged/polished alloy wheels (design #220M), 19 x 8.5 front/19 x 9.5 rear	OPT	OPT
M Y Spoke alloy wheels (design #359M), 19 x 9.0 front/19 x 10.0 rear	ZCP	NA
245/40R-18 front / 265/40R-18 rear performance tires⁵	S	S
245/35R-19 front / 265/35R-19 rear performance tires⁵	ZCP/OPT	OPT
Tire Pressure Monitor	S	S
M Mobility System	S	S
BMW M-calibrated Dynamic Stability Control	S⁶	S
M Dynamic Mode for DSC	S	S
M Drive system, providing 1-touch selection of preferred combination of throttle-response settings, DSC modes & de-activated DSC; also M DCT shift programs & EDC settings on vehicles so equipped	S	S
Comfort & convenience	M3 Coupe	M3 Convertible
Doorsill trim plates with chrome trim & BMW M logo	S	S
Vehicle & Key Memory	S	S
Multi-function remote control with selective unlocking ¹ & remote trunk release	S	S
Remote lowering of retractable hardtop	–	OPT ⁷
Comfort Loading	NA	OPT ⁷
Comfort Access keyless entry	ZPP/OPT	ZPP/OPT
Automatic-dimming interior rearview mirror	S	S
Automatic-dimming exterior mirrors, power-folding exterior mirrors	ZPP	ZPP
Dual power/heated exterior mirrors	S	S
Automatic High Beams	OPT	OPT

Comfort & convenience (cont.)	M3 Coupe	M3 Convertible
Digital compass in interior mirror	ZPP	ZPP
BMW Universal Transceiver (3-function garage-door opener)	ZPP	ZPP
Courtesy lights with fade-in/fade-out feature, actuation from remote, automatic switch-on upon engine shutdown, separately controlled left/right front & rear reading lights, front & rear footwell lighting & illuminated visor vanity mirrors	S	S
Welcome Light (automatic switch-on of front luminous rings & turn signals, taillights, license-plate lights, ground lighting & interior lights upon unlocking vehicle)	S	S
BMW Ambiance Lighting: overhead, doors & rear side panels	S	S
Tilt/telescopic 3-spoke leather-wrapped M sport steering wheel with fingertip audio & phone controls ⁸	S	S
Cruise control	S	S
10-way manual front sport seats with power-adjustable backrest width, 4-way power lumbar support & manually adjustable thigh support	S	–
14-way power + 2-way manual front sport seats, including power-adjustable backrest width, 4-way power lumbar support & manually adjustable thigh support	ZPP	S
Power easy-entry feature	ZPP	S
Power-adjustable front head-restraint & safety-belt height	NA	S
Memory system for driver's seat & exterior mirrors (2 settings per user)	ZPP ⁹	S
Front safety-belt presenters	S	–
Auto tilt-down of right-hand exterior mirror for backing up	ZPP ⁹	S

1 – Selectable via Vehicle & Key Memory System.

5 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions; snow chains cannot be fitted.

6 – Specific calibration for lowered suspension & wider wheels of Competition Package.

7 – Included with Comfort Access keyless entry (Premium Package or stand-alone option).

8 – Phone controls active when approved mobile device is paired with Bluetooth interface.

9 – Included with power seats (Premium Package).

S – Standard

OPT – Optional

NA – Not available

– – Not applicable

ZCP – Competition Package

ZPP – Premium Package

Standard & optional features

2013 M3

Bold within table indicates distinction from 335is model.

Comfort & convenience (cont.)	M3 Coupe	M3 Convertible
3-stage, thermostatically controlled heated front seats	ZCW/OPT	ZCW/OPT
Front center armrest	S	S
Full-length console	S	S
Climate-controlled front center console compartment	S	S
BMW M instrumentation with – Illuminated white scales on speedometer & tachometer	S	S
Red pointers	S	S
Oil-temperature gauge	S	S
Variable warning segment on tachometer	S	S
LCD main & trip odometers	S	S
Comprehensive Check Control vehicle monitor system	S	S
iDrive system with high-resolution control display, GPS Navigation; direct-select radio, media, phone & Navigation menus; 6 Programmable Memory Keys, Voice Command, Real Time Traffic Information & other features	ZPP/OPT	ZPP/OPT
Cloth/leather upholstery	S	NA
Novillo leather upholstery	ZPP/OPT	S
Extended Novillo leather upholstery	OPT¹⁰	OPT¹⁰
Titanium Shadow interior trim	S	S
Blue-Gray Brushed Aluminum interior trim	ZPP/OPT	ZPP/OPT
Sycamore Anthracite wood interior trim	ZPP/OPT	ZPP/OPT
Carbon Leather interior trim	ZPP/OPT	ZPP/OPT
Pearl-gloss galvanic trim (speedometer & tachometer, steering wheel, climate-control & radio knobs, start/stop button, interior door handles, etc.)	S	S
Power door windows with key-off operation; 1-touch opening & closing, anti-trapping feature, opening from remote	S	S
Power rear side windows with 1-touch opening, opening from remote	NA	S
All-window switch with 1-touch opening	NA	S

Comfort & convenience (cont.)	M3 Coupe	M3 Convertible
Automatic climate control with separate left/right temperature settings, automatic recirculation control, mist control, bi-directional solar sensor, temperature- & volume-controlled rear air outlets, activated-charcoal microfilter ventilation & other features	S	S
Convertible mode for automatic climate control	–	ZPP/OPT¹¹
2-way power moonroof with 1-touch opening & closing, anti-trapping feature, opening from remote, sliding interior sunshade	NC	NA
Fully automatic power-retracting hardtop	–	S
Anti-theft AM/FM/HD/CD/MP3 audio system with 8 speakers including 2 subwoofers, Radio Data System (RDS), FM diversity antenna system, auxiliary audio input & other features	S	S
Variable AM/FM antenna position, hardtop raised/lowered	–	S
BMW Individual Enhanced Premium Sound System with 12 (Convertible) or 16 speakers (Coupe); includes Neodymium speaker technology, Digital Sound Processing & surround settings, & other audiophile features, plus all features of standard system	OPT¹²	OPT¹²
Satellite Radio with 1-year subscription	OPT	OPT
iPod/USB Adapter	S	S
80-GB hard drive providing data storage for Navigation, audio system, phonebook & Voice Command; ripping capability from CD, MP3 player or USB stick	OPT ¹¹	OPT ¹¹
Bluetooth cellphone interface with high-capacity phonebook download	S	S
USB connectivity	S	S
Enhanced Bluetooth interface	ZPP/OPT¹¹	ZPP/OPT¹¹
BMW Apps including Smartphone Integration	OPT	OPT
Front cupholders	S	S
Dual front sun visors with illuminated mirrors	S	S

10 – Requires Premium Package or stand-alone Navigation + iDrive option.

11 – Included with Navigation + iDrive option.

12 – Requires Premium Package.

S – Standard

OPT – Optional

NC – No extra cost

NA – Not available

– – Not applicable

ZCW – Cold Weather Package

ZPP – Premium Package

Standard & optional features

2013 M3

Bold within table indicates distinction from 335is model.

Comfort & convenience (cont.)	M3 Coupe	M3 Convertible
Open & closable storage compartments in front doors including sunglasses compartments & coinholder	S	S
Fold-up rear center armrest with dual cupholders	S	NA
Seatback storage compartments	S	S
Split folding rear seats	S	NA
1-piece folding rear backrest	–	S
Rear center storage compartment	NA	S
Ski bag	ZCW	–
Through-loading system with cargo bag (can hold 2 small golf bags)	NA	ZCW/OPT
Power-operated rear-window sunshade	OPT	NA
Rear-window defroster	S	S
Floor mats, front & rear	S	S
Interior trunk release, electrically operated	S	S
Trunk features:		
4 cargo tie-downs	S	S
Side compartments (capacity depends on options present)	S	S
Variable overall capacity, hardtop raised/lowered	–	S
Comfort Loading (intermediate hardtop position for convenient trunk loading)	–	ZPP/OPT ⁷
Safety & security	M3 Coupe	M3 Convertible
BMW M-calibrated Dynamic Stability Control (DSC), including all-speed traction control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Brake Control, Brake Standby, Brake Drying & Start-off Assistant	S	S
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S
3-point safety belts at all seating positions	S	S
Front safety belts with automatic tensioners & force limiters	S	S
Front safety-belt presenters	S	–
Seat-integrated front safety belts	NA	S
LATCH attachments at rear seating positions (for installation of child restraint seats)	S	S

Safety & security (cont.)	M3 Coupe	M3 Convertible
Head restraints at all seating positions	S	S
Front-seat Active head restraints	S	S
Front & rear-seat Head Protection System	S	NA
Active Knee Protection	NA	S
Rollover Protection System	–	S
Pedals that rotate forward (decouple) under frontal impact	S	S
Footrest designed to crush under force of driver's left foot in frontal crash impact	S	S
Front-seat side-impact airbags, seat-mounted	S	–
Front-seat side-impact airbags, seat-mounted with head protection	–	S
Advanced Crash Safety Management for deployment of safety systems	S	S
Post-impact safety measures:		
Unlocking of central locking system	S	S
Switch-on of hazard flashers	S	S
Switch-on of interior lighting	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S
BMW Assist, including Enhanced Automatic Collision Notification, SOS button, Enhanced Roadside Assistance, TeleService ¹³ , BMW Assist Safety Plan ¹³	ZPP/OPT ¹¹	ZPP/OPT ¹¹
Central locking system with double-lock anti-theft feature, selective unlocking (Convertible: includes glove compartment)	S	S
Coded Driveaway Protection	S	S
Alarm system with operation from remote, interior motion detector	S	S

⁷ – Included with Comfort Access keyless entry (Premium Package or stand-alone option).

S – Standard
OPT – Optional
NA – Not available

¹¹ – Included with Navigation + iDrive option.

– – Not applicable
ZCW – Cold Weather Package

¹³ – Requires BMW Assist annual fee after 4th year.

ZPP – Premium Package

Technical specifications

2013 M3

Except for wheelbase, body types, accommodations and electrical, most M3 specifications differ from those of 335is models.

General	M3 Coupe	M3 Convertible
Curb weight, lb.:		
Manual transmission	3704	4145
Automatic transmission	3704	4145
Weight distribution, front/rear, %:		
Manual transmission	51.2/48.8	47.2/52.8 ¹
Automatic transmission	51.2/48.8	47.2/52.8 ¹
Wheelbase, in.	108.7 ²	
Track, front/rear, in. (with standard wheels)	60.6/60.6 ²	
Length, in.	181.8	181.8
Width, in.	71.0	71.0
Height, in.	55.8	54.8

Body	M3 Coupe	M3 Convertible
Type	2-door coupe	2-door convertible
Aerodynamic drag coefficient (C _d)	0.31	0.32 ¹
EPA size classification	Subcompact ²	

Accommodations	M3 Coupe	M3 Convertible
Seating capacity, persons	4	4
Shoulder room, front/rear, in.	55.3/51.9	55.3/49.3
Head room, front/rear:		
without moonroof	38.4/36.8	38.0/36.5
with moonroof	37.1/36.1	–
Leg room, front/rear	41.8/33.7	41.8/31.9
EPA passenger-compartment volume, cu ft.	88.5	84.0
EPA cargo volume, cu ft.	11.1 ³	9.0 ^{1,4}

Engine & electrical	M3 Coupe	M3 Convertible
Engine type	DOHC (4-cam) 32-valve V-8, Double VANOS ⁵ steplessly variable valve timing, 8 individual electronically controlled throttles with Normal & Sport response settings ²	
Bore x stroke, mm/in.	92.0 x 75.2/3.62 x 2.96 ²	
Displacement, cc/cu in.	3999/244 ²	
Compression ratio	12.0:1 ²	
Power @ rpm, hp	414 @ 8300 ²	
Torque @ rpm, lb-ft.	295 @ 3900 ²	

Engine & electrical (cont.)	M3 Coupe	M3 Convertible
Engine-management system	MS S60 with ionic-current knock control, variable valve timing, electronic throttles, variable throttle response, g-sensitive lubrication system, oil-level/temperature sender, variable tachometer warning segment, catalyst protection & other functions included in control strategy ²	
Fuel requirement	Premium unleaded ²	
Fuel capacity, U.S. gal.	16.6 ²	
Battery capacity, amp-hr.	70 ²	
Alternator output rating, amp./W	180/2520 ²	

Drivetrain	M3 Coupe	M3 Convertible
Drive system	Front engine/rear-wheel drive ²	
Manual transmission	6-speed, Type G ²	
Ratios: 1st	4.06:1 ²	
2nd	2.40:1 ²	
3rd	1.58:1 ²	
4th	1.19:1 ²	
5th	1.00:1 ²	
6th	0.87:1 ²	
Reverse	3.68:1 ²	
Final drive ratio	3.85:1 ²	
M Double-Clutch Transmission (M DCT Drivelogic)	7-speed, M DKG 436 with dual clutches & gearsets; 6 Sequential & 5 Automated shift programs, driver control via E-shift, steering-wheel shift paddles & mode selector	
Ratios: 1st	4.78:1 ²	
2nd	2.93:1 ²	
3rd	2.15:1 ²	
4th	1.68:1 ²	
5th	1.39:1 ²	
6th	1.20:1 ²	
7th	1.00:1 ²	
Reverse	4.45:1 ²	
Final drive ratio	3.15:1 ²	

1 – With hardtop raised.

2 – Specification applies to both models.

3 – Can be expanded via folding rear seats.

4 – Can be augmented via folding rear backrest.

5 – VANOS = **V**ariable **N**Ockenwellen

Steuerung = variable camshaft control, or variable valve timing.

– – Not applicable

Technical specifications

2013 M3

Except for wheelbase, body types, accommodations and electrical, most M3 specifications differ from those of 335is models.

Chassis	M3 Coupe	M3 Convertible
Body/frame construction	Unitized steel with aluminum hood, thermoplastic front fenders ² (Coupe only: carbon-fiber roof panel)	
Front suspension	BMW M sport suspension in aluminum; struts, double-pivot lower arms, coil springs, twin-tube gas-pressure shock absorbers, tubular anti-roll bar, subframe, thrust plate ²	
Rear suspension	BMW M sport suspension in aluminum; 5-link system, coil springs, twin-tube gas-pressure shock absorbers, tubular anti-roll bar, reinforcing V-brace to underbody ²	
Optional M EDC	Electronically controlled shock absorbers with Comfort, Normal & Sport modes ²	
Optional Competition Package (Coupe)	Suspension lowered by 10 mm/0.4 in., special programming of EDC & DSC	
Rack & pinion steering system, vehicle-speed-sensitive power assist ² ;		
Overall ratio	12.5:1 ²	
Turns lock-to-lock	2.5 ²	
Turning circle, ft.	38.4 ²	
4-wheel compound, ventilated & cross-ventilated disc brakes, vacuum-assisted:		
Front, diameter x thickness, mm/in.	360 x 30/14.2 x 1.18 ²	
Rear, diameter x thickness, mm/in.	350 x 24/13.8 x 0.94 ²	
Calipers front/rear	2-piston aluminum/ 1-piston cast iron, floating ²	
Alloy wheels:		
standard	cast alloy, 18 x 8.5 front/ 18 x 9.5 rear ²	
stand-alone option	forged alloy, 19 x 8.5 front/ 19 x 9.5 rear ²	
Competition Package (Coupe only)	cast alloy, 19 x 9.0 front/ 19 x 10.0 rear	
Performance tires:		
standard	245/40R-18 front / 265/40R-18 rear ^{2, 6}	
stand-alone option or Competition Package	245/35R-19 front / 265/35R-19 rear ^{2, 6}	

Chassis (cont.)	M3 Coupe	M3 Convertible
Stability-enhancement system	BMW M-calibrated Dynamic Stability Control (DSC), including all-speed traction control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Brake Control, Brake Standby, Brake Drying & Start-off Assistant; M Variable Differential Lock ²	
Performance data	M3 Coupe	M3 Convertible
Acceleration, 0-60 mph, sec. ⁷ :		
Manual transmission	4.7	5.1
M DCT Drivelogic	4.5	4.9
Top speed, mph ⁸	155 ²	
EPA estimated MPG, city/highway:		
Manual transmission	14/20	13/20
M DCT Drivelogic	14/20	14/20

2 - Specification applies to both models.

6 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. M3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions; snow chains cannot be fitted.

7 - BMW AG test results. Actual acceleration results may vary depending on specification of vehicle; road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

8 - Electronically limited.

2013 X6:

BMW's unique Sports Activity Coupe gets an all-around freshening with new design details, new colors, LED lighting technology and an available M Performance Package.

Five years ago, BMW introduced a new vehicle that raised eyebrows everywhere. On the fresh platform of the 2nd-generation X5, the X6 repeated an exercise the original X5 had done in 1999: create a whole new category of vehicles.

The X5 had already proved that traditional BMW qualities – performance, handling, agility, elegance, solid construction – could be combined with the height, robustness and versatility of an SUV; to commemorate this achievement, BMW had designated it not a mere SUV, but an SAV – Sports Activity Vehicle.

Now the X6 would add another element: Wrapping the X5's performance and construction concept in a lower, sportier, spicier body, BMW had again created a new and unique vehicle, the Sports Activity Coupe. And BMW went another step, backing up its sporty look with a standard sport transmission, firmer suspension tuning and a new powertrain element called Dynamic Performance Control. Inside, the X6 expressed its performance character with details like standard shift paddles, sport steering wheel and console kneepads.

Naturally, BMW expected the X6 to be successful; and yet it has been even more so than BMW anticipated, with sales of over 160,000 units worldwide and 25,000 in the U.S. alone in the three-plus years since its introduction. Indeed, so successful has the Sports Activity Coupe been in the marketplace

that before long, BMW will launch another, more compact model of similar character. In the meantime, other vehicle makers are rolling out their “me toos” because BMW's trailblazing move worked.

It is BMW's custom to freshen its models after three to five years of production; so it is that the 2013 X6 presents a bright new face – with, also per custom, bright new technology and performance choices to back it up.

What's new for 2013

As of 4/12 production:

Exterior design & function

- Revised front end with wider grille + newly sculpted slats; foglights positioned lower and wider apart, matte finish; newly shaped lighting clusters
- Newly designed LED taillights
- New Double Spoke standard wheel design for 50i model
- Three new metallic paint colors as Priority 1 options: Midnight Blue, Marrakesh Brown, Orion Silver; Mineral Silver, Monaco Blue and Tasman Green discontinued

Comfort & convenience

- New Nevada leather color: Vermilion Red; Chateau Red discontinued
- Optional Nappa leather available in new Ivory White/Black, replacing Sand Beige
- Alcantara/leather upholstery no longer available in Chateau Red; now in Black only
- Storage Package, formerly in Premium Package, now standard

Packages & options

- New M Performance Package; includes upgraded engine power/torque, 20-in. wheels and performance tires¹, Shadowline exterior trim, Black Chrome exhaust tips, M door-sill trims and driver's footrest, stainless-steel pedals, Anthracite-color headliner; Carbon Black Metallic exterior color available only in combination with this package. Package price less than that of former Sport Package. Unchanged Sport Activity Package remains available.
- New Dynamic Handling Package includes Active Steering and Adaptive Drive; both formerly in Sport Package or as P1 stand-alone options.
- Premium Sound Package price reduced; adds Enhanced Premium Sound System as package upgrade (same system as available in X6 M)
- Active Ventilated Seat Package renamed Luxury Seating Package (consistent with other Series); content unchanged
- LED headlights newly available, stand-alone option
- Leather-trimmed dash and upper door panels no longer included with Nappa leather upholstery, whose option price is reduced accordingly; both features now available as P1 option.

BMW Individual X6 Performance Edition

As with several other BMW Series for '13, a limited-production special edition was offered in the X6 line. Developed exclusively for the U.S. market, this BMW Individual X6 Performance Edition was produced in September and October '12 in two versions: 35i and 50i, limited to 50 units each. Both combine special interior and exterior design elements with the performance and esthetic enhancements of the M Performance Package described nearby and on page 683:

- BMW Individual Pearl Silver metallic paint
- 20-in. Y Spoke wheels with performance tires¹
- Black Chrome exhaust tips
- Black Alcantara/leather upholstery with Sakhr Orange contrast stitching
- Contrast stitching also on dash and floor mats
- Carbon Leather interior trim, dash and center console

Each of the 100 units was also equipped with Premium, Technology, Cold Weather and Premium Sound Packages as described in this section of **Fast Facts 2013**, and a list of stand-alone options (short because almost everything was standard) enabled the fortunate owners to further personalize these already highly distinctive Sports Activity Coupes.

¹ – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X6 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X6 models & key features

This information lists major features, and helps position and distinguish the models from each other. For a comprehensive summary of features, see pages 690-701.

X6 xDrive35i

The 6-cylinder model. Offered at a base price 5-figures lower than that of the V-8 50i, yet packs 300 hp under its hood and accelerates from 0 to 60 mph in just 6.3 sec. As this summary shows, the 35i also comes standard with Dynamic Performance Control, standard leather upholstery and a host of other premium features that dispel any notion of an “entry” model:

- TwinPower Turbo 6-cylinder engine with aluminum construction, direct fuel injection, twin-scroll turbocharger, Valvetronic variable valve lift, Double VANOS² variable intake- and exhaust-valve timing and air-to-air intercooling; 300 hp/300 lb-ft./19 mpg combined EPA rating
- Dual round chrome exhaust outlets, 90 mm/3.5 in.
- 8-speed Sport automatic transmission with E-shift and steering-wheel shift paddles
- Multi-link front suspension with upper links
- 4-link Integral rear suspension
- Variable-ratio, constant-assist rack-and-pinion power steering
- 4-wheel ventilated disc brakes
- Electromechanical parking brake with Automatic Hold
- 19 x 9.0 alloy wheels, Star Spoke design #232 (5 spokes)
- 255/50R-19 run-flat all-season tires
- Tire Pressure Monitor
- Dynamic Stability Control with enhanced braking functions
- Xenon Adaptive headlights with dynamic auto-leveling
- Cornering lights
- Daytime Running Lamps via luminous rings
- Halogen free-form foglights
- Welcome Light
- Rain-sensing windshield wipers
- Park Distance Control front/rear, with graphic display in iDrive
- Matte-black side-window trim
- Power tilt/telescopic leather-wrapped sport steering wheel with automatic tilt-away and fingertip multi-function controls
- Dynamic cruise control
- Auto-dimming interior and exterior rearview mirrors
- 14-way power/heated front seats, including 4-way power lumbar support
- Ambiance lighting package
- Memory system for driver’s seat, steering wheel and exterior mirrors
- Auto tilt-down of right-hand exterior mirror for backing up
- Power-folding exterior mirrors
- Center console with left/right center armrests, storage compartment
- iDrive system
- Nevada leather upholstery
- Ash Grain wood interior trim, medium-dark tone
- Kneepads at sides of front center console
- Power windows with key-off and 1-touch operation
- Automatic climate control with separate left/right (dual-zone) temperature and air-distribution settings, automatic recirculation control, misting control, bi-directional solar sensor, Heat at Rest, temperature-controlled rear air outlets, activated-charcoal microfilter ventilation and other features
- Anti-theft AM/FM/HD/CD/MP3 audio system with Radio Data System, 10 speakers, auxiliary audio input
- Power 2-way moonroof

- Split folding rear seats with center armrest
- Center console between rear seats, with dual cupholders
- Privacy glass
- Fully finished cargo area with foldable/removable cover, lockable underfloor compartment
- Power liftgate with 5-position adjustable opening height; stainless-steel loading sill
- Dual-airbag Supplementary Restraint System with 2-stage Smart Airbags
- Front safety belts with automatic tensioners and force limiters
- Front- and rear-seat Head Protection System
- Front-seat-mounted side-impact airbags
- Front-seat Active head restraints
- Central locking system with selective unlocking
- Coded Driveaway Protection
- Anti-theft alarm system
- BMW Assist with 4-year subscription, Bluetooth mobile-device interface
- Available option packages:
 - Premium Package (rear- and top-view cameras, Comfort Access keyless entry, BMW Universal Transceiver, digital compass in interior mirror, 4-zone climate control, Navigation system with Voice Command, storage package, rear door-window sunshades)
 - M Performance Package (engine upgrade to 315 hp/330 lb-ft. torque, 20-in. Y Spoke wheels with performance tires¹, auxiliary lower grilles in contrasting color, high-gloss Shadowline exterior trim, black-chrome exhaust tips, M doorsill trims and driver’s footrest, stainless-steel-trimmed pedals, M sport steering wheel, front sport seats, Anthracite-color headliner)
- Sport Activity Package (19-in. Star Spoke wheels with all-season tires or 20-in. Y Spoke wheels with performance tires at additional cost, auxiliary lower grilles in contrasting color, high-gloss Shadowline exterior trim, front sport seats, Anthracite-color headliner)
- Technology Package (Automatic High Beams, side-view cameras, Head-up Display)
- Cold Weather Package (headlight cleaning system, heated steering wheel, heated rear seats, ski bag)
- Premium Sound Package (16-speaker premium audio system, Satellite Radio with 1-year subscription; Enhanced Premium audio system at additional cost)
- BMW Individual Composition (high-gloss Shadowline exterior trim, Individual doorsill trims, Full Merino Leather upholstery, Merino instrument-panel trim, choice of Individual interior trims, Multi-Contour front seats, Anthracite-color headliner)
- Luxury Seating Package (Active Ventilated front seats, Active Support driver’s seat, 20-way Multi-Contour front

1 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X6 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

2 – VANOS = Variable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

X6 models & key features

This information lists major features, and helps position and distinguish the models from each other. For a comprehensive summary of features, see pages 690-701.

- seats, perforated Nevada leather)
- Priority 1 package³:
 - Dynamic Handling Package (Active Steering, Adaptive Drive)
- Stand-alone options:
 - Full LED headlights (require Cold Weather Package)
 - BMW Individual metallic exterior colors Azurite Black, Pearl Silver, Citrin Black, Ruby Black (require BMW Individual Composition)
 - Space-saver spare tire
 - Comfort Access keyless entry
 - Soft-close doors
 - Aluminum running boards
 - Navigation system
 - Head-up Display (requires Navigation system or Premium Package)
 - Satellite Radio with 1-year subscription
 - Rear Seat Entertainment
 - Multi-Contour front seats
 - Sport front seats
 - Dark Bamboo or Aluminum interior trim (no extra cost)
 - BMW Apps, including Smartphone Integration
 - 5-seater configuration
- Priority 1 stand-alone options³:
 - Metallic exterior colors Mineral Silver, Deep Sea Blue, Orion Silver, Marrakesh Brown
 - Active Cruise Control with Stop-and-Go function, Frontal Collision Warning System
 - Lane Departure Warning
 - Alcantara/leather upholstery (requires sport front seats)
 - Nappa leather upholstery (requires Multi-Contour front seats)
 - Leather-trimmed dash and upper door panels

X6 xDrive50i

As the top X6 model, the 50i offers even higher performance and more lavish equipment than the 35i. Its 400-hp twin-turbo V-8 engine is the most obvious distinction, but the 50i also offers a wide range of added features, capabilities and amenities, as summarized here.

- 4.4-liter DOHC (4-cam) twin-turbo V-8 engine with aluminum construction, direct fuel injection via piezo injectors, Double VANOS² variable intake- and exhaust-valve timing and air-to-air intercooling; 400 hp/450 lb-ft.

- Modified rectangular chrome exhaust outlets, 92 x 165 mm/ 3.6 x 6.5 in.
- Larger front brakes, 14.4-in. diameter vs. 13.6
- Same standard wheel and tire dimensions and type, but Double Spoke design #424
- Titanium-finish vertical grille slats, vs. black
- Black/chrome side-window trim, vs. black
- Model script on front doors
- 20-way Multi-Contour front seats, standard vs. optional or in packages
- Navigation system standard, vs. optional or Premium Package
- Packages as for 35i, except –
 - Premium Package – Navigation and BMW Universal Transceiver standard, thus not included in Package
 - M Performance Package – upgrades 50i V-8 engine to 440 hp/480 lb-ft. torque; sport seats not specified in Package because Multi-Contour seats standard; package price lower
- Sport Activity Package – different wheels, Star Spoke design #258 vs. Star Spoke #212; sport seats not specified in package because Multi-Contour seats standard; package price lower
- Luxury Seating Package – Multi-Contour seats standard, thus not included; package price lower
- Stand-alone options same as for 35i, except –
 - Navigation system standard, vs. optional
 - Multi-Contour seats standard, vs. optional
 - Sport seats as no-extra-cost option

2 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

3 – Priority 1 options accurate at time of publication but subject to changes. For current model-specific standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

X6 key features

Except as noted, both current X6 models offer the following features:

Exterior design & function

The look: Sports Activity heft and stance, Coupe sleekness

Though based on the X5 platform and sharing X5 front-end design elements, the X6's body is otherwise completely distinct. In contrast to the X5's "wagon-type" shape, which combines BMW elegance with the practicality and interior space of a 5-door SAV, the X6 has a lower windshield and overall height, sloping roofline, and a 1-piece liftgate instead of the X5's 2-piece liftgate/tailgate configuration. The X6's sleek roofline precludes a dual-panel Panoramic moonroof, so a single-panel, 2-way moonroof is standard.

Exterior lighting functions

Continuing as standard are Xenon Adaptive headlights with dynamic auto-leveling, cornering lights, luminous rings that function as parking lights and Daytime Running Lamps, and the Welcome Light that adds such a gracious touch to users' arrival at, and departure from, their Sports Activity conveyance.

New for '13 are optional Full LED headlights, which add LED-powered headlights to the standard LED luminous rings, plus wedge-shaped LED strips above them. Thus most forward lighting functions, including turn signals and Daytime Running Lamps, are LED-sourced and the standard Adaptive feature is retained. Both low and high beams employ all four lights for the first time.

At the front

The X6 front end continues to be distinguished from that of the X5 via its bumper/spoiler ensemble, lighting clusters and hood contours, but its frontal aspect has

been freshened for '13 via –

- Wider, newly shaped kidney grilles with the curved, "kinked" slats that add character, especially to an angled or from-the-side view of the front end.
- Newly shaped lighting clusters with a sharper hook to their lower edge.
- Foglights set higher and wider apart, double-recessed in that they are set into the large outboard air intakes but also recessed into their own matte-finished, circular housings.
- The added distinction of the optional Full LED headlights, whose upper light band sets a captivating accent.

As on X5s, the grille slats distinguish between models: they're matte black on the 35i, titanium-finish on the 50i.

In profile

The picture is truly worth a thousand words here; what could be more eye-catching and recognizable than the X6's out-and-out fastback roofline, its sharply up-sloping beltline, and the vertical conclusion that fairly screams "aerodynamics"?

As at the front, the profile view includes model and equipment distinctions:

- Side-window framing – 35i matte black, 50i matte black with chrome trim, high-gloss Satin Chrome Shadowline trim for M Performance and Sport Activity Packages as well as BMW Individual Composition.
- Wheel designs and sizes (see **Run-flat tires**). The 50i sports new standard wheels, with curved double spokes.

At the rear

Just as dramatically different as the profile view, the rear is striking for its high lower-to-upper-body proportions; the low-set rear window topped by a subtly integrated roof spoiler; and chrome exhaust tips framed by bumper openings: round but angle-cut for an elliptical look on the 35i, modified rectangular on the 50i reflecting the front air intakes' shape. Look a little deeper here and you'll see a functional difference too: On the 35i a single pipe per side feeds into the chrome tip, on the 50i it's two pipes per side.

New for '13 in the rear aspect are the taillights, each powered by dual LED bars.

New colors for '13

Three new metallics are offered for '13 (metallics at no extra cost on X6):

- **Midnight Blue B83**, an elegant dark shade
- **Marrakesh Brown B09**, also a darker shade
- **Orion Silver A92**, with a subtle yellow cast; familiar from some other Series.

Each of these is available as a P1 option. Discontinued are Mineral Silver, Monaco Blue and Tasman Green.

Performance & efficiency

Both X6 engines continue unchanged for '13, and are the same choices offered in X5s – except that a new M Performance Package includes a power and torque boost for both X6 models.

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (35i)

BMW has staked much of its current performance strategy on this engine, which was new for 2011 and now powers models in 10 of BMW's vehicle lines.

While maintaining BMW's traditional and distinctive inline 6-cylinder configuration, this award-winning powerplant distinguishes itself via several primary attributes:

- **A single Twin Scroll turbo-charger** that achieves turbo boost comparable to two of the conventional single-scroll type
- **Valvetronic variable intake-valve lift**, which until '11 appeared only in BMW's non-turbocharged engines
- **High Pressure direct fuel injection** instead of the High Precision type with piezo injectors that continues in the 50i V-8 engine.

The 35i engine maintains the same power and torque ratings with which it made its debut in 2011:

- **300 hp @ 5800 rpm**
- **300 lb-ft. torque @ 1200-5000 rpm.**

Teamed with BMW's remarkably smooth, efficient and performance-enhancing 8-speed automatic transmission, this

X6 key features

Except as noted, both current X6 models offer the following features:

brilliant engine delivers a strong 0-60-mph time of just 6.3 sec., and EPA ratings of 16 mpg city/23 mpg highway/19 mpg combined. These are all excellent results for a 3-liter engine powering these substantial Sports Activity vehicles.

In addition to the main features listed, the N55 incorporates many other engineering distinctions. These and further N55 specifics are described in detail in **BMW features**.

N63 4.4-liter DOHC (4-cam) 32-valve twin-turbo V-8 engine with direct fuel injection (50i)

Endowing the X6 50i with a cool 100 hp and 150 lb-ft. more than the already powerful 35i engine, this unit represents the prowess and refinement of contemporary non-M BMW V-8 performance.

It does so by applying twin turbocharging and an especially high-tech form of direct fuel injection to 4.4 liters of displacement – an approach that departs dramatically from previous BMW V-8s, which typically had greater displacement and no turbocharging.

The point of this engineering approach is to achieve even

higher performance without correspondingly higher fuel consumption. In technical terms, the approach involves some fascinating design details. For detailed descriptions of twin turbocharging, direct fuel injection, piezo injectors, intercooling and other features of BMW's turbocharged engines, see the **BMW features** section.

8-speed STEPTRONIC Sport automatic transmission (both models)

With either of the two quite distinct engines of these models, this ultimate automatic transmission brings smooth shifting, sportiness and efficiency to a new level of perfection. In X6 models, it is the Sport version, with performance-oriented programming and steering-wheel shift paddles; for extensive details about the specific characteristics of BMW's Sport automatics, see **BMW features**.

Dynamic Performance Control (DPC)

(both models)

An amazing system that gives this relatively large, all-wheel-driven vehicle the agility of a BMW rear-wheel-drive vehicle without losing any of the traction advantages

of AWD. The principle and operation of DPC are explained in **BMW features**.

X6 suspension tuning and other details

Though X6 suspension is basically the same as that of the X5, its tuning and certain other details are trimmed to the X6's more sporting intent. The suspension is calibrated more firmly, and set 10 mm (0.4 in.) lower. A further handling benefit derives from the DPC's space requirement on both sides of the differential, which widens the rear track by 2.2 in., and the standard 19-in. wheels and tires. DPC is mentioned nearby and described in detail in **BMW features**.

Big brakes to match the powerful performance

BMW always systematically matches braking power to engine power. The two X6 models illustrate this principle perfectly with their performance-calibrated brake dimensions:

- X6 xDrive35i – 348-mm/13.7-in. diameter front, 320-mm/12.6-in. rear. Generously dimensioned by any standards.
- X6 xDrive50i – 365-mm/14.7-in. diameter front, 345-mm/13.6-in. rear – a full inch larger in diameter

to go with the 50i's 100 more horsepower.

In their basic engineering, all X6 brakes are 4-wheel ventilated discs with Geomet anti-corrosion rotor coating, ABS and extensive DSC brake functions as described in **BMW features**.

Run-flat tires: 19- or 20-in. on all models

Like nearly all current BMW models, the X6s have run-flat tires, whether equipped with all-season or performance tires. Departing somewhat from X5 wheel-and-tire configurations, both X6 models –

- come standard with 19-in. equipment that bespeaks the X6's sportier intent
- retain the same 19-in. size and all-season tires but have distinctive wheel designs for their Sport Activity Packages
- specify 20-in. performance equipment for the M Performance Package
- offer a Sport Activity Package 20-in. upgrade option.

Each model and equipment combination has its own wheel design and wheel/tire dimensions, as listed in the table below.

Model & version	Wheel size & design/code	Run-flat tires	Changes for '13
X6 xDrive35i standard	19 x 9.0 Star Spoke #232 2SG	255/50R-19 all-season	No changes
X6 xDrive50i standard	19 x 9.0 Double Spoke #424 2A3	255/50R-19 all-season	New wheel design
X6 xDrive35i Sport Activity Package	19 x 9.0 Star Spoke #212 2RY	255/50R-19 all-season	No changes
X6 xDrive50i Sport Activity Package	19 x 9.0 Star Spoke #258 2S6	255/50R-19 all-season	No changes
X6 xDrive35i & 50i Sport Activity Package upgrade	20 x 10.0 front/20 x 11.0 rear Y Spoke #214 2LE	275/40R-20 front/ 315/35R-20 rear performance ¹	Formerly a 35i Sport & Sport Activity Package upgrade
X6 35i & 50i M Performance Package	20 x 10.0 front/20 x 11.0 rear Y Spoke #336 2LM	275/40R-20 front/ 315/35R-20 rear performance ¹	Formerly a 50i Sport & Sport Activity Package upgrade

1 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X6

models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X6 key features

Except as noted, both current X6 models offer the following features:

Comfort & convenience

The interior is another of the significant X6 distinctions from the X5. Whereas the X5 is configured as a 5-passenger vehicle with optional 3rd-row seating for an additional 2 persons, the X6 is a 4-seater, with individual rear seats separated by a center console, no provision for 3rd-row seating, reduced (though still generous) cargo capacity, and a 1-piece liftgate with no lower tailgate. It's a whole different concept, combining a sporty and roomy cabin with the high seating position of an SUV. So, more accent on the "S" and not so much on the "U."

Introduced in 2012 is a 5-seater option for the X6, which replaces the for-two-only rear seats with a semi-bench seat contoured for three.

Interior space, amenities and ambiance

Compared to X5 dimensions, the X6 offers 0.7 in. less front and 1.1 in. less rear head room – yet *Car and Driver* (August '08) found it "surprisingly spacious and comfortable – perfect for four six-plus-footers, in fact, with plenty of stowage room in the long cargo area."

Up front, the instrument-panel/dash design and seating configuration are shared with the X5, but beyond this there are many X6 distinctions:

- All X6s come standard with the sport steering wheel; in X5s it's included with the optional Sport Activity Package.
- The standard wood trim is Ash Grain, vs. X5's Dark Burl Walnut. (Both are dark in color.)
- Optional trim materials are brushed aluminum and Dark

Bamboo wood, whereas the X5 offers Silver Matte, brushed aluminum, Light Poplar and Dark Bamboo.

- Whereas the base X5 35is has a leatherette interior, both X6 models come standard with leather upholstery. In both lines, the standard leather grade is Nevada.
- As in all X5s except the base 35i, a Nappa-leather interior is optional in both X6s. In X5s a Nappa-trimmed dash and upper door panels are included with the Nappa option; in both lines, this dash/door-panel option is available separately.
- Leather color choices differ between X6 and X5. In X5s, Nevada comes in Sand Beige, Oyster/Black, Tobacco and Black; in X6s the choices are Sand Beige, Vermilion, Oyster/Black, Saddle Brown/Black and Black. Vermilion is a rich red color, new for '13.
- Also as in X5s, perforated Nevada leather is mandatory with the newly named Luxury Seating Package, and is available in two colors as opposed to the five choices of the non-perforated leather.
- Beyond the X5 upholstery, X6 offers two additional choices: one is Alcantara/leather, in Black, as a no-extra-cost option. The Individual Composition, available in X6s, includes Full Merino Leather in three distinctive color schemes. See **packages & options** for details on this exciting option.
- For extra lateral support in vigorous driving, knee pads are positioned on the front center console's outboard edges.

- The X6 moonroof is BMW's traditional 2-way (lift/slide) glass type, vs. the X5's dual-panel Panoramic type; this is because the X6, with its sloping roofline, has less relatively flat roof length to accommodate the longer Panoramic moonroof.
- As in X5s, the X6's individual rear seats fold to extend the cargo area forward, though in the X6 they do not fold quite as nearly flush. As in X5s, the pass-through and ski bag are included in the optional Cold Weather Package.
- 3rd-row seating is not available in X6s.
- Newly standard in both models, the **Storage Package** adds illumination and an accessory power outlet to the front console compartment; plus enhancements of the cargo area including dual cargo rails with four adjustable attachment points, storage net and strap, and multi-function hooks left/right.
- In contrast to the X5's retractable soft cargo cover, X6s have a rigid, though foldable and removable, cover. This can be stored under the rear cargo floor unless the vehicle is equipped with the optional spare wheel/tire.
- The X6s have a 1-piece liftgate only, in contrast to the X5's 2-piece liftgate/tailgate combination.
- Because the X6's 1-piece liftgate lifts higher than the X5's liftgate, it includes 5-position adjustable opening height. This is to protect the liftgate, for example, in a low-ceilinged garage.

Standard power liftgate

Users can initiate a full opening from a console button, the remote or, close up, a button on the liftgate itself. (For the latter method, the vehicle must be unlocked.) For user safety, power closing of the liftgate is possible only from close up; in addition to this precaution, however, anti-trapping protection is included. The X6 liftgate includes 5-position opening height, adjustable in the iDrive system.

Safety & security

Safety and security features of the X6 generally parallel those of other BMW models, and are identical to those of the X5 except for the number of safety belts with the standard 4-seat configuration. Safety concepts and features shared by all BMW Sports Activity models include the following:

Active safety:

- Suspension, steering and brakes that communicate road conditions accurately to the driver, and respond precisely to the driver's commands
- Dynamic Stability Control with specific xDrive functions (ASC-X Automatic Stability Control, ADB-X Automatic Differential Brake, Hill Descent Control) plus Dynamic Traction Control, Brake Fade Compensation, Brake Standby, Brake Drying, Start-off Assistant, Modulated ABS function
- Xenon Adaptive headlights with auto-leveling
- Cornering lights
- Automatic headlight control
- Standard front foglights
- Rain-sensing windshield wipers

X6 key features

Except as noted, both current X6 models offer the following features:

- Park Distance Control (standard X5 and X6, optional X3)
- Adaptive brakelights
- Tire Pressure Monitor
- Rollover sensor
- Available rear and top-view cameras

Passive safety:

- 3-point safety belts at all seating positions
- Front safety belts with automatic tensioners and force limiters
- Height-adjustable Active front head restraints
- Advanced occupant-detection sensor for front passenger's seat
- Front- and rear-seat Head Protection System
- Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags
- Front-seat side-impact airbags
- LATCH attachment for child safety seats in 2nd seating row
- Battery Safety Terminal
- Automatic fuel-pump shutoff upon severe accident impact
- Advanced Crash Safety Management (ACSM) for deployment of safety systems
- State-of-the-art optimization of body structure for crash safety

X6 and X5:

- Enhanced steering-column design for crash safety
- Force limiters on all safety belts
- Available side-view cameras

Packages & options

Packages

Premium Package

(both models, code ZPP)

Changed for '13 only by elimination of the Storage Package, now standard, contents are as follows:

Both models –

- Rear- and top-view cameras, code 3AH
- Comfort Access keyless entry, code 322
- BMW Universal Transceiver, code 319
- Digital compass in interior mirror, code 4NA
- 4-zone climate control, code 4NB. The standard dual-zone climate system is a comprehensive, highly capable system; this adds full-featured climate control for the rear-seat passengers, including –
 - Separate left/right temperature controls
 - Separate blower
 - Additional air outlets in B-pillars
 - Control panel with temperature and air-distribution settings, including individual heating elements in foot space
 - Its own automatic program.
- Rear side-window sunshades, conveniently raised or lowered by hand. Code 417. The 35i Package adds –
- Navigation system, with all the customary functions and amenities of this industry-leading system. Code 609; standard in 50i.

M Performance Package

(both models, code ZMX)

Replacing the former Sport Package, this new package puts a sharper-than-ever emphasis on sportiness and performance.

Both models:

- Engine upgrade – embodying fine-tuning that ups power and torque, code 767:
 - 35i – +15 hp, +30 lb-ft. torque for ratings of 330 hp/330 lb-ft.
 - 50i – +40 hp, +30 lb-ft. for ratings of 440 hp/480 lb-ft.
 - 20-in. Y Spoke wheels with performance tires in differentiated front/rear sizes¹, code 2LM. These include the increased top-speed limiter, code 840.
 - Shadowline exterior trim as in Sport Activity Package and BMW Individual Composition, code 760
 - Black-chrome exhaust outlets, part of factory code 767
 - M doorsill trims, also part of code 767
 - M stainless-steel-trimmed pedals and driver's footrest, part of code 767
 - M sport steering wheel, code 7XA
 - Anthracite-color headliner, code 775
- 35i only:
- Sport front seats, code 481
 - Multi-Contour front seats, code 456, at additional cost. These are standard in the 50i, but customers can also specify the sport seats at no change in package cost.

Sport Activity Package

(both models, code ZAP)

This Package provides the wheels, tires, exterior distinctions and comfort/luxury features of the previous Sport Package but omits Adaptive Drive, which now appears in the Dynamic Handling Package, next. Contents differ for the two models and are as follows:

- Distinctive wheel design. Both models come standard with 19 x 9.0 wheels and 225/50R-19 run-flat all-season tires. With this Package, wheel and tire specifications don't change but the wheel designs are different:
 - 35i – Star Spoke design #212, code 2RY
 - 50i – Star Spoke design #258, code 2S6.
- 20-in. wheels and performance tires are available at additional cost: same differentiated front/rear sizes and performance tires¹ as with the M Performance Package, but in a different wheel design: Y Spoke #336, code 2LM. The increased top-speed limiter is included. Thus customers have the choice of prioritizing all-season or full sports capabilities with this package.
- Grilles with contrasting finish in air inlets immediately below kidney grilles and at bottom center of bumper/spoiler; this is part of the factory Sport Package code 330. (If vehicle is equipped with Active Cruise Control, the bottom-center grille is black.)

¹ – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X6 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X6 key features

Except as noted, both current X6 models offer the following features:

- **High-gloss Shadowline exterior trim** framing the side windows. Code 760.
- **Anthracite-color headliner**, another classic BMW nuance of Sport-equipped interiors. Code 775.

For the 35i only, the Package adds:

- **Sport front seats**, code 481. Classic BMW design, with more prominent side bolsters than those of standard seats, plus manual adjustment of thigh support. 10-way power adjustments of standard seats are also included. The 20-way **Multi-Contour front seats** may be substituted for the sport seats at their regular option price in the 35i, and are standard in the 50i. Yet customers who prefer sport seats in their 50i can specify them at no extra cost, just as with the M Performance Package.

BMW Individual Composition (both models, code Z11)

Now this magnificent vehicle treatment comes to the X family in the form of a lavish group of luxury and esthetic details.

Both models:

- **Shadowline exterior trim**, as in the Sport and Sport Activity Packages. Code 760.
- **BMW Individual doorsill trims**, code 778, with the BMW Individual script.
- **Full Merino Leather upholstery**, codes ZB. This richest of BMW leather, familiar from other Individual Composition vehicles (6 and 7 Series) as well as the X5-X6 M, is available in Platinum, Champagne and Criollo Brown, all with contrasting Black elements. Merino appears on the –

- **Seat facings**, including the backrests' back sides
 - **Head restraints**, including their rear-facing surfaces
 - **Lower door panels**
 - **Door pulls and armrests**
 - **Center-console sides and knee pads**
 - **Front and rear center armrests** – and Nappa leather is on the door panels' upper portions. Finally, the dash is trimmed in Merino as code XT1.
 - **Choice of three Individual interior trim materials:** Piano Black, code XE7; Eucalyptus Red Brown, XE3; Carbon Leather, XE9.
 - **Anthracite-color headliner**, code 775
- 35i only:
- **Multi-Contour front seats**, which are standard in the 50i. Code 456.

BMW Individual exterior colors (both models, paint codes)

As with most other BMW models' Individual Compositions, a selection of special Xirallic exterior paints is available at separate extra cost in combination with the Composition: here the choices are Azurite Black S34, Pearl Silver X01, Citrin Black X02 and Ruby Black X03. These paints are described in **BMW features**.

Technology Package (both models, code ZTP)

This group is the same for both models:

- **Automatic High Beams** – switches between low and high beams according to traffic conditions. Code 5AC.
- **Side-view cameras** – by providing a view to the sides at the front of the vehicle, these enhance certainty and safety in pulling out into traffic, as for

instance from an alley or parking garage. Code 5DK.

- **Head-up Display**, code 610. This is not the new-generation HUD found in some other BMW Series.

Cold Weather Package

(both models, code ZCW)
With heated front seats now standard, this Package includes heated rear seats instead. Content is identical for both models as well as the standard 4-passenger and optional 5-passenger seating:

- **Headlight cleaning system with retracting jets**, code 502
- **Heated steering wheel**, code 248
- **Heated rear seats**, code 496
- **Ski bag** with pass-through in the rear seat, code 464.

Premium Sound Package (both models, code ZPS)

This package adds a new possibility for '13: a further audio upgrade via the spectacular BMW Individual Enhanced Premium audio system. Here are the contents of ZPS:

- **Premium audio system**, code 677. Upgrades the entire audio system with nearly tripled audio power (600 watts), even higher-caliber speakers and more of them (16, vs. standard 10), Digital Sound Processing (DSP) and Surround Sound simulation. For a detailed description, see the X5 section.
- **Satellite Radio with 1-year subscription**, code 655.

Available for additional extra cost is the –

- **Enhanced Premium audio system**, code 752. Already available in X5 M and X6 M, and was offered in the previous Active-hybrid X6. Specifically designed by BMW M for

the X5 and X6 interior, this 825-watt, BMW M-developed true audiophile system goes another big step toward sound perfection. For details, see **BMW features**.

Luxury Seating Package (both models, code ZLS)

A new name brings the former Active Ventilated Seats Package into line with similar packages offered in other Series. Its content is unchanged from the former ZAV:

- **Active Seat Ventilation**, code 453. Nine fans inside each front seat cushion and backrest gently blow air upward and outward through an internal web and special perforated leather to provide pleasant ventilation and help keep occupants' clothes free of perspiration. The perforated Nevada leather upholstery that facilitates and is required with Active Seat Ventilation is available in Sand Beige and Black.
- **Active Support** feature on driver's seat, code 451. Employs two stretchable hollow cavities, filled and emptied alternately with a freeze-proof liquid. This slow, gentle process creates a cyclical raising and lowering (at about once a minute) of the cushion's left and right halves by about half an inch, and can be switched on or off as desired. The movement is virtually imperceptible, yet helps relieve fatigue during extended driving.

1 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X6 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X6 key features

Except as noted, both current X6 models offer the following features:

The 35i Package adds:

- 20-way Multi-Contour front seats, code 456, increasing the number of power adjustments from the standard 10-way to 20-way. Described in detail in the **BMW features** section, these seats are standard in the 50i.

Priority 1 package³

Dynamic Handling Package (both models, code ZDH)

New for '13, this package combines three high-tech BMW systems that enhance agility, riding comfort or both:

- Active Steering, code 217
- Active Roll Stabilization (ARS)⁴
- Electronic Damping Control (EDC)⁴

For an explanation of all these systems, see **BMW features**.

Stand-alone options

Full LED headlights

(both models, code 552; require Cold Weather Package)

This cutting-edge lighting technology made its debut in the new 6 Series in '12 and is now available for X6.

The option adds LED-powered headlights to the standard LED luminous rings, plus wedge-shaped LED strips above them. Thus most forward lighting functions, including turn signals and Daytime Running Lamps, are LED-sourced and the standard Adaptive feature is retained. Both the low and high beams employ all four lights for the first time.

Comfort Access keyless entry (both models, code 322)

Eliminates the need to activate a remote to unlock or lock the vehicle, or to insert it into the dash slot before starting the engine. Described in the **BMW features** section.

Soft-close doors

(both models, code 323)

The user closes the doors gently; an electric mechanism draws it fully in.

Aluminum running boards (both models, code 328)

Rubber-trimmed aluminum running boards, 4.1 in. wide, are a popular option for both esthetic and functional reasons.

Navigation system

(optional 35i, code 609; standard 50i)

This signature BMW system is available in the 35i Premium Package or as this stand-alone option. See **BMW features** for details on a pioneering BMW system that has matured into an elegant, convenient and multifaceted amenity.

Head-up Display

(both models, code 610; in 35i, requires Premium Package or Navigation)

In the X5 and X6, as well as a growing number of other models, the display's vertical position in the windshield can be adjusted to suit drivers of greater or lesser stature. Settings chosen by the driver are captured by the Vehicle and Key Memory, and are re-captured when that user unlocks the car.

Satellite Radio with 1-year subscription

(both models, code 655)

The system beams programming to satellites orbiting the earth; satellite-equipped vehicles receive the programming. For more details, see **BMW features**.

Rear Seat Entertainment

(35i & 50i, code 6FF)

This option includes –

- An 8-in. monitor that can be folded away
- DVD player
- Wireless remote control
- Two headphone jacks
- Two accessory power outlets
- An infrared interface for wireless headphones.

BMW Apps

(both models, code 6NR)

BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function is released, users can update and customize their vehicle's infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party app.

Further details are presented in **BMW features**.

Multi-Contour front seats

(optional 35i, code 456; standard 50i)

Included in various X6 packages; also available as this stand-alone option. 20-way power adjustment, including articulated backrests and power thigh support. Standard in 50i; described in the **BMW features** section.

Sport front seats

(50i, code 481)

Though also available in various other packages, these are available in the 50i as a stand-alone, no-extra-cost option. Described under **Sport Activity Package**.

Alternate interior trim

(no extra cost, code 4AD or 4AZ)

Dark Ash Grain wood trim (code 4BN) is standard in all X6 models. Two trim materials are available at no extra cost: Dark Bamboo (4AZ) or brushed aluminum (4AD).

Space-saver spare wheel/tire (both models, code 300)

As all X6s are equipped with run-flat tires, a spare is not included in the standard equipment. For customers who desire the additional reassurance of an onboard spare, this option provides an 18-in. (35i) or 19-in. (50i) space-saver spare wheel/tire.

Priority 1 options³

Lane Departure Warning (both models, code 5AD)

This remarkable system employs a camera near the interior rear-view mirror to detect when the vehicle begins to move across a lane marking without turn signals activated. When this occurs, LDW vibrates the steering wheel to alert the driver.

3 – Priority 1 options accurate at time of publication but subject to changes. For current model-specific standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

4 – ARS and EDC are combined as a single option, coded 2VA and called Adaptive Drive. They are listed separately here to emphasize that they are two highly sophisticated and valuable features.

X6 key features

Except as noted, both current X6 models offer the following features:

Active Cruise Control with Stop-and-Go function, Collision Warning System (both models, code 5DF)

This most capable version of Active Cruise Control is described in BMW features.

P1 metallic exterior colors (both models, color codes)

Offered as P1 options for 2013 are Deep Sea Blue 076, Orion Silver A92 and Marrakesh Brown B09.

Nappa leather upholstery

(both models, codes NA; in 35i, requires Multi-Contour front seats)

For X6 customers who want an extra measure of leather luxury, Nappa is one of BMW's most sumptuous leather grades. The Nappa interior differs from the Nevada in several ways:

- Seat center and side sections and head restraints, Nappa instead of Nevada leather
- Center and door armrests, front and rear, Nappa instead of Nevada
- Door pulls front and rear, Nappa leather instead of leatherette
- Roof grab handles – plastic instead of knitwear material

The Nappa leather is available in Sand Beige and Black.

Alcantara/leather upholstery (both models, codes GH; requires sport front seats)

This distinctive upholstery scheme is available as a no-extra-cost alternative to the standard leather upholstery in both models; its combination requirement of sport seats effectively makes the M Performance or Sport Activity Package a requisite for the 35i, but sport seats (code 481) are available as a stand-alone option in the 50i. Now available in Black only.

Leather-trimmed dash and upper door panels (both models, code 4M5)

Formerly included with the Nappa upholstery or available stand-alone, this option is now available only on this P1 stand-alone basis. The upper dash and door sections are in black, the lower dash in the interior color.

Sports Activity center-installed performance equipment

Available for installation by Sports Activity centers for 2008-2010 X6 35i and 50i models are Performance Power Kits, featuring special software developed and tested in-house by BMW powertrain engineers. These enhance the X6 driving experience by increasing engine output and response, without increasing fuel consumption or exhaust emissions:

- For X6 xDrive35i, 320 hp/332 lb.-ft. torque vs. original 300/300
- For X6 xDrive50i, 440 hp/480 lb.-ft. torque vs. original 400/450.

In addition, BMW Performance offers a high-performance exhaust system for current 35i and 50i models.

Similar upgrades for both currently available X6 models are included in the M Performance Package.

BMW Sports Activity center-installed accessories

Among the many accessories available for the X6 are:

- Complete wheel and tire sets, including elegant Midnight Chrome and Ferric Gray wheels in 21-in. sizes
- 18-in. winter wheel and tire sets
- Valve-stem caps with BMW lettering or logo
- Snow chains
- Mud flaps
- Bicycle carriers, roof-mounted, plus lifts
- Roof rails
- Roof-rack system and attachments
- Underride protection
- Trailer-hitch kit, Class III
- Black kidney grilles
- Grille guard
- Aerodynamic components
- Nose mask and other exterior protective products
- Carbon-fiber-look door-pillar accents
- Running boards, aluminum with rubber contact inserts
- Illuminated doorsill trims
- Sun/wind deflector for moon-roof
- Side-window wind deflectors
- Wood trim for E-shift and steering wheel
- License-plate frames
- Car covers, outdoor and indoor types
- UV sunshade
- Aluminum-trimmed pedal pads
- Racing-style steering wheel with Alcantara-wrapped rim, flattened lower rim
- Floor mats, all-weather
- Snap-in adaptor with USB interface for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- Snap-in adapter for BMW Apps and various media
- Connection and charging cables of various types
- BMW Bluetooth speaker
- CD/DVD storage sleeve
- Cool bag
- BMW umbrella with LED light
- LED hand lamp
- Extensive cargo-compartment accessories

For details and a complete listing, see the latest Accessories listings for XGs on bmwusa.com.

Standard & optional features

2013 X6

Bold within table indicates new feature for 2013.

Exterior design & function	X6 xDrive35i	X6 xDrive50i
Impact-absorbing bumpers front & rear with combination body-color & protective black cladding	S	S
Xenon Adaptive headlights with dynamic auto-leveling	S	S
Full LED headlights	OPT	OPT
Cornering lights	S	S
Automatic headlight control	S	S
High-intensity headlight cleaning system with retractable jets	ZCW	ZCW
Daytime Running Lamps via luminous rings	S ¹	S ¹
Halogen free-form foglights	S	S
Welcome Light	S	S
Rain-sensing windshield wipers	S	S
Heated windshield-washer jets	S	S
Park Distance Control front & rear, with graphic display	S	S
Rear- & top-view cameras	ZPP	ZPP
Side-view cameras	ZTP	ZTP
Ground lighting in door handles	ZPP	ZPP
Running boards	OPT/C	OPT/C
Adaptive brakelights	S	S
Choice of standard or metallic paint	NC	NC
BMW Individual Xirallic paint, choice of 4 colors	Z11+OPT	Z11+OPT
Vertical grille slats	Black	Titanium-finish
Matte-black side-window trim	S	–
Matte-black & chrome side-window trim	NA	S
High-gloss Shadowline side-window trim	ZMX/ZAP/Z11	ZMX/ZAP/Z11
Body-color door handles & roof-seam trim	S	S
Exterior mirrors in body color/black finish	S	S
Power-folding exterior mirrors	S	S
Dual chrome exhaust tips	Round	Modified rectangular
Black Chrome exhaust tips, same shape as standard	ZMX	ZMX
Performance & efficiency	X6 xDrive35i	X6 xDrive50i
3.0-liter DOHC 24-valve TwinPower Turbo 6-cylinder engine	S	–
4.4-liter DOHC 32-valve twin-turbo V-8 engine	–	S
Engine features:		
Aluminum construction	S	S
Double VANOS ² steplessly variable valve timing	S	S
High Pressure direct fuel injection	S	–
High Precision direct fuel injection with piezo injectors	–	S

1 – Selectable by user, stored in Vehicle & Key Memory.
 2 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.
 S – Standard
 OPT – Optional
 NA – Not available
 C – BMW Sports Activity center-installed
 NC – No extra cost

– – Not applicable
 ZAP – Sport Activity Package
 ZCW – Cold Weather Package
 Z11 – BMW Individual Composition

ZMX – M Performance Package
 ZPP – Premium Package
 ZTP – Technology Package

Standard & optional features

2013 X6

Bold within table indicates new feature for 2013.

Performance & efficiency (cont.)	X6 xDrive35i	X6 xDrive50i
Electronically controlled engine cooling	S	S
Electric coolant pump	S	S
Volume-controlled oil pump	S	NA
Direct ignition system with knock control	S	S
Dual exhaust system	S	S
Engine upgrade to 315 hp/330 lb-ft.	ZMX	–
Engine upgrade to 440 hp/480 lb-ft.	–	ZMX
8-speed Sport Automatic transmission with Adaptive Transmission Control, Sport & Manual modes, E-shift on console, shift paddles on steering wheel, other special features	S	S
Multi-link double-wishbone front suspension	S	S
4-link rear suspension with Integral Link	S	S
Front & rear anti-roll (stabilizer) bars	S	S
Active Roll Stabilization ³	ZDH⁴	ZDH⁴
Twin-tube gas-pressure shock absorbers	S	S
Electronic Damping Control ³	ZDH⁴	ZDH⁴
Variable-ratio, constant-assist power steering	S	S
Active Steering with electronically variable ratio & Servotronic vehicle-speed-sensitive power assist	ZDH⁴	ZDH⁴
4-wheel ventilated disc brakes	S	S
Aluminum/cast-iron brake rotors front & rear	NA	NA
Brake Energy Regeneration	S	S
Electromechanical parking brake & Automatic Hold	S	S
Dynamic Stability Control with Hill Descent Control	S	S
xDrive fulltime all-wheel drive system, electronically controlled with variable front/rear torque split & traction control	S	S
Alloy wheels:		
19 x 9.0 Star Spoke, design #232	S	NA
19 x 9.0 Double Spoke, design #424	NA	S
19 x 9.0 Star Spoke, design #212	ZAP	NA
19 x 9.0 Star Spoke, design #258	NA	ZAP
20 x 10.0 front/20 x 11.0 rear Y Spoke, design #214	ZAP+OPT	ZAP+OPT
20 x 10.0 front/20 x 11.0 rear Y Spoke, design #336	ZMX	ZMX
Run-flat tires:		
255/50R-19 all-season	S/ZAP	S/ZAP
275/40R-20 front / 315/35R-20 rear performance ⁵	ZAP+OPT/ZMX	ZAP+OPT/ZMX
Space-saver spare tire	OPT	OPT
Tire Pressure Monitor	S	S
Pre-wiring for trailer hitch	S	S

3 – These two options combined are called Adaptive Drive.

4 – Priority 1 option or package.

5 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and

consequential damages. X6 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

S – Standard
OPT – Optional
NA – Not available
– – Not applicable

ZAP – Sport Activity Package
ZDH – Dynamic Handling Package
ZMX – M Performance Package

Standard & optional features

2013 X6

Bold within table indicates new feature for 2013.

	X6 xDrive35i	X6 xDrive 50i
Comfort & convenience		
Trailer-hitch kit	C	C
Vehicle & Key Memory	S	S
Multi-function remote control with selective unlocking ¹ & remote liftgate release	S	S
Comfort Access keyless entry	ZPP	ZPP
BMW M doorsill trims	ZMX	ZMX
BMW Individual doorsill trims	ZI1	ZI1
Soft-close doors	OPT	OPT
Auto-dimming interior & exterior mirrors	S	S
Digital compass in interior mirror	ZPP	ZPP
Automatic High Beams	ZTP	ZTP
BMW Universal Transceiver(garage-door opener)	ZPP	S
Courtesy lights with fade-in/fade-out feature, actuation from remote, automatic switch-on upon engine shutoff, separately controlled left/right front reading lights, front vanity-mirror lights, front footwell lighting, entry/exit light above each rear door, ambient lighting of console area, 2 cargo-compartment lights in liftgate	S	S
Ground lighting, ambient lighting of exterior door handles & interior storage compartments, illumination of interior door handles, entry/exit light in each door, left/right rear reading lights & rear footwell lighting (ambient lighting package)	S	S
Power tilt/telescopic leather-wrapped sport steering wheel with memory, automatic tilt-up & fingertip multi-function controls	S	S
Heated steering wheel	ZCW	ZCW
M sport steering wheel	ZMX	ZMX
M stainless-steel-trimmed pedals & driver's footrest	ZMX	ZMX
Dynamic Cruise Control	S	S
Active Cruise Control with Stop-and-Go function & Frontal Collision Warning System	OPT ⁴	OPT ⁴
10-way power front seats	S	-
10-way power + 2-way manual front sport seats	ZAP/ZMX	NC
4-way power front-seat lumbar support	S	S
Memory system for driver's seat, steering wheel & exterior mirrors (2 settings per user)	S	S
3-stage, thermostatically controlled heated front seats with fast heating & 4-zone balance control	S	S
20-way Multi-Contour front seats with driver & passenger memory	ZI1/ZLS/OPT	S
Active Seat Ventilation, both front seats	ZLS	ZLS
Active Comfort driver's seat	ZLS	ZLS
Auto tilt-down of right-hand exterior mirror for backing up	S	S
Front center console compartment with dual lids/armrests & auxiliary audio input	S	S

1 – Selectable by user, stored in Vehicle & Key Memory. 4 – Priority 1 option or package.

S – Standard
OPT – Optional
NA – Not available
ZAP – Sport Activity Package
ZCW – Cold Weather Package

ZI1 – BMW Individual Composition
ZLS – Luxury Seating Package
ZMX – M Performance Package
ZPP – Premium Package
ZTP – Technology Package

Standard & optional features

2013 X6

Bold within table indicates new feature for 2013.

Comfort & convenience (cont.)	X6 xDrive35i	X6 xDrive 50i
Dual cupholders front & rear	S	S
Accessory electric power outlets in front & rear center consoles, cargo compartment	S	S
Glove compartment with dual open-up/open-down, electrically operated doors; included in central locking system	S	S
Electronic analog speedometer & tachometer	S	S
LCD main & trip odometers	S	S
iDrive system with high-resolution control display, direct-select radio, CD & phone ⁶ menus + Menu, Back & Option keys, 6 Programmable Memory Keys, On-Board Computer & other functions	S	S
Navigation System with larger (8.8-in.) display, additional direct-select Navigation menu key, enhanced Voice Command, Real Time Traffic Information, expanded On-board Computer functions, BMW Search, automatic ventilation & many other features	ZTP/OPT	S
Head-up Display	ZTP/OPT ⁷	ZTP/OPT
Nevada leather upholstery	S	S
Nevada perforated leather upholstery	OPT ⁸	OPT ⁸
Nappa leather upholstery	OPT ^{4,9}	OPT ⁴
Alcantara/leather upholstery	NC ^{4,10}	NC ^{4,10}
Full Merino leather upholstery & dash trim	ZI1	ZI1
Ash Grain wood interior trim, medium-dark tone	S	S
Dark Bamboo wood interior trim	NC	NC
Brushed-aluminum interior trim	NC	NC
BMW Individual interior trim, choice of Piano Black or Eucalyptus Red-Brown wood or Carbon Leather	ZI1	ZI1
Anthracite-color headliner	ZAP/ZMX/ZI1	ZAP/ZMX/ZI1
Power windows with key-off operation; 1-touch opening & closing of all door windows, anti-trapping feature, opening from remote, closing from exterior lock	S	S
Automatic climate control with separate left/right temperature & air-distribution settings, automatic recirculation control, misting control, bi-directional solar sensor, temperature-controlled rear air outlets, toggle control for custom air-distribution setting, Max A/C function, activated-charcoal microfilter ventilation & other features	S	S
4-zone automatic climate control with rear blower, separate left/right temperature & air-distribution controls front & rear, additional air outlets in B-pillars & all features of standard system	ZPP	ZPP
2-way power moonroof with 1-touch operation, sliding interior sunshade	S	S

4 – Priority 1 option or package.

6 – Phone controls active when approved mobile-device is paired with Bluetooth interface.

7 – Requires Premium Package or Navigation.

8 – Required with Luxury Seating Package; available in Black or Sand Beige.

9 – Requires Multi-Contour seats.

10 – Requires sport seats.

S – Standard
OPT – Optional
NC – No extra cost
ZAP – Sport Activity Package

ZI1 – BMW Individual Composition
ZMX – M Performance Package
ZPP – Premium Package
ZTP – Technology Package

Standard & optional features

2013 X6

Bold within table indicates new feature for 2013.

Comfort & convenience (cont.)	X6 xDrive35i	X6 xDrive 50i
Anti-theft AM/FM/HD/CD/MP3 audio system with 10 speakers including 2 subwoofers, Radio Data System (RDS), auxiliary audio input, weather band & FM diversity antenna system	S	S
Premium audio system with 16 speakers, Surround Sound & Digital Sound Processing; includes 2 subwoofers, increased audio power, upgraded componentry throughout & all features of 10-speaker system	ZPS	ZPS
Enhanced Premium Sound System with 16 Neodymium/Hexacone speakers, DIRAC acoustic compensation, 9-channel amplifier with increased power, Digital Sound Processing, Surround Sound & other high-end audio features (also includes all features of standard system)	ZPS+OPT	ZPS+OPT
Auxiliary audio input	S	S
iPod/USB Adapter	S	S
BMW Apps, including Smartphone Integration	OPT ⁷	OPT ⁷
Satellite Radio with 1-year subscription	ZPS/OPT	ZPS/OPT
Rear Seat Entertainment	OPT	OPT
Bluetooth mobile-device interface with high-capacity phonebook download	S	S
Dual front sun visors with illuminated mirrors	S	S
Storage compartments in all 4 doors	S	S
Seatback storage compartments	S	S
Split folding rear seats	S	S
Fold-up rear center armrest	S	S
Ski bag	ZCW	ZCW
Heated rear seats	ZCW	ZCW
5-passenger seating	OPT	OPT
Rear side-door sunshades	ZPP	ZPP
Privacy glass	S	S
Fully finished cargo area with folding/removable cover, 4 cargo tie-downs, accessory power outlet, underfloor toolkit	S	S
Floor mats, front & rear	S	S
Dual cargo rails with 4 adjustable tie-downs, storage net & straps, multi-function hooks; lockable underfloor storage; removable rubber mats in front door bins; accessory power outlet & illumination in front center compartment (storage package)	S	S
Power liftgate with 5-position opening height, adjustable within iDrive	S	S

7 - Requires Premium Package or Navigation.

S - Standard
 OPT - Optional
 NA - Not available
 C - BMW Sports Activity center-installed
 - - Not applicable

ZCW - Cold Weather Package
 ZPP - Premium Package
 ZPS - Premium Sound Package

Standard & optional features

2013 X6

Bold within table indicates new feature for 2013.

Safety & security	X6 xDrive35i	X6 xDrive50i
Dynamic Stability Control, including electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Brake Control, Hill Descent Control, Brake Fade Compensation, Brake Standby, Brake Drying & Automatic Hold	S	S
Rollover Protection System: senses possibility of rollover, deploys Head Protection System & safety-belt tensioners, interacts with Dynamic Stability Control	S	S
Rear- & top-view cameras	ZPP	ZPP
Side-view cameras	ZTP	ZTP
Lane Departure Warning	OPT ⁴	OPT ⁴
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S
3-point safety belts with force limiters at all seating positions	S	S
Front safety belts with automatic tensioners	S	S
LATCH attachments at rear outboard seating positions (for installation of child restraint seats)	S	S
Head restraints at all seating positions (including optional 3rd-row seating)	S	S
Active head restraints, front seats	S	S
Front- & rear-seat Head Protection System	S	S
Front-seat side-impact airbags, seat-mounted	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S
Post-impact safety measures:		
Unlocking of central locking system	S	S
Switch-on of hazard flashers	S	S
Disconnect of alternator, fuel pump & starter from battery (Battery Safety Terminal)	S	S
BMW Assist, including enhanced automatic collision notification, SOS button, enhanced Roadside Assistance, TeleService, BMW Assist Safety Plan	S	S
Central locking system with selective unlocking; includes glove compartment	S	S
Enhanced Coded Driveaway Protection	S	S
Alarm system with operation from remote, interior motion detector	S	S

4 – Priority 1 option or package.

S – Standard

OPT – Optional

ZPP – Premium Package

ZTP – Technology Package

Technical specifications

2013 X6

Bold within table indicates new specification for 2013.

General	X6 xDrive35i	X6 xDrive50i
Curb weight, lb.	4784	5225
Weight distribution, front/rear, %	49.8/50.2	51.1/48.9
Wheelbase, in.	115.5 ¹	
Track, front/rear, in.	64.7/67.2 ^{1,2}	
Length, in.	192.0 ¹	
Width, in.	78.1 ¹	
Height, in.	66.5	66.5

Sports Activity-specific	X6 xDrive35i	X6 xDrive50i
Gross Vehicle Weight Rating (GVWR), lb.	5975	6250
Payload, lb.	937	937
Onroad towing capacity, lb.:		
Maximum trailer gross weight, braked	6000 ¹	
Suggested max. tongue weight	600 ¹	
Ramp angle, deg.	17.2 ¹	
Front approach angle, deg.	22.8 ¹	
Rear departure angle, deg.	23.8 ¹	
Ground clearance, unloaded, in.	8.3 ¹	
Fording depth @ 4 mph, in.	17.7 ¹	

Body	X6 xDrive35i	X6 xDrive50i
Type	5-door Sports Activity Coupe ¹	
Aerodynamic drag coefficient (C _D)	0.35	0.37
EPA category	SUV 4WD ¹	

Accommodations	X6 xDrive35i	X6 xDrive50i
Seating capacity, persons	4 or 5 ¹	
Shoulder room, front/rear, in.	59.9/57.0 ¹	
Head room, front/rear, in.	37.7/37.2 ¹	
Leg room, front/rear, in.	40.4/35.9 ¹	
EPA passenger volume, cu ft.	97.7	
Cargo volume, cu ft.	25.6/59.7 ¹	
Max. cargo volume, SAE/EPA measurement	59.7 ^{1,3}	

1 – Specification applies to both models.

2 – With standard wheels.

3 – Can be expanded via folding rear seats.

Technical specifications

2013 X6

Bold within table indicates new specification for 2013.

Engine & electrical	X6 xDrive35i	X6 xDrive50i
Engine type	DOHC inline 24-valve 6-cylinder, aluminum construction with cast-iron cylinder liners, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁴ steplessly variable intake- & exhaust-valve timing	DOHC (4-cam) 32-valve V-8, aluminum construction with silicon-impregnated cylinders, direct fuel injection with piezo injectors, twin turbochargers, Double VANOS ⁴ steplessly variable intake- & exhaust-valve timing
Bore x stroke, mm/in.	84.0 x 89.6/ 3.31 x 3.53	89.0 x 88.3/ 3.50 x 3.48
Displacement, cc/cu in.	2979/182	4395/268
Compression ratio	10.2:1	10.0:1
Power @ rpm, hp	300 ⁵ @ 5800-6200	400 ⁶ @ 5500-6400
Torque @ rpm, lb-ft.	300 ⁵ @ 1200-5000	450 ⁶ @ 1750-4500
Engine-management system	MEVD 17.2 with knock control, direct fuel injection, variable valve lift & timing, engine cooling & other functions included in control strategy	MSD 85.1 with knock control, direct fuel injection, variable valve timing, engine cooling & other functions included in control strategy
Fuel requirement	Premium unleaded ¹	
Fuel capacity, U.S. gal.	22.5 ¹	
Battery capacity, amp-hr.	70	90
Vehicle electrical system, volts	12 ¹	
Alternator output, amp./W	210/2940 ¹	

1 – Specification applies to both models.

4 – VANOS = **V**ariable **N**ockenwellen

Steuerung = variable camshaft control, or variable valve timing.

5 – 315 hp/330 lb-ft. with M Performance Package.

6 – 440 hp/480 lb-ft. with M Performance Package.

Technical specifications

2013 X6

Bold within table indicates new specification for 2013.

Drivetrain	X6 xDrive35i	X6 xDrive50i
Drive system	Front engine/all-wheel drive; xDrive system with electronically controlled multi-disc clutch for variable front/rear torque split; all-wheel electronic traction control; Dynamic Performance Control for rear left/right torque split ¹	
Automatic transmission	8-speed Sport Automatic ¹ 8 HP 45	8 HP 70
Ratios: 1st	4.71:1 ¹	
2nd	3.14:1 ¹	
3rd	2.11:1 ¹	
4th	1.67:1 ¹	
5th	1.28:1 ¹	
6th	1.00:1 ¹	
7th	0.84:1 ¹	
8th	0.67:1 ¹	
Reverse	3.30:1 ¹	
Final drive ratio	3.15:1 ¹	
Chassis	X6 xDrive35i	X6 xDrive50i
Body/frame construction	Unitized steel structure ¹	
Front suspension	Multi-link double-wishbone system: upper & lower lateral links with aluminum upper links, steel double-pivot lower links, coil springs, twin-tube gas-pressure shock absorbers, anti-roll bar; aluminum thrust plate ¹ Dynamic Handling Package: Active Roll Stabilization & Electronic Damping Control (Adaptive Drive) ¹	
Rear suspension	4-link Integral suspension with aluminum upper & lower arms & wheel carriers; coil springs ¹ Dynamic Handling Package: Active Roll Stabilization & Electronic Damping Control (Adaptive Drive) ¹	
Steering type: Standard	Rack & pinion, power-assisted ¹	
Optional Active Steering (Dynamic Handling Package)	Rack & pinion, Servotronic vehicle-speed-sensitive power assist ¹	
Overall ratio: Standard steering	Mechanically variable; mean ratio is 19.5:1 ¹	
Active Steering	Electronically variable over wide range ¹	
Turns, lock-to-lock	3.1 (standard system or at mean ratio of Active system) ¹	
Turning circle, ft.	42.0 ¹	

¹ – Specification applies to both models.

Technical specifications

2013 X6

Bold within table indicates new specification for 2013.

Chassis (cont.)	X6 xDrive35i	X6 xDrive50i
Brakes	4-wheel ventilated discs ¹	
Diameter, mm/in.:		
Front	348/13.7	365/14.4
Rear	320/12.6	345/13.6
Assist	Vacuum ¹	
Cast-alloy wheels:		
Standard or Sport Activity Package	19 x 9.0 ¹	
Optional	20 x 10.0 front/20 x 11.0 rear ^{1,5}	
Tires:		
Standard or Sport Activity Package	All-season, 255/50R-19 ¹	
Sport Activity Package upgrade or M Performance Package	Performance, 275/40R-20 front / 315/35R-20 rear ^{1,7}	
Stability-control system	Dynamic Stability Control (DSC), including all-speed traction (ADB-X) & stability (ASC-X) control via engine &/or brake intervention; Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), Cornering Brake Control, cornering stability enhancement, Dynamic Performance Control, Dynamic Brake Control, Hill Descent Control, Brake Fade Compensation, Brake Standby, Brake Drying, Automatic Hold ¹	
Performance data	X6 xDrive35i	X6 xDrive50i
Acceleration, 0-60 mph, sec. ⁸ :	6.3	5.2
Top speed, mph ⁹ :		
Standard, Sport or Sport Activity Package	130 ¹	
With optional performance tires	150 ¹	
Fuel economy, EPA est. MPG, city/highway/combined	16/23/19	14/20/16

1 – Specification applies to both models.

7 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X6 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

8 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle, road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

9 – Electronically limited.

2013 X5:

Featuring an available M Performance Package and Chrome Line exterior trim, plus other option enhancements.

Over its now 14-year history, the X5 has become one of BMW's standout success stories. Upon its debut, it was a revolutionary concept, combining for the first time traditional BMW qualities – performance, handling, agility, elegance, solid construction – with the robustness, all-road capability and versatility of an SUV. So new, so unique and so compelling was this concept that BMW wouldn't simply call the X5 an SUV; instead, BMW dubbed it a Sports Activity Vehicle. Thus with this stunning new idea, a unique vehicle category was born.

In the intervening years, the first X5 generation ran from 2000 through 2006. Model year 2007 introduced the 2nd generation, which remained true to the original's character and presence while evolving with an all-new design, more powerful and refined engines, available 7-passenger seating and an expanded range of options. BMW's customary LCI – Life Cycle Impulse – freshened it in 2011, and 2012 brought a further evolution in terms of standard equipment and customer value.

What's new for 2013

As of 4/12 production:

- 2013 X5 35i and 50i models enter production; 35d continues as 2012 model
- M Performance Package, as a complement to M Sport Package of 35i Sport Activity and 50i models; includes upgraded engine power/torque, Black Chrome exhaust outlets, stainless-steel-trimmed pedals

- Chrome Line exterior treatment is added to Convenience Package of 35i Premium model
- Premium Sound Package price reduced
- Orion Silver Metallic exterior color becomes available as Priority 1 option; Platinum Bronze discontinued
- Active Ventilated Seat Package (all models except base 35i) renamed Luxury Seating Package for consistency with other Series; content unchanged
- Heated steering wheel (Cold Weather Package) now available in combination with M Sport Package; previously was not

As of 10/12 production:

- Soft-close doors added to Convenience Package of 35i Premium and Sport Activity models and Premium Package of 50i; new option code ZC3 for these models

As of 12/12 production:

- 2013 35d model enters production, with Chrome Line exterior trim added to Premium Package and Premium Sound Package price reduced; Satellite Radio added as stand-alone option

X5 models & key features

This information lists major features, and helps position and distinguish the models from each other. For a comprehensive summary of features, see pages 738-755.

X5 xDrive35i

The 3-model 35i hierarchy positions this as the “base” model, with relatively simple (though obviously ample) standard equipment, few options and an impressively modest entry price. As this listing shows, the base 35i incorporates all the essentials of the X5 experience:

- TwinPower Turbo 6-cylinder engine, 300 hp/300 lb-ft./19 mpg combined EPA rating
- 8-speed STEPTRONIC automatic transmission (standard)
- Multi-link front suspension with upper links
- 4-link rear suspension with Integral Link
- Variable-ratio rack-and-pinion power steering
- 4-wheel ventilated disc brakes
- Electromechanical parking brake with Automatic Hold
- 18 x 8.5 alloy wheels, Star Spoke design #209 (5 spokes)
- 225/55R-18 run-flat all-season tires
- Tire Pressure Monitor
- Dynamic Stability Control
- Xenon Adaptive headlights with dynamic auto-leveling
- Cornering lights
- Daytime Running Lamps via LED luminous rings
- Halogen free-form foglights
- Welcome Light
- Rain-sensing windshield wipers
- Matte-black side-window trim
- Roof rails, matte-black finish
- Rear roof spoiler
- Dual chrome exhaust outlets, round, 80 mm, left and right sides
- Tilt/telescopic leather-wrapped steering wheel with fingertip multi-function controls
- Dynamic cruise control
- 10-way power front seats
- Memory system for driver's seat and exterior mirrors

- Auto tilt-down of right-hand exterior mirror for backing up
- iDrive system with color display, 5 menus and controller
- Leatherette upholstery
- Silver Matte interior trim
- Power windows with key-off and 1-touch operation
- Automatic climate control with separate left/right (dual-zone) temperature and air-distribution settings, automatic recirculation control, misting control, bi-directional solar sensor, Heat at Rest, temperature-controlled rear air outlets, activated-charcoal microfilter ventilation and other features
- Anti-theft AM/FM/HD/CD/MP3 audio system with Radio Data System, 10 speakers, auxiliary audio input
- iPod/USB Adapter
- Split folding rear (2nd-row) seats with flush fold-down function
- Fully finished cargo area
- Retractable cargo cover
- Split tailgate with separately opening power upper section (liftgate) and manual lower sections, rear-window wiper/washer
- Dual-airbag Supplementary Restraint System with 2-stage Smart Airbags
- Front safety belts with automatic tensioners and force limiters
- Front- and rear-seat (2nd-row) Head Protection System
- Front-seat-mounted side-impact airbags
- Front-seat Active head restraints
- Central locking system with selective unlocking
- Coded Driveway Protection
- Anti-theft alarm system
- BMW Assist with 4-year subscription, Bluetooth mobile-device interface

X5 models & key features

This information lists major features, and helps position and distinguish the models from each other. For a comprehensive summary of features, see pages 738-755.

- Available option package:
 - Convenience (Soft-close doors, dual-panel panoramic moonroof, auto-dimming interior and exterior mirrors, power-folding exterior mirrors, ambient light package; Dark Burl Walnut, Dark Bamboo or Light Poplar wood interior trim)
- Stand-alone options:
 - Space-saver spare tire
 - Park Distance Control, front and rear
 - Navigation system
 - Satellite Radio with 1-year subscription
 - Heated front seats
 - Nevada leather upholstery
 - 3rd-row seating (requires leather upholstery, includes rear climate control and self-leveling rear air springs)
 - Rear door-window sunshades
 - Power liftgate
- Priority 1 options¹:
 - Deep Sea Blue, Vermilion Red and Orion Silver metallic paint colors
 - Additional color for Nevada leather, Tobacco Brown

X5 xDrive35i Premium

This 35i version lives up to its name by adding extensive luxury, convenience and technology features as standard equipment. It also greatly expands the range and number of packages and stand-alone options; one package, several stand-alones, and certain exterior and interior colors are P1 options. Here are the distinctions from the base X5 35i that make the 35i Premium truly premium:

- Additional standard equipment:
 - 19-in. wheels and tires (all-season tires as on base model)

- Park Distance Control, front and rear
- Dual-panel Panoramic moonroof
- Power-adjustable steering wheel with automatic tilt-away; included in memory system
- Auto-dimming interior & exterior mirrors
- Power-folding exterior mirrors
- Ambient lighting package
- Nevada leather upholstery
- 4-way power lumbar support on front seats
- Heated front seats
- Dark Burl Walnut interior trim
- Privacy glass
- Power liftgate
- Additional Convenience Package content:
 - Rear- and top-view cameras
 - Chrome Line exterior trim (new for '13)
 - Comfort Access keyless entry
 - Soft-close doors (as of 10/10 production)
 - Digital compass in interior rearview mirror
 - BMW Universal Transceiver (garage-door opener)
 - 4-zone climate control
 - Navigation system with Voice Command, Real Time Traffic Information and Online Information Services
- Rear door-window sunshades
- Additional packages:
 - Technology (side-view cameras, Automatic High Beams, Head-Up Display)
 - Premium Sound (16-speaker premium audio system, Satellite Radio with 1-year subscription)
 - Cold Weather (headlight cleaning system, heated steering wheel, heated rear seats, ski bag)
 - Luxury Seating (P1 package; Active Ventilated front seats, Active Support driver's seat,

- 20-way Multi-Contour front seats, perforated Nevada leather)
- Additional regular stand-alone options:
 - Aluminum running boards
 - Comfort Access keyless entry
 - Soft-close doors
 - Head-up Display
 - BMW Apps, including Smart-phone Integration
 - 20-way Multi-Contour front seats
 - Dark Bamboo or Light Poplar wood trim (no extra cost)
 - Rear Seat Entertainment
- P1 options¹:
 - Active Roll Stabilization²
 - Electronic Damping Control²
 - Active Steering
 - Active Cruise Control with Stop-and-Go function, Frontal Collision Warning System
 - Automatic High Beams
 - Perforated Nevada leather (in combination with Luxury Seating Package)
 - Nappa leather plus Nappa leather-trimmed dash and door panels
 - Nappa leather-trimmed dash and door panels (separately)

X5 xDrive35i Sport Activity

This variant of the 35i model stresses sportiness and the active lifestyles of the customers who are drawn to it. Once again the reference point is the base 35i; here are the equipment and features that differentiate the Sport Activity, which include the contents of the European Sport Package:

- Additional standard equipment:
 - 20-in. wheels and performance tires in differentiated front/rear sizes³
 - Increased top-speed limiter
 - Upper and lower grilles in Titanium finish (upper is

- immediately below kidneys grille, lower near bottom of bumper/spoiler⁴)
- Shadowline exterior trim
- Dual-panel Panoramic moonroof
- Power-adjustable sport steering wheel with automatic tilt-away and shift paddles
- Front sport seats
- Nevada leather upholstery
- Dark Burl Walnut interior trim
- Anthracite-color headliner
- Privacy glass
- Package details:
 - Convenience, same as for Premium model minus Chrome Line exterior trim
 - Technology, same content as for Premium model
 - Cold Weather, same content as for Premium model
 - Luxury Seating, P1; lower price because of standard sport seats
 - Premium Sound, same content as for Premium model
 - M Sport Package, exclusive to this model (20-in. M Double Spoke wheels, sport suspension, aluminum roof rails, M aerodynamic exterior treatment, rear mufflers in

- 1 - Priority 1 options accurate at time of publication but subject to change. For current model-specific Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering & Pricing Guides.
- 2 - ARS and EDC are combined as a single option, coded 2VA and called Adaptive Drive. They are listed separately here to emphasize that they are two highly sophisticated and valuable features. For descriptions, see the **BMW features** section of this **Fast Facts** edition.
- 3 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X5 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.
- 4 - This grille black if vehicle is equipped with Active Cruise Control.

X5 models & key features

This information lists major features, and helps position and distinguish the models from each other. For a comprehensive summary of features, see pages 738-755.

- chrome look, M doorsill trims, M driver's footrest, M sport steering wheel with shift paddles; Carbon Black Metallic exterior color available only with this package, otherwise specific color selection)
- M Performance Package (engine upgrade to 315 hp/330 lb-ft. torque, black-chrome exhaust tips, M stainless-steel trimmed pedals; requires M Sport Package)
- Additional regular stand-alone options, same as for Premium model plus:
 - Brushed Aluminum interior trim (requires M Sport Package)
 - Lane Departure Warning

X5 xDrive35d

This model features an amazingly torquey and fuel-efficient twin-turbo diesel engine and a 6-speed automatic transmission that's especially suited to the diesel engine's power and torque characteristics; substantially higher EPA mileage than for 35i models. The 35d comes in a single version rather than the three 35i levels, and compares to the 35i Premium as follows (some information is preliminary):

- 3.0-liter DOHC 24-valve inline diesel engine with aluminum construction, variable twin turbochargers, common-rail direct fuel injection and piezo injectors; 265 hp/425 lb-ft. torque; peak power occurs at 4200 rpm, vs. 5800-6250 for 35i; peak torque occurs over a range of 1750-2250 rpm, vs. 1400-5000 for the 35i, and is 125 lb-ft. higher.
- Transmission is a heavy-duty 6 HP 26 version of BMW's 6-speed automatic
- EPA mileage rating 19 mpg city/26 mpg highway/22 mpg combined, vs. 16/23/19 for 35i
- Higher curb weight, by 232 lb.
- Titanium-finish vertical grille slats, vs. black
- Model script on front doors
- Standard equipment closest to 35i Premium, except:
 - 18-in. wheels with all-season tires, same as base 35i
- Packages:
 - Premium (Chrome Line exterior trim, Comfort Access keyless entry, BMW Universal Transceiver, rear- and top-view cameras, digital compass in interior rearview mirror, 4-zone climate control, Navigation system, rear door-window sunshades)
 - Sport Activity (19-in. wheels with all-season tires, upper and lower bumper/spoiler grilles in titanium finish, Shadowline exterior trim, sport front seats, Anthracite-color headliner)
 - Technology (same content as for 35i Premium and Sport Activity models)
 - Cold Weather (same content as for 35i Premium and Sport Activity models)
 - Premium Sound (same content as for 35i Premium and Sport Activity models)
- P1 package:
 - Luxury Seating (same content as for 35i Premium model)
- Stand-alone options same as for 35i Premium except:
 - 20-in. wheels and performance tires in differentiated front/rear sizes³ (require Sport Activity Package, include increased top-speed limiter)

X5 xDrive50i

Top-of-line X5, powered by BMW's 4.4-liter twin-turbo V-8 engine and offering numerous increments of technology, luxury and features. Compared to base 35i, points of differentiation include (an asterisk denotes features that are standard on or in the 35i Premium):

- Twin-turbo V-8 (N63) engine: 400 hp, 450 lb-ft. torque; EPA ratings 14 mpg city/20 mpg highway/16 mpg combined
- 8-speed automatic transmission has same internal ratios as that of 35i, but is heavier-duty 8 HP 70 version vs. 35i's 8 HP 45
- Larger rear brakes, 13.6 in. vs. 12.6
- Same standard 18-in. wheel and tire dimensions and all-season tires, but Star Spoke wheel design #210 (also 5 spokes, but different look)
- Titanium-finish vertical grille slats, vs. black
- Matte-black/chrome side-window trim
- Model script on front doors
- Dual chrome exhaust outlets, oval, 80 x 135 mm, left and right sides (35i with M Sport Package also has these outlets)
- Power-adjustable steering wheel with automatic tilt-away*; included in memory system
- Nevada leather upholstery standard*, vs. optional
- Leatherette upholstery not available*
- Dual-panel panoramic moon roof*
- Packages as those of 35i models, except as follows:
 - Premium instead of Convenience; 50i Premium Package includes all content of

35i Premium's Convenience Package, minus Chrome Line exterior treatment and Navigation

- Compared to that of 35i Sport Activity model, M Sport adds self-leveling rear suspension, 19-in. wheels with performance tires³, Shadowline exterior trim, sport front seats (some of which are standard in 35i Sport Activity).
- M Performance upgrades 50i V-8 engine to 440 hp/480 lb-ft. torque
- Luxury Seating identical to that of 35i Premium, lower price than that of 35i Sport Activity because of latter's standard sport seats
- Stand-alone options same as for 35i Premium, except:
 - Multi-Contour front seats' option price higher than for 35i Sport Activity, because sport seats standard there
 - Lane Departure Warning available on 50i and 35i Sport Activity; not on Premium
 - Automatic High Beams not available as P1 option.

3 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X5 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X5 key features

Except as noted, all X5 models offer the following features:

Exterior design & function

The look: an established favorite

Within the overall context of BMW Design, the BMW “X Family” presents the versatile capabilities of a Sports Activity Vehicle in a unique image that says “I am as I look.” As the largest and most prestigious of what are now three wagon-type platforms in this family (X1, X3 and X5), the X5 combines the muscularity of a fullsize SAV with the elegance of a luxury sedan. Its interplay of proportions, surfaces and details clearly expresses its all-oriented talents.

Evolved technology

As with any BMW, the look isn’t merely esthetics, although of course esthetics play a major role in the character of any fine motor vehicle. Instead, the X5 look embodies extensive updated technology that enhances both esthetics and function.

Lighting features include –

- **Xenon Adaptive headlights.** This night-vision feature is standard on all X5 models.
- **Dynamic auto-leveling.** Instead of merely leveling the headlights for loads carried in the vehicle, dynamic auto-leveling also responds to transient conditions such as braking or acceleration.
- **Automatic High Beams** – switching headlights between low and high beams as needed according to traffic conditions. Available all models except base 35i.
- **Cornering lights.** Standard on all X5s.
- **Luminous rings.** The rings function as parking lights and illuminate in combination with the headlights. They also serve

as Daytime Running Lamps, though with brighter illumination of the inner ones.

- **Welcome Light.** When the user unlocks the vehicle, not only the interior lights but also the luminous rings, ground lighting, taillights and license-plate lights illuminate. On vehicles with Comfort Access keyless entry, lighting of the exterior door-handle area is added. Like the interior lights, these then dim out after 20 sec., and all come on again when the vehicle is locked. Visibility features include –
- **Park Distance Control** – sensing possibly unseen objects or obstructions via sensors in the front and rear bumpers. Standard on all except base 35i.
- **Rear-view and top-view cameras** – giving the driver a wide-angle view behind the vehicle, and a “bird’s-eye” view of the vehicle’s surroundings. Now part of the Convenience Package on X5 Premium and Sport Activity, and Premium Package on 35d and 50i.
- **Side-view cameras** – enabling the driver to see to the sides at the front of the vehicle. Technology Package, all except base 35i.

At the front

This view of the X5 makes a strong statement of quality, elegance and bravery SAV functionality. The hood is a single stamping of aluminum, reaching from cowl to the cross-hatched grillework beneath the BMW “kidneys.” In these traditional kidneys, the slats are lightly angled outward; on the 35i models they are black, on the 35d and 50i titanium finish.

On the bumper, a major body-color expanse reaching from side to side encompasses the three main air intakes: the wide center one at the bottom, and two smaller side intakes for brake cooling. At the top, just under the hood with its kidney grilles, is a fourth intake for engine cooling. Foglights are positioned just inboard of the outer intakes. Park Distance Control sensors are in the lower outer corners of the cladding and in the lower center air intake. The available side-view cameras are also positioned in the bumper cladding, just ahead of the left and right wheelwell arches.

At the bottom of the lower center intake is the silver-finished visible portion of the standard underdrive protection; the outboard bumper surfaces reach farther down at the sides to form specially purposed air dams. (See **aerodynamics**, next page.)

Also noticeable in the front view are the exterior mirrors, whose two sections repeat the front bumper’s theme: main portions, body color, lower portions matte black.

In profile

A subtle side character line begins just behind and above the wheel arch, then continues all the way to the rear, through the taillights and across the liftgate to the other side. Along the side, the line climbs gently toward the rear, paralleling the beltline; scratch-resistant black material begins at the bumper’s lower rear edge, runs up around the front wheel arch, then continues rearward along the prominent rocker panel to also frame the rear wheel arches before continuing into the lower rear

bumper. The elements accent the X5’s wedge profile, robust image and scratch resistance. Exterior door handles and roof-seam trim strips are in body color; roof rails come in two forms: black (standard on all models) and the BMW Individual aluminum ones that come with the M Sport Package of 35i Sport Activity and 50i models.

In this view, the gracefully raked D-pillar and rear window and a substantial roof spoiler lend energy to the X5’s “conclusion.” The spoiler incorporates “separation edges” that smooth airflow as it exits; so do the taillights as they wrap around to the sides.

Certain model and equipment variations are apparent in this view:

- Side-window framing – 35i and 35d matte black, 50i matte black with chrome trim; 35i Sport Activity model plus Sport Activity and M Sport Packages high-gloss Shadowline black.
- The M Sport Package (available on 35i Sport Activity and 50i) substitutes more body-color elements for the black materials; see **packages & options** for details on Package contents.
- The different wheel designs and sizes (see table later in this section).

As on some other recently introduced BMW Series, the front side panels (fenders) are of plastic; so is the “module carrier” that contains the front lighting units, foglights, windshield-washer reservoir (on the left side) and the side turn-signal repeaters. This plastic is of the same material family as the painted bumper cladding, and thus has good resistance to minor damage.

X5 key features

Except as noted, all X5 models offer the following features:

At the rear

A striking aspect, with the roof spoiler capping a highly contemporary set of design and functional elements. With its separation edges, this spoiler is also distinctive in the profile view; one can see clearly the upper taillight sections' corresponding separation edges. The character line wrapping around from the side continues across the liftgate, forming the top edge of the license-plate recess. Another character line begins above the taillights and runs across the liftgate, forming a spoiler-like "top edge" of the concave surface containing the BMW logo and X5 script. A further horizontal line is the split between upper tailgate (liftgate) and lower tailgate; the latter reaches deeply down into the bumper for a conveniently low loading height.

As at the front, a silver-finished visible portion of the standard underdrive protection spans across the lower diffuser section. The entire bumper is shaped for an efficient exit of air from the relatively smooth underbody; it frames the chrome dual exhaust outlets, whose shapes and dimensions are –

- 35i, 35d – round, 80 mm
- 50i – oval, 80 x 135 mm
- 35i Sport Activity and 50i with M Performance Package – black chrome, same shape and dimension as standard.

Aerodynamics

Aerodynamics figured into every step of shaping and equipping the X5 body, and into many aspects of its mechanical and electrical design as well. It was BMW's goal to make this vehicle the best in its class; test data indicate that BMW has achieved

excellent aerodynamics with drag coefficients of 0.34 for the 35i, 0.35 for the 35d and 50i.

Exterior features, such as the roof spoiler and taillights with their separation edges, have been mentioned as esthetic and functional elements. Another element, integrated into the front spoiler and tailored to the various powertrains available in X5s worldwide, is the twin air dams that reach out and down at the spoiler's sides to reduce aerodynamic losses associated with the front tires. In turn, these frame the air intakes that among other functions channel air to the front brakes.

Performance & efficiency

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (35i models)

This outstanding engine has been named one of the world's 10 Best Engines by Ward's Auto, a longtime purveyor of auto data, news and analysis for the worldwide auto and truck industry.

In the three X5 35i models, as in most other current BMWs with this engine, the N55 delivers 300 hp and 300 lb.-ft. of torque. It achieves a 0-60-mph acceleration time of just 6.4 sec., yet also turns in the excellent combined EPA rating of 19 mpg. Such a combination of performance and efficiency in a hefty SAV is a testament to BMW's enduring technological prowess.

New for '13 is availability of the M Performance Package, which lifts the N55's output to 315 hp/330 lb.-ft. with no loss of fuel economy.

This outstanding, new-age BMW engine is described in detail in **BMW features**.

N63 4.4-liter DOHC 32-valve Twin Turbo V-8 engine (50i)

As the X5's top engine choice, this brilliant and brawny power unit delivers a 100-hp, 150 lb.-ft. output edge over the 35i models, which results in a 0-60-mph time of just 5.3 sec. Here too there's a newly available M Performance Package, which raises output to 440 hp/480 lb.-ft..

For a detailed description of the N63 engine, see **BMW features**.

M57 engine: BMW Advanced Diesel with BluePerformance, twin turbocharging, piezo common-rail fuel injection (35d)

Displacing 3.0 liters, same as in the 35i models, this inline 6-cylinder twin-turbo diesel demonstrates the dazzling diesel progress that has enabled Europeans to enjoy high performance with remarkable fuel efficiency. Expressing this in numbers, the M57 produces 265 hp and an abundant peak torque of 425 lb.-ft. To achieve such results, this aluminum powerplant (with cast-iron cylinder liners) applies a full range of advanced diesel performance/efficiency technologies:

- **Common-rail, high-pressure direct fuel injection.** "Common rail" (CR) refers to the fact that fuel is delivered to the individual cylinders via a shared conduit – standard practice in gasoline engines, but until fairly recently not employed in diesels. A single, very high-pressure fuel-delivery pump supplies all cylinders, the fuel traveling along

a common "rail" or distributor line. From there, fuel is injected at extremely high pressure (180 bar or 2645 lb./sq in.) directly into the cylinder.

The basic novelty of common-rail injection is to divorce the production of fuel pressure from the actual injection process; this was necessary to give the diesel engine what gasoline engines had long had, namely full electronic control of fuel injection. CR also facilitates multiple injections per combustion cycle, which are beneficial to power delivery and emission control. In all, CR was a breakthrough that made possible dramatic strides in diesel power, efficiency and emission control. CR has also resulted in much quieter-running diesel engines.

- **Piezo injectors.** With direct injection, the injectors – that critical component injecting fuel into each cylinder's combustion chamber – are subject to especially high temperatures and pressures. Instead of most injectors' conventional electrical valves, a "stack" of piezo crystals reacts lightning-fast to impulses from the engine electronics, governing the injector needle's opening stroke and duration for ultra-precise control. This too facilitates major advances in fuel economy and emission control, especially in diesel engines.
- **Variable Twin Turbo technology.** In contrast to the two small, equal-size turbochargers of BMW's twin-turbo 6-cylinder, V8 and V-12 engines, the diesel employs two turbos of different sizes; a sophisticated electronic control system

X5 key features

Except as noted, all X5 models offer the following features:

governs how they interact to optimize performance.

At low engine speeds, intake air does pass through the large turbo, but it's the smaller, lower-inertia one that does the air compressing (turbocharging). Thanks to low inertia and optimum efficiency within this rpm range, it provides effective boost for driving from a standstill up to modest acceleration rates and driving speeds. So it is that this engine develops a good 390 lb.-ft. of torque at as low as 1500 rpm – a remarkable achievement that will amaze first-time 35d drivers and continue to thrill those who drive this BMW regularly. With increasing engine speed, the larger turbocharger begins to take over: first as a pre-compressor for the smaller one, then progressively until it becomes the primary turbo. The engine reaches its maximum of 425 lb.-ft. by 1750 rpm, then maintains this immense torque level until 2250 rpm, going on to reach its peak power of 265 hp at 4200 rpm.

- **BMW BluePerformance technology.** In addition to a diesel particulate filter (to trap black smoke particles) and an oxidation catalyst, a selective catalytic reaction (SCR) catalyst enables the X5's engine to meet the most stringent emission limits in Europe and North America.

This catalyst employs platinum, palladium and rhodium, which cause a reaction of nitrogen oxide and nitrogen dioxide with barium carbonate introduced into the catalyst, with the result that these substances are

stored in the form of barium nitrate. Then, during a brief period of engine operation with an after-injection of fuel, this nitrate is fully burned. An additional benefit of this process is that sulfuric oxide resulting from diesel combustion is eliminated. For this phase of the emission control, which reduces oxides of nitrogen (NOx) emissions to the stringent U.S. limits, the injection of urea, or Diesel Exhaust Fluid (DEF), is required.

- **Two DEF tanks, infrequent filling, free service.** The DEF is supplied by a 2-tank system that ensures convenience for the vehicle user. The required amount is injected from the 1.6-gallon Active tank via a dosage pump. As the fluid freezes at 12°F, this tank is heated. Then there is a reservoir, or Passive, tank that carries the longer-term supply of 4.5 gal. Periodic replenishment of the DEF – at the same interval as oil changes – is included within the BMW Maintenance Program and is therefore free of charge to the customer for 4 years or 50,000 miles.

Diesel combustion, power and torque characteristics, and fuel. In its most basic distinction from gasoline engines, a diesel engine achieves its combustion not with a sparkplug, but by much “harder” compression of the fuel-air mixture; the 35d engine, for example, has a compression ratio of 16.5:1, vs. 10.2:1 for the 35i gasoline turbo. This requires a significantly stronger engine structure, so the 35d engine weighs more than the 35i's gasoline six.

The diesel combustion process also produces very different torque and power characteristics. Whereas the 35i engine reaches its maximum torque of 300 lb.-ft. over a range of 1400-5000 rpm and the 50i unit its 450 lb.-ft. @ 1750-4500 rpm, the 35d's turbodiesel attains its maximum torque of 425 lb.-ft. in the narrower range of 1750-2250 rpm and its maximum power of 265 hp @ just 4200 rpm. In general, diesels have this low-speed-torque, lower-rpm character and are geared accordingly: The X5 35d, for example, has a 6-speed transmission vs. the gasoline models' 8-speed; its 1st gear is just 4.17:1 vs. the other X5s' 4.71:1.

Diesel fuel is the product of a different refining process from that of gasoline. The two fuels are not interchangeable; gasoline cannot be used in a diesel engine, and vice versa. Their prices typically diverge; at any time or in any location, demand may be different for the two, and government taxation policies for gasoline and diesel fuel also diverge.

Stellar pulling moxie, full-bore acceleration – and fuel efficiency. The huge torque output of 425 lb.-ft. at low engine speeds speaks for itself; 35d drivers will marvel at this engine's robust response at low to medium speeds. The peak power output of 265 hp is also convincing, as is the resulting 0-60-mpg time of 6.9 sec. But here's the real denouement: EPA mileage ratings of 19 city/26 highway/22 combined, vs. 16/23/19 for the 35i and 14/20/16 for the 50i.

6-speed STEPTRONIC automatic transmission (35d)

The 35d continues with a 6-speed automatic in its high-torque-capacity 6 HP 26 TU version. (TU stands for Technically Updated and indicates the current, highly refined version of this automatic.) In its April 18, '07 issue (the diesel was offered earlier in Europe than the U.S.), Switzerland's authoritative *Automobil Revue* weekly noted that the BMW turbodiesel “is really fun – especially in combination with the excellent 6-speed automatic. Gearshifts are executed smoothly and always at the right point in time.”

8-speed STEPTRONIC automatic transmission (35i & 50i)

With either of the two quite distinct engines of these models, this ultimate automatic transmission brings smooth shifting, sportiness and efficiency to a new level of perfection. The 8-speed's “taller” cruising gears (7th and 8th) contribute to moderate fuel consumption and emissions as well as quietness. And its wider spread of ratios from lowest to highest gear enhances acceleration and response across the range of driving speeds.

Two versions are employed: 8 HP 45 in the 35i, higher-capacity 8 HP 70 in the more powerful 50i. Both have the same ratios and essentially the same operational traits, which include such a high level of smoothness that

4 – In a “naturally aspirated” engine, air is drawn into the engine by the pistons' downward, or “suction” stroke. By contrast, a supercharger or turbocharger compresses and supplies the engine's air in what is known as “forced induction.”

X5 key features

Except as noted, all X5 models offer the following features:

drivers must “try” to tell when the transmission has shifted.

This aspect of the X5, too, belongs to the BMW Efficient-Dynamics concept: the 8-speed transmission plays a significant role in the impressive EPA mileage ratings of all the models in which it appears.

For further details on this ultimate powertrain achievement, see the **BMW features**.

Multi-link front suspension

With the current X5 generation's debut in '07, BMW introduced a multi-link system that achieves even better results than BMW's traditional strut-type front suspension.

Since this X5 generation was introduced, this system has also been adopted for the X6, 6, 7 and 5 Series.

This and other BMW front-suspension systems are described in **BMW features**.

Refined Integral rear suspension system

This system also appears in the X6, augmented there by the Dynamic Performance Control, which is exclusive to the X6 and described in that platform's section. (X5 M and X6 M models also include DPC.)

Here, in a continuation of BMW's practice of employing aluminum in suspension components where possible, the system's upper and lower lateral arms and wheel carriers are of aluminum. This reduces weight in the moving parts; inertia is reduced and the wheels can conform to uneven road surfaces in a supple manner.

Available Active Roll Stabilization and Electronic Damping Control (Adaptive Drive)

These advanced handling/ride systems remain available as a P1 stand-alone option on all X5 models except the base 35i. They are described in **BMW features**.

Variable-ratio steering

The X5's standard steering provides a moderately variable ratio (not to be confused with variable assist). This feature is also found in the X6 as well as the 7, 6 and 5 Series.

The steering ratio – the number of degrees the steering wheel must be turned to steer the front wheels by 1 degree – gradually becomes “quicker” (greater steering action relative to steering-wheel turns) as the steering wheel is turned away from its center position. This means less turning of the steering wheel in parking, U-turns and other low-speed maneuvers.

By contrast, the X5's standard steering system has **constant power assist**, which means that there is no variation of assist according to engine or vehicle speed. Instead, assist is calibrated entirely to the steering force needed at the steering wheel. This provides highly accurate road feel, although it does not reduce steering effort

in parking to a minimum. More sharply reduced parking effort, more widely variable ratios, and other benefits are offered by the optional **Active Steering**, described in **Priority 1 packages & options**.

Run-flat tires on all X5s

All X5s have run-flat tires; maintaining a BMW tradition, the various models (except the base and Premium 35i) offer an extensive selection of wheel-and-tire equipment, including all-season tires that reflect the all-weather, all-road nature of these Sports Activity vehicles as well as performance tires for those customers who put greater priority on dry-road capabilities.

The run-flat system has been developed for the severe driving conditions to which the BMW's versatile SAVs may be subjected; it is described in **BMW features**.

The table below summarizes the available wheel/tire equipment combinations.

Model & version	Wheel size & design/code	Run-flat tires	Changes for '12
35i & 35d standard	18 x 8.5 Star Spoke #209 2C9	255/55R-18 all-season	No changes
50i standard	18 x 8.5 Star Spoke #210 2RX	255/55R-18 all-season	No changes
35i Premium standard	19 x 9.0 Star Spoke #334 2DE	255/50R-19 all-season	No changes
35i Sport Activity optional, 35d & 50i Sport Activity Package	19 x 9.0 Y Spoke #335 2LK	255/50R-19 all-season	No changes
50i M Sport Package	19 x 9.0 front/19 x 10.0 rear V Spoke #223M 2M5	255/50R-19 front / 285/45R-19 rear performance ³	No changes
35i Sport Activity standard, 35d Sport Activity Pkg. upgrade	20 x 10.0 front/20 x 11.0 rear Y Spoke #214 2LE	275/40R-20 front / 315/35R-20 rear performance ³	No changes
35i Sport Activity M Sport Package, 50i M Sport Package upgrade	20 x 10.0 front/20 x 11.0 rear Spoke #333M 2NY	275/40R-20 front / 315/35R-20 rear performance ³	No changes
50i Sport Activity Package upgrade	20 x 10.0 front/20 x 11.0 rear Y Spoke #336 2LM	275/40R-20 front / 315/35R-20 rear performance ³	No changes

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X5 models are

not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X5 key features

Except as noted, all X5 models offer the following features:

Brake system: 4-wheel ventilated discs, generous dimensions

X5 brakes represent BMW's state of the art with 4-wheel discs all around, generous dimensions, and a Geomet coating on the rotors to eliminate rusting on rotor areas not swept by the brake pads. There are two combinations of dimensions, each attuned precisely to the model's performance capabilities: **X5 xDrive35i and 35d** – 348 mm/13.7 in. front, 320 mm/12.6 in. rear
X5 xDrive50i – 348 mm/13.7 in. front, 345 mm/13.6 in. rear.

A remarkable array of additional comfort- and safety-related braking functions is provided by the current DSC generation; see **Dynamic Stability Control**, next; and for more detail the **BMW features** section.

State-of-the-art Dynamic Stability Control

All BMW models employ Dynamic Stability Control for a wide range of traction and stability functions. The X5's DSC incorporates a Sports Activity/all-wheel-drive-specific function, Hill Descent Control; as in all current models, it also includes a wide range of customer-relevant functions that make driving even more pleasant.

xDrive: enhancing X5's traction and agility

Like all BMW Sports Activity models, X5s incorporate BMW's advanced xDrive all-wheel drive and traction system. Recently evolved for even more sensitive and beneficial variation of torque distribution to the front and rear wheels, xDrive is described in detail in **BMW features**.

Comfort & convenience

BMW's roomiest Sports Activity vehicle

When introduced as the successor to the original X5, the current, 2nd-generation X5 introduced an array of new amenities and upgraded the general level of technology enjoyed by the driver and passengers. Shoulder and leg room was increased, automatic climate control became standard, and the standard audio system added two subwoofers. In turn, the gain in enclosed volume made it possible to offer 3rd-row seating.

Interior space: the specifics

Thanks largely to the longer wheelbase and greater overall length, width and height, the 2nd-generation X5 offers significantly more space for people and cargo –

- More shoulder room, +2.0 in. front/+0.3 in. 2nd row
- More leg room, +0.7 in. front/1.2 in. 2nd row
- Greater overall passenger volume, + 4.8 cu ft.
- Increased basic cargo volume, + 3.9 cu ft.
- Greater maximum cargo volume, + 7.1 cu ft.

The beautifully conceived and executed 3rd-row option is described under **packages & options**.

Impressive ambiance: the X5 cabin

The unique BMW SAV experience is fully supported by an X5 interior conceived and executed to achieve intuitive driving. Typical for BMW SAVs is the "semi-command" driving position, which affords an optimum view of the instrument panel and a

feeling of control and driving pleasure. The instrument cluster and center-of-dash controls and displays are lightly oriented toward the driver; so is the E-shift transmission selector. At the same level is the iDrive monitor, which is standard. As always in a BMW, controls are grouped logically and conveniently to be optimally accessible to the driver. Those likely to be operated by the front passenger are just as accessible to him or her.

3-spoke steering wheel

All X5 versions come standard with a sporty 3-spoke steering wheel. The standard and sport wheels both have –

- Rims wrapped in Mano leather.
- Multi-function controls in the steering-wheel face for the audio system and phone use; in addition, there are two programmable buttons.
- Magnesium internal frame for light weight, strength and optimum deformation in a crash impact.

The sport wheel, standard in the 35i Sport Activity and part of the 35d/50i Sport Activity Package, has a smaller diameter (385 mm/15.2 in. vs. the standard 391/15.4) and pearl-gloss trim around the center hub. An even sportier M sport wheel, included with the M Sport Package (35i Sport Activity, 50i), is differentiated by an even thicker, Walknappa-covered rim, black trim and the M logo.

Front seating

Active head restraints and power adjustment of head-restraint height are standard in all X5s. The sport seats, included in the 35i Sport Activity's standard equipment and the Sport Activity

and M Sport Packages, add manual adjustment of thigh support; these are described in **packages & options**. Multi-Contour front seats, available as a stand-alone option in all models except the base 35i, add further features, and are also described in **packages & options**.

Other console features

The E-shift transmission selector fosters an uncrowded, highly functional front console. Among its features are –

- **Forward compartment** containing large dual cupholders, storage, ashtray, accessory power outlet, and auxiliary audio input; its rollover cover opens forward and rearward.
- **Dual armrest lids**, split left/right. These can be opened and closed separately for easy access from either side.
- **Accessory power outlet** in main console storage compartment.
- **iDrive controller**, to right of transmission selector.
- **Button to set and release** electromechanical parking brake: lift to set, press to release.
- **Automatic Hold selector**; activates or de-activates this functional feature.
- **Trimmed at both sides** in vehicle's chosen trim material.

2-door glove-compartment design

A 2-door design – upper door opening upward, lower opening downward – makes for easy access, while its relatively high position gives users a good view of its contents. At the touch of a button to the compartment's left, the doors open electrically; they are closed manually and, because their movement is linked,

X5 key features

Except as noted, all X5 models offer the following features:

by pressing on either portion. There is no separate lock; the compartment is locked by the central locking system.

Automatic climate control: dual-zone standard, 4-zone optional

All X5 models come standard with a dual-zone climate-control system, featuring separate left/right temperature and air-distribution controls plus a wide range of other state-of-the-art features.

Available as part of the Convenience Package (35i Premium and Sport Activity) or Premium Package (35d, 50i) is a 4-zone system, which adds left/right temperature settings and other features that give 2nd-row passengers a high degree of individual control over their environment.

Features include –

- Separate blower
- Additional air outlets in B-pillars
- Control panel with left/right temperature and air-distribution settings, including individual heating outlets in foot space
- Automatic program.

Standard audio system

There are two X5 audio systems.

The “Hi-Fi” system, code 676, includes 10 speakers –

- 2 midrange, 100 mm, in front doors
- 2 tweeters, 26 mm, in front doors’ mirror triangles
- 2 midrange, 100 mm, in rear doors
- 2 subwoofers, 217 mm, under front seats
- Center-fill midrange, 100 mm, in dash
- Center-fill tweeter, 26 mm, in dash

– and 205 watts of audio power.

Beyond this excellent standard system, four audio or audiovisual options are offered:

- **16-speaker premium audio system** (Premium Sound Package, all models except base 35i)
- **Satellite Radio including 1-year subscription** (Premium Sound Package all except base 35i, stand-alone all 35i models)
- **BMW Apps**, including Smart-phone Integration (stand-alone all but base 35i)
- **Rear Seat Entertainment**, stand-alone for all models except base 35i.

Formerly optional, the iPod/USB Adapter is now standard in all models. The four options are described in **packages & options**.

Upholstery and trim

Leatherette continues as the standard upholstery in the base 35i, available in Beige or Black. All other models now come standard with Nevada leather, available on a regular-order basis in Sand Beige, Oyster, Cinnamon Brown and Black, or on P1 basis the dark-brown Tobacco color. The Nevada leather appears on the seats (center and side portions), head restraints, front center armrest and door armrests.

Five trim materials are offered for the dash, doors and console:

- **Silver Matte** – standard in base 35i only
- **Dark Burl Walnut wood** – standard in all other models, included in base 35i’s Convenience Package
- **Light Poplar wood** – optional at no extra cost in combination with base 35i’s Convenience Package, at no extra cost with no combination requirement in all other models

- **Dark Bamboo wood** – available on same basis as Light Poplar
- **Brushed Aluminum** – available at no extra cost in 35i Sport Activity and 50i only; on 35i, requires the M Sport Package. Includes galvanic accent strips.

Beyond these prominent trim choices, every X5 interior is rich in details, such as –

- The dash covering’s elegant surface grain
- Pearl-gloss galvanic trim on rotary controls, door handles and air outlets’ adjusting tabs
- Perfect-to-the-touch tactile surfaces on the rotary control knobs
- Elegant door-panel design and functional elements.

Two additional upholstery variations are offered:

- **Perforated Nevada leather** – included in the Luxury Seating Package (all models except base 35i); available in Sand Beige or Black. Both the Package and the perforated leather are P1 options.
- **Nappa leather** – optional, richer leather, available in Sand Beige or Black; includes a leather-trimmed dash and door panels, which are also available as a P1 stand-alone option for all models except the base 35i.

Rear seating: spacious 2nd row, available 3rd row

The X5’s folding 2nd-row seats offer a great variety of people- and cargo-carrying configurations in this superbly practical vehicle. Standard features include –

- Flush folding for a flat cargo floor
- Fold-up center armrest incorporating dual cupholders

- Head restraints and 3-point safety belts at all three seating positions.

The optional 3rd-row seating adds several special 2nd-row features, described along with the 3rd-row option in **packages & options**.

Versatile, thoughtfully configured cargo area with increased space

Ample cargo volume is an important X5 story. This has been achieved partly by a low cargo floor via omission of space for a full-size spare wheel and tire. (Run-flats are standard, a space-saver spare available on all models.) Yet this underfloor space is sufficient to fold the optional 3rd-row seat flat into the floor. The cargo floor tilts up for convenient access to the underfloor space.

Other cargo-area features include an accessory power outlet at the compartment’s right side and four tie-downs.

Some key statistics of the cargo area illustrate the versatility, capacity and accessibility of the X5s’ cargo area. Some key dimensions –

In inches:

Loading height – 30.3

Vertical space under open upper tailgate – 74.0

Height of open tailgate – 83.6

Maximum loading width – 49.5

Maximum cargo-area height – 34.0

Maximum cargo-area width – 43.9

X5 key features

Except as noted, all X5 models offer the following features:

In cubic feet:

Cargo volume to top of 2nd-row seats, DIN⁵:

Standard – 21.9⁵

With 3rd-row seating (upright) 18.2⁶

Maximum cargo volume, DIN 61.8⁶

Maximum cargo volume, SAE/EPA 75.2⁷.

A retractable cargo cover is standard in all models; other cargo-compartment items available as center-installed Accessories are –

- Floor net
- Cargo organizer box
- Lashing straps and securing straps
- Embroidered floormat
- 2-sided floormat, carpeted on one side, non-slip black plastic on the other.

2-piece tailgate/liftgate

Making up about 3/4 of its height, the tailgate's upper section or liftgate opens upward, leaving 6 ft. 2 in. of stand-up

room underneath it. The lower section opens downward for a conveniently low loading height, just over 30 in. The upper section can be power-released from the interior, the remote or at the tailgate itself, and includes an emergency manual release that's accessible from the inside.

Once released, the upper half pops open first; the user lifts the upper half, then opens the lower half via an electric (but not remote) release. The opening dips well into the bumper to achieve a conveniently low loading height. A power-operated liftgate is standard on all models except the base 35i.

Safety & security

Safety concepts and features shared by all BMW Sports Activity models, as well as certain state-of-the-art concepts and features specific to the X5 and X6, are summarized in the X6 section.

Packages & options

Packages

Convenience Package

(all 35i models, code ZCV or ZC3) The base 35i Package consists entirely of features that are standard on the other two 35i models:

- Auto-dimming interior and exterior mirrors, codes 430-431
- Power-fold exterior mirrors, included in code 430
- Dual-panel panoramic moonroof, code 402
- Choice of wood interior trim – Dark Burl Walnut (4AB), Dark Bamboo (4AZ) or Light Poplar (4BP)
- Ambiance lighting package – ground lighting from exterior door handles, entry/exit lights in doors, illuminated door storage bins front and rear, indirect lighting of interior door handles, rear footwell lighting (front standard). Code 563. (Lighting at exterior door handles also included with Comfort Access.)

For the upmarket Premium and Sport Activity models, the Package is completely distinct:

- Comfort Access keyless entry, code 322
- BMW Universal Transceiver, for operating garage doors and other external devices or systems. Code 319.
- Digital compass in the interior rearview mirror, code 4NA
- Rear- and top-view cameras, code 3AH
- 4-zone automatic climate control, code 4NB
- Navigation system added to the standard iDrive, code 609. Includes all the usual extra

features as described under iDrive in BMW features.

- Rear door-window sunshades, code 417.
- And for the 35i Premium only, this new item for '13:
- Chrome Line exterior trim – chrome trim around the side windows, plus titanium-finish vertical grille slats.

Premium Package (35d⁵ & 50i, code ZPP)

This Package plays essentially the same role for these two models as the Convenience Package does for the upper 35i models. Its contents for the 50i are:

- Soft-close doors, code 323
- Comfort Access keyless entry
- BMW Universal Transceiver
- Digital compass in the interior rearview mirror
- Rear- and top-view cameras
- 4-zone automatic climate control
- Rear door-window sunshades ...and additionally for the 35d,
- Navigation system, which is standard in the 50i.

Sport Activity Package (35d & 50i, code ZAP)

This package brings the crisper handling and sportier appearance of larger wheels and tires to these two X5 models, plus many functional and esthetic features that enhance the X5's innate sportiness. The contents:

- 19-in. wheels and tires. These models come standard with 18 x 8.5 wheels and 225/55R-18 run-flat all-season tires.

5 – Deutsche Industrie-Normen, the German industrial standards of measurement.

6 – Including underfloor space.

7 – Volume aft of front seats, cargo floor to ceiling.

X5 key features

Except as noted, all X5 models offer the following features:

- With this package, both get 19 x 9.0 wheels in Y Spoke design #335 and 255/50R-19 run-flat all-season tires. Code 2LK.
- **20-in. wheels and performance tires.** This upgrade to the package includes 20-in. equipment in differentiated front/rear sizes: 20 x 10.0 front/20 x 11.0 rear Y Spoke wheels of design #214 (35d) or #336 (50i) with 275/40R-20 front/315/35R-20 rear W-rated performance tires³. It is intended for customers who prioritize extra-sporty appearance and dry-road handling over the all-season abilities of the standard or Sport Activity Package wheel-and-tire equipment. Code 2LE or 2LM; also adds increased top-speed limiter, code 840.
 - **Titanium-finish grilles** in air inlets immediately below kidney grilles and at bottom center of bumper/spoiler; this is part of the factory Sport Package code 330.
 - **High-gloss Shadowline exterior trim** framing the side windows, code 760
 - **Sport steering wheel.** All X5 steering wheels are 3-spoke designs, with a grippy leather wrapping called Mano; the Sport steering wheel (code 255) differs from the standard one by way of –
 - Smaller diameter, 385 mm/15.2 in. vs. standard 391/15.4
 - More pronounced rim contours from 3 to 9 o'clock
 - Function illumination next to multi-function controls, vs. standard illumination within the control itself
 - Galvanic trim around center section.
 - **Sport front seats,** code 481. Classic BMW design and function, with more prominent side bolsters than those of standard seats plus manual adjustment of thigh support. 10-way power adjustments of standard seats are also included. In the 50i, 20-way **Multi-Contour front seats** (code 456) may be substituted for the sport seats at an option price lower than that of their stand-alone availability.
 - **Anthracite-color headliner,** another classic BMW nuance of Sport-equipped interiors. Code 775.
- M Sport Package**
(35i Sport Activity & 50i, code ZMP)
- This package goes “all the way,” adding BMW M esthetics and performance features to these already sporty models. Except as noted, this package is the same for both of these models. Not available in combination with the Sport Activity Package, it consists of:
- **Sport suspension,** 35i only; code 226.
 - **Self-leveling rear suspension with air springs,** 50i only; code 220.
 - **19-in. wheels and performance tires,** 50i only. Distinctive M V Spoke wheel design, #223M. Wheel sizes are 19 x 9.0 front/19 x 10.0 rear; tires are 255/50R-19 front / 285/45R-19 rear³. This is the only X5 19-in. wheel/tire combination with differentiated front/rear sizes; it is code 2M5.
 - **20-in. wheels and performance tires,** both models. Sizes and specifications like other 20-in. X5 equipment (see **Sport Activity Package**). The wheels are in a Double Spoke

design (#333M and the option code is 2NY. At additional cost for 50i, but not for 35i as 20-in. equipment is standard on 35i Sport Activity.

- **Increased top-speed limiter** (50i package only, as this is standard on the 35i Sport Activity.)
- **High-gloss Shadowline exterior trim** at the side windows (50i only, as this is standard on the 35i Sport Activity.)
- **Aluminum roof rails,** code 3MA.
- **M exterior treatment,** all in body color –
 - Front and rear bumpers
 - Wheelwell flares
 - Side sills
 - Protective strips on doors – plus matte-black protective appliques on side sills and rear bumper.

All this is coded 7M5, and is part of the factory M Sport Package, code 337.

- **Oval chrome exhaust outlets,** 80 x 135 mm. These are standard on the 50i, so are part of only the 35i package.
- **M doorsill trim** with M logo, part of the factory M Sports Package
- **M sport steering wheel,** even sportier than that of the Sport Activity Package, with thicker rim, black instead of galvanic trim, and M logo. Not available with heating; code 710.
- **M driver's footrest,** which is part of the factory Package.
- **Sport front seats** in 50i only, as they are standard in 35i Sport Activity; code 481. Multi-Contour seats can be substituted in 50i at additional cost.
- **Brushed Aluminum interior trim** at no extra cost as alternative to standard or no-cost

optional wood trims. Includes galvanic accent strips. Code 4AD; available only with ZMP.

- **Anthracite-color headliner** as with the Sport Activity Package; for 50i only, as standard in 35i Sport Activity.

This package is available only with standard Alpine White and metallic colors Titanium Silver, Black Sapphire, Deep Sea Blue and Space Gray, plus one metallic color not otherwise available on X5s: Carbon Black.

M Performance Package

(35i Sport Activity & 50i, code ZMX; requires M Sport Package)

This new-for-'13 package complements ZMP by adding:

- **Engine upgrade** – fine-tuning of both X5 engines that ups power and torque, code 767:
 - 35i – +15 hp, +30 lb-ft. torque for ratings of 315 hp/330 lb-ft.
 - 50i – +40 hp, +30 lb-ft. for ratings of 440 hp/480 lb-ft.
- **Black Chrome exhaust outlets**
- **M stainless-steel-trimmed pedals**

Because it is meant as a complement to the M Sport Package, it is much less extensive than the like-named X6 package. Thus on these X5s, the combination M Sport + M Performance is very close to the X6 ZMX.

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X5 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X5 key features

Except as noted, all X5 models offer the following features:

Technology Package

(all models except base 35i, code ZTP; requires Convenience or Premium Package)

Identical for all models, this Package now consists of –

- Automatic High Beams, code 5AC
- Side-view cameras, code 5DK
- Head-up Display, code 610.

This is not the new-generation HUD found in some other BMW Series.

Cold Weather Package

(all models except base 35i, code ZCW)

The contents of this Package are:

- **Headlight cleaning system** with retracting jets, code 502
- **Heated steering wheel**, code 248; available with standard or, in combination with Sport Activity model or Package, sport steering wheel.
- **Heated rear seats**, code 496. Heated front seats are standard in all these models.
- **Ski bag** with pass-through in 2nd-row seat, code 464.

Premium Sound Package

(all models except base 35i, code ZPS)

Includes an audiophile-quality premium audio system, specifically designed for the X5 interior and featuring the highest speaker count among BMW models. Its contents are:

- **Premium audio system**, code 677. Upgrades the entire audio system with –
 - Nearly tripled audio power (600 watts) compared to the standard 10-speaker system
 - Even higher-caliber speakers and more of them (16, vs. standard 10)
 - 7-band Digital Sound Processing (DSP), only when

combined with Navigation system

- Surround Sound simulation.

Where the speakers have equivalents in the standard system, they are identical in dimensions but have audiophile Neodymium drivers. The speakers are as follows; an asterisk (*) denotes additional speakers over the standard system –

- 2 midrange, 100 mm, in front doors
- 2 tweeters, 26 mm, in front doors' mirror triangles
- 2 midrange, 100 mm, in rear doors
- 2 tweeters, 26 mm, in rear doors*
- 2 subwoofers, 100 mm, under front seats
- Center-fill midrange, 100 mm, in dash
- Center-fill tweeter, 26 mm, in dash
- 2 midrange, 100 mm, in D-pillars*
- 2 tweeters, 26 mm, D-pillars*
- **Satellite Radio with 1-year subscription**, code 655.

Priority 1 package

Luxury Seating Package

(all models except base 35i, code ZLS; in 50i, not available in combination with Sport Activity or M Sport Package)

- **Active Seat Ventilation**, described in BMW features. Code 453.
- **Active Support** feature on driver's seat. Described in BMW features; code 451.
- **20-way Multi-Contour front seats**. Increase the number of power adjustments from the standard 10-way to 20-way. Described in detail in the BMW features section.

- **Perforated leather upholstery**, codes LV. Available in Beige or Black.

Stand-alone options

19-in. wheels and all-season tires

(35i Sport Activity, code 2LK)
For the special case of this model, which comes standard with 20-in. wheels and performance tires, this no-cost option is offered for customers who prioritize all-weather traction.

Roof rails

(base 35i only, code 386)

Standard on all other models, roof rails in matte-black finish are available on the base 35i as a stand-alone option.

Park Distance Control

(base 35i only, code 508)

Standard on all other models, Park Distance Control employs sensors in the front and rear bumpers to help drivers park accurately and minimize damage.

Comfort Access keyless entry

(all models except base 35i, code 322)

Eliminates the need to activate a remote to unlock or lock the vehicle, or to insert it into the dash slot before starting the engine. Comfort Access is described in BMW features.

Soft-close doors

(all models except base 35i, code 323)

This sophisticated feature is described in BMW features.

Aluminum running boards

(all models except base 35i, code 328; not available in combination with M Sport Package)
Rubber-trimmed aluminum running

boards, 4.1 in. wide, are a popular option for both esthetic and functional reasons.

Lane Departure Warning

(35i Sport Activity, 35d & 50i, code 5AD; requires Sport Activity or M Sport Package on 50i)

This remarkable system employs a camera near the interior rear-view mirror to detect when the vehicle begins to move across a lane marking without turn signals activated. When this occurs, LDW vibrates the steering wheel to alert the driver. Described in more detail in BMW features.

Navigation system

(optional all 35i models & 35d, code 609)

This signature BMW system is also available in 35i Premium and Sport Activity models via the Convenience Package, and in the 35d via the Premium Package. Described in detail in BMW features.

Head-up Display

(all models except base 35i, code 610; in 35i Premium & Sport Activity models, requires Convenience Package or Navigation)

In its X5/X6 version, the display's vertical position in the windshield can be adjusted to suit drivers of greater or lesser stature. Settings chosen by the driver are captured by the Vehicle and Key Memory, and are re-captured when the individual user unlocks the car.

Satellite Radio with 1-year subscription

(all 35i models, code 655)

The system beams programming to the satellites orbiting the earth; satellite-equipped vehicles receive the programming.

X5 key features

Except as noted, all X5 models offer the following features:

Rear Seat Entertainment

(all models except base 35i, code 6FF)

This option includes –

- An 8-in. monitor that can be folded away; same 16:9 format as the iDrive control display
- AV-in jack
- DVD player
- Wireless remote control
- Two jacks for wired headphones
- An infrared interface for wireless headphones.

The rear monitor is on a swiveling mount over the aft end of the center console.

BMW Apps

(all models except base 35i, includes Smartphone Integration; in 35i models requires Navigation or Convenience Package, in 35d⁵ requires Navigation or Premium Package; code 6NR) BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function or app is released, users can update and customize their vehicle's infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party app.

Further details are presented in **BMW features**.

Multi-Contour front seats

(all models except base 35i, code 456)

Included in the Active Ventilated Seats Package; also available as this stand-alone option. These seats incorporate 20-way power adjustment, vs. the standard 10-way, by adding the following powered modes:

- 4-way lumbar support
- Thigh support
- Upper backrest angle (articulated;

adjustable separately from main backrest angle)

- Backrest width (the backrest's side bolsters spread or narrow to accommodate occupants' back and shoulders).

Heated front seats

(base 35i only, code 494)

Standard in all other models, X5 heated front seats include premium features:

- **Rapid heating.** Each seat incorporates four heating zones: center of cushion and backrest, edges of cushion and backrest. When the heating is first switched on, the center zones heat at full power until almost to their regulated heat level; then the outer zones are brought up to the set level.
- **Balance control.** The relative temperature of cushions and backrests can be varied via the iDrive Climate screen. Heating levels are depicted in a graphic of the seat as this is done.

Rear door-window sunshades

(base 35i only, code 417)

These convenient and comfort-enhancing shades are available as a stand-alone option in only this model; otherwise they are included in the Convenience (35i Premium and Sport Activity) or Premium Package (35d and 50i).

3rd-row seating

(all models, code 4UB; in base 35i, requires Nevada leather, includes additional features as described)

This beautifully conceived option includes extensive features in addition to the expanded seating:

- **3rd-row seating.** The 3rd row is configured for two passengers, and integrated into the X5's cargo area. Thoughtful

features include –

- Center console with electric heating and ventilation, related controls and two integrated cupholders; coded 4NC and bundled with the 3rd-row option.
- Armrests in the side panels
- Grips in the C-pillars to assist passengers as they enter or exit the 3rd row
- 3-point safety belts and adjustable head restraints for both passengers.

Upholstery is in leatherette; the entire 3rd-row seat assembly can be folded flush into the floor for a flat cargo area.

- **Enhanced 2nd-row seating.**

The seats retain their 60/40 split folding, but add:

- 3.1-in. fore-aft adjustment
- Backrest-angle adjustment
- Easy-entry feature for access to 3rd row: upon release, entire seat assembly on side of entry tips forward.

Dual adjusting levers are provided at the outboard sides of each backrest, one usable from outside and the other more accessible to sitting passengers; the easy-entry releases are also here.

The 2nd-row seat assembly can be folded flush into the floor, so that the entire cargo length is available for flat-floor storage.

- **Self-leveling rear suspension.** Electronically controlled rear air springs compensate for loads carried in the rear seats and cargo area, maintaining normal vehicle height and headlight aiming. Code 220.

Nevada leather upholstery (optional base 35i, codes LU; otherwise standard)

This luxurious leather grade is available in Sand Beige, Oyster, Cinnamon Brown and Black.

In vehicles equipped with the Active Ventilated Seats Package, Nevada seating leather is perforated and is available in Sand Beige or Black with codes LV.

Alternate interior trim

(all models as described)

Dark Burl Walnut wood trim (code 4AB) is standard in all except the base 35i, where it comes with the Convenience Package. Dark Bamboo (4AZ) and Light Poplar (4BP) are available at no extra cost in all models, including the base 35i when it is equipped with the Convenience Package.

One further trim option, 4AD Brushed Aluminum, is available in combination with the M Sport Package in the 35i Sport Activity and 50i, and in the 35d with no restrictions.

Space-saver spare

(all models, code 300; not available in combination with 3rd-row seating)

As all X5s are equipped with run-flat tires, a spare is not standard. For customers who desire the reassurance of an onboard spare, this option provides an 18-in. space-saver spare wheel/tire. It is not available with the 3rd-row seating option, as that seat assembly folds into the space where the spare is stored.

Power liftgate

(base 35i only, code 316)

Standard on all other models, this amenity is available on the base 35i as a stand-alone option.

5 – 35d information is preliminary.

X5 key features

Except as noted, all X5 models offer the following features:

Priority 1 options

Active Steering

(35i Premium & Sport Activity, 50i; code 217)

The Sports Activity vehicles remain the only BMWs offering this feature in combination with all-wheel drive. Its fascinating and unique benefits are explained in detail in **BMW features**.

Active Roll Stabilization and Electronic Damping Control

(Adaptive Drive, code 2VA; 35i Premium & Sport Activity, 35d & 50i)

These advanced handling/ride systems are described in detail under **Active Roll Stabilization** and **Electronic Damping Control** in the **BMW features** section.

Automatic High Beams

(all models except base 35i, code 5AC)

Switches automatically between low and high beams, according to whether or not there are oncoming headlights. Details in **BMW features**.

Active Cruise Control with Stop-and-Go function, Collision Warning System

(35i Premium & Sport Activity, 50i; code 5DF)

This most capable version of Active Cruise Control utilizes the ACC radar sensors to detect critical closing-rate situations with standing and moving objects, even with ACC off.

A detailed description of this enhanced Active Cruise Control is found in **BMW features**.

Nevada leather upholstery in Tobacco color

(all models, code LUF1)

This Nevada color, a dark brown, is available only on a P1 basis.

Nappa leather upholstery (all models except base 35i, codes NA; requires Multi-Contour front seats)

Nappa is one of BMW's most sumptuous leather grades; the Nappa interior differs from the Nevada in several ways:

- Seat center and side sections and head restraints, Nappa instead of Nevada leather
- Center and door armrests, front and rear, Nappa instead of Nevada
- Door pulls, front and rear, Nappa instead of leatherette
- Roof grab handles – plastic instead of knitwear material
- Leather-trimmed dash and door panels. The upper dash and door sections are in black, the lower dash in the interior color. Code 4M5; also available separately, next.

When this option is combined with the 3rd-row seating, the 3rd row is also in Nappa leather. Nappa is available in Sand Beige and Black.

Leather-trimmed dash and door panels

(all models except base 35i, code 4M5)

This is the same as included with the Nappa option.

BMW Sports Activity center-installed accessories

Among the many accessories available for the X5 are:

- **BMW Performance items** –
 - Aero Kit including front and rear bumper covers and side sills (not compatible with trailer hitch)
 - All-black grilles
 - Aluminum pedals – with rubber inserts; accelerator and brake pedals plus driver's footrest
 - Steering wheel – thick, racing-style, flattened lower rim, Alcantara-wrapped; not compatible with Lane Departure Warning
- **Complete wheel and tire sets**, including elegant Midnight Chrome and Ferric Gray wheels in 21-in. sizes
- **18-in. winter wheel and tire sets**
- **Valve-stem caps** with BMW lettering or logo
- **Snow chains**
- **Mud flaps**
- **Bicycle carriers**, roof- and rear-mounted, plus lifts
- **Roof-rack system**, attachments and lifts
- **Underride protection**
- **Grille guard**
- **Nose mask** and other exterior protective products
- **Carbon-fiber-look door-pillar accents**
- **Running boards**
- **Illuminated doorsill trims**
- **Sun/wind deflector** for Panoramic moonroof
- **Wood trim** for E-shift and steering wheel
- **License-plate frames**
- **Car covers**, outdoor and indoor types
- **UV sunshade**
- **Floormats**, all-weather
- **Snap-in adaptor with USB interface** for playing stored music through vehicle audio system, charging a smartphone and hard-wiring into vehicle antenna
- **Snap-in adapter for BMW Apps** and various media
- **Connection and charging cables** of various types
- **BMW Bluetooth headset**
- **CD/DVD storage sleeve**
- **Cool bag**
- **BMW umbrella with LED light**
- **LED hand lamp**

For details and a complete listing, see the latest **Accessories** listings for X5s on bmwusa.com.

Standard & optional features

2013 X5

Bold within table indicates new feature for 2013. Information on 35d is preliminary.

Exterior design & function	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Impact-absorbing bumpers front & rear with combination body-color & protective black cladding	S	S	S	S	S
Silver-finish visible parts of underride protection front & rear	S	S	S	S	S
Xenon Adaptive headlights with dynamic auto-leveling	S	S	S	S	S
Cornering lights	S	S	S	S	S
Automatic headlight control	S	S	S	S	S
Automatic High Beams	NA	ZTP/ OPT ^{1, 2}	ZTP/ OPT ^{1, 2}	ZTP	ZTP
High-intensity headlight cleaning system with retractable jets	NA	ZCW	ZCW	ZCW	ZCW
Daytime Running Lamps via LED luminous rings	S ³	S ³	S ³	S ³	S ³
Halogen free-form foglights	S	S	S	S	S
Welcome Light	S	S	S	S	S
Rain-sensing windshield wipers	S	S	S	S	S
Heated windshield-washer jets	S	S	S	S	S
Park Distance Control front & rear, with graphic display	OPT	S	S	S	S
Rear-view + top-view cameras	NA	ZCV	ZCV	ZPP	ZPP
Ground lighting in door handles	ZCV	S	S	S	S
Running boards	C	OPT/C	OPT/C	OPT/C	OPT/C
Adaptive brakelights	S	S	S	S	S
Choice of standard or metallic paint	NC	NC	NC	NC	NC
Vertical grille slats	Black	Black	Black	Titanium-finish	Titanium-finish
Standard side-window trim	Matte black	Matte black	Matte black	Matte black	Matte black & chrome
High-gloss Satin Chrome Shadowline side-window trim	NA	NA	S	ZAP	ZAP/ZMP
Chrome Line exterior trim	NA	ZCV	NA	NA	NA
Rear-window wiper/washer with adjustable wiping interval	S	S	S	S	S
Roof rails (accommodate various BMW carrier systems):					
Matte-black finish	S	S	S	S	S
Satin aluminum	NA	NA	ZMP	NA	ZMP
Rear roof spoiler with separation edges	S	S	S	S	S

1 – Require Convenience Package.

2 – Priority 1 option.

3 – Selectable by user, stored in Vehicle & Key Memory.

S – Standard

OPT – Optional

NA – Not available

C – BMW center-installed

NC – No extra cost

ZAP – Sport Activity Package

ZCW – Cold Weather Package

ZMP – M Sport Package

ZPP – Premium Package

ZTP – Technology Package (requires ZCV)

Standard & optional features

2013 X5

Bold within table indicates new feature for 2013. Information on 35d is preliminary.

Exterior design & function (cont.)	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Body-color door handles & roof-seam trim	S	S	S	S	S
Exterior mirrors in body color/black finish	S	S	S	S	S
Power-fold exterior mirrors	ZCV	S	S	S	S
Special BMW M exterior equipment in body color (front & rear bumpers, wheelwell flares, side sills & protective strips on doors); matte-black appliquéés on side sills & rear bumper	NA	NA	ZMP	NA	ZMP
Chrome exhaust outlets:					
Round, 80 mm, left & right sides	S	S	S	S	-
Oval, 80 x 135 mm, left & right sides	-	-	-	-	S
Black chrome, 80 x 135 mm, left & right sides	NA	NA	ZMX	NA	ZMX
Performance & efficiency	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
DOHC 3.0-liter 24-valve inline 6-cylinder engine:					
3.0-liter TwinPower Turbo	S	S	S	-	-
3.0-liter twin-turbo diesel	-	-	-	S	-
DOHC 32-valve 4.4-liter TwinPower Turbo (twin-turbo)	-	-	-	-	S
Engine features:					
Aluminum construction with cast-iron cylinder liners	S	S	S	S	-
Aluminum construction with silicon-impregnated cylinders	-	-	-	-	S
Dual overhead camshafts & 4 valves/cylinder	S	S	S	S	S
High Pressure direct fuel injection	S	S	S	-	-
High Precision direct fuel injection with piezo injectors	-	-	-	-	S
Common-rail diesel direct fuel injection with piezo injectors	-	-	-	S	-
Valvetronic system	S	S	S	-	-
Double VANOS ⁴ steplessly variable valve timing	S	S	S	-	S
Twin-scroll turbocharger	S	S	S	-	-
Twin single-scroll turbochargers	-	-	-	-	S
Variable twin turbocharging	-	-	-	S	-

4 - VANOS = **V**ariable **N**ockenwellen **S** - Standard
Steuerung = variable camshaft control, **NA** - Not available
or variable valve timing. -- - Not applicable

ZCV - Convenience Package
ZMP - M Sport Package

ZMX - M Performance Package (requires ZMP)
ZPP - Premium Package

Standard & optional features

2013 X5

Bold within table indicates new feature for 2013. Information on 35d is preliminary.

Performance & efficiency (cont.)	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Electronically controlled engine cooling	S	S	S	S	S
Electric coolant pump	S	S	S	S	S
Volume-controlled oil pump	S	S	S	S	S
Electronic sensing of oil level & condition	S	S	S	S	S
Direct ignition system with knock control	S	S	S	–	S
Dual exhaust system	Single	Single	Single	Partial dual	Dual
6-speed STEPTRONIC automatic transmission with Adaptive Transmission Control, E-shift, selectable Normal, Sport & Manual modes	–	–	–	S	–
8-speed STEPTRONIC automatic transmission with Adaptive Transmission Control, E-shift, selectable Normal, Sport & Manual modes	S	S	S	NA	S
Multi-link double-wishbone front suspension	S	S	S	S	S
4-link rear suspension with Integral Link	S	S	S	S	S
Self-leveling rear air springs	OPT ⁵	OPT ⁵	OPT ⁵	OPT ⁵	OPT ⁵
Front & rear anti-roll (stabilizer) bars	S	S	S	S	S
Twin-tube gas-pressure shock absorbers	S	S	S	S	S
Sport suspension	NA	NA	ZMP	NA	NA
Active Roll Stabilization ⁶	NA	OPT ²	OPT ²	OPT ²	OPT ²
Electronic Damping Control ⁶	NA	OPT ²	OPT ²	OPT ²	OPT ²
Variable-ratio, constant-assist power steering	S	S	S	S	S
Active Steering with electronically variable assist (Servotronic) & ratio	NA	OPT ²	OPT ²	NA	OPT ²
4-wheel ventilated disc brakes	S	S	S	S	S
Brake Energy Regeneration	S	S	S	S	S
Electromechanical parking brake	S	S	S	S	S
Dynamic Stability Control with Hill Descent Control	S	S	S	S	S
xDrive fulltime all-wheel drive system, electronically controlled with variable front/rear torque split & traction control	S	S	S	S	S

2 – Priority 1 option.

5 – Included with optional 3rd-row seating; also included in M Sport Package of 50i model.

6 – These two options combined are called Adaptive Drive.

S – Standard
OPT – Optional

NA – Not available
– – Not applicable

Standard & optional features

2013 X5

Bold within table indicates new feature for 2013. Information on 35d is preliminary.

Performance & efficiency (cont.)	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
18 x 8.5 alloy wheels:					
Star Spoke, design #209	S	NA	NA	S	NA
Star Spoke, design #210	NA	NA	NA	NA	S
19 x 9.0 alloy wheels:					
Star Spoke, design #334	NA	S	NA	NA	NA
Y Spoke, design #335	NA	NA	NC	ZAP	ZAP
19 x 9.0 front/19 x 10.0 rear M V Spoke alloy wheels, design 223M	NA	NA	NA	NA	ZMP
20 x 10.0 front/20 x 11.0 rear alloy wheels:					
Y Spoke, design #214	NA	NA	S	ZAP+OPT	NA
M Double Spoke, design #333M	NA	NA	ZMP	NA	ZMP+OPT
Y Spoke, design #336	NA	NA	NA	NA	ZAP+OPT
Run-flat tires:					
255/55R-18 all-season	S	NA	NA	S	S
255/50R-19 all-season	NA	S	NC	ZAP	ZAP
255/50R-19 front / 285/45R-19 rear performance ⁷	NA	NA	NA	NA	ZMP
275/40R-20 front / 315/35R-20 rear performance ⁷	NA	NA	S	ZAP+OPT	ZAP/ZMP+OPT
Space-saver spare tire	OPT ^a	OPT ^b	OPT ^b	OPT ^b	OPT ^b
Tire Pressure Monitor	S	S	S	S	S
Pre-wiring for trailer hitch	S	S	S	S	S
Trailer-hitch kit	C	C	C	C	C
Comfort & convenience	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Soft-close doors	NA	ZC3	ZC3	OPT	ZP2
M doorsill trims with M logo	NA	NA	ZMP	NA	ZMP
Color-coordinated doorsill trim	S	S	S	S	S
Vehicle & Key Memory	S	S	S	S	S
Multi-function remote control with selective unlocking ³ & remote tailgate release	S	S	S	S	S
Comfort Access keyless entry	NA	ZCV/OPT	ZCV/OPT	ZPP/OPT	ZPP/OPT
Auto-dimming interior & exterior mirrors	ZCV	S	S	S	S
BMW Universal Transceiver (garage-door opener)	NA	ZCV	ZCV	ZPP	ZPP

3 - Selectable by user, stored in Vehicle & Key Memory.

7 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X5 models are not standard-equipped with a spare

tire and wheel. Performance tires are not recommended for driving in snow and ice conditions. X5 performance tires include higher top-speed limiter.

8 - Not available in combination with 3rd-row seating.

S - Standard
OPT - Optional
NA - Not available
C - BMW center-installed
NC - No extra cost

ZAP - Sport Activity Package
ZC3 - Convenience Package as of 10/12 production
ZCV - Convenience Package
ZMP - M Sport Package
ZP2 - Premium Package as of 10/12 production
ZPP - Premium Package

Standard & optional features

2013 X5

Bold within table indicates new feature for 2013. Information on 35d is preliminary.

Comfort & convenience (cont.)	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Courtesy lights with fade-in/fade-out feature, actuation from remote, automatic switch-on upon engine shutoff, separately controlled left/right front reading lights, ambient lighting of console area, front footwell lighting, entry/exit light above each rear door, 2 cargo-compartment lights in tailgate	S	S	S	S	S
Ground lighting, ambient lighting of exterior door handles & interior storage compartments, entry/exit light in each door, left/right rear reading lights & rear footwell lighting (ambient lighting package)	ZCV	S	S	S	S
Tilt/telescopic leather-wrapped steering wheel with fingertip multi-function controls	S	-	-	S	-
Power tilt/telescopic leather-wrapped steering wheel with memory, automatic tilt-up & fingertip multi-function controls	NA	S	S	ZPP	S
Sport steering wheel	NA	NA	S	ZAP	ZAP
M sport steering wheel	NA	NA	ZMP	NA	ZMP
Heated steering wheel	NA	ZCW	ZCW ⁹	ZCW	ZCW ⁹
Stainless-steel-trimmed pedals	NA	NA	ZMX	NA	ZMX
Dynamic Cruise Control	S	S	S	S	S
Active Cruise Control with Stop-and-Go function & Frontal Collision Warning System	NA	OPT ²	OPT ²	NA	OPT ²
10-way power front seats	S	S	-	S	S
10-way power + 2-way manual front sport seats	NA	NA	S	ZAP	ZAP/ZMP
4-way power front-seat lumbar support	NA	S	S	S	S
Memory system for driver's seat, steering wheel & exterior mirrors (2 settings per user)	S	S	S	S	S
3-stage, thermostatically controlled heated front seats with fast heating & 4-zone balance control	OPT	S	S	S	S
20-way Multi-Contour front seats	NA	ZLS/OPT	ZLS/OPT	ZLS/OPT	ZLS/OPT
Active Seat Ventilation, both front seats	NA	ZLS	ZLS	ZLS	ZLS ¹⁰
Active Comfort driver's seat	NA	ZLS	ZLS	ZLS	ZLS ¹⁰

2 - Priority 1 option.

9 - Heated steering wheel not available in combination with M Sport Package.

10 - Not available in combination with Sport Activity or M Sport Package.

S - Standard

OPT - Optional

NA - Not available

- - Not applicable

ZAP - Sport Activity Package

ZCV - Convenience Package

ZCW - Cold Weather Package

ZLS - Luxury Seating Package (P1 option)

ZMP - M Sport Package

ZMX - M Performance Package (requires ZMP)

ZPP - Premium Package

Standard & optional features

2013 X5

Bold within table indicates new feature for 2013. Information on 35d is preliminary.

Comfort & convenience (cont.)	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Auto tilt-down of right-hand exterior mirror for backing up	S	S	S	S	S
Front center console compartment with dual lids/armrests, auxiliary audio input & accessory power outlet	S	S	S	S	S
Dual cupholders front & 2nd row	S	S	S	S	S
Accessory electric power outlets in front ashtray, rear of center console & cargo area	S	S	S	S	S
Glove compartment with dual open-up/open-down, electrically operated doors; included in central locking system	S	S	S	S	S
Electronic analog speedometer & tachometer	S	S	S	S	S
LCD main & trip odometers	S	S	S	S	S
iDrive system with 6.5-in. color display, 5 menus & controller (includes On-board Computer)	S	S	S	S	S
BMW On-board Navigation system, encompassing 8.8-in. display, enhanced iDrive system with Real Time Traffic Information, Voice Command & Online Information Services; includes expanded On-board Computer functions, automatic ventilation & many other features	OPT	ZCV/OPT	ZCV/OPT	ZPP/OPT	S
Head-up Display	NA	ZTP/OPT ¹¹	ZTP/OPT ¹¹	ZTP/OPT ¹²	ZTP/OPT
Leatherette upholstery	S	–	–	–	–
Nevada leather upholstery	OPT	S	S	S	S
Nevada perforated leather upholstery	NA	ZLS ^{2, 13}	ZLS ^{2, 13}	ZLS ^{2, 13}	ZLS ^{2, 13}
Nappa leather upholstery	NA	OPT ^{2, 14}	OPT ^{2, 14}	OPT ^{2, 14}	OPT ^{2, 14}
Nappa leather-trimmed instrument panel & door panels	NA	OPT ^{2, 15}	OPT ^{2, 15}	OPT ^{2, 15}	OPT ^{2, 15}
Silver Matte interior trim	S	–	–	–	–
Dark Burl Walnut wood interior trim	ZCV	S	S	S	S
Light Poplar wood interior trim	ZCV+OPT	NC	NC	NC	NC
Dark Bamboo wood interior trim	ZCV+OPT	NC	NC	NC	NC
Brushed-aluminum interior trim	NA	NA	NC ¹⁶	NC	NC ¹⁶

2 – Priority 1 option.

11 – Requires Convenience Package or Navigation system.

12 – Requires Premium Package or Navigation system.

13 – Available in Black or Beige.

14 – Requires Multi-Contour front seats.

15 – Included with Nappa upholstery, or available separately.

16 – Requires M Sport Package.

S – Standard

OPT – Optional

NA – Not available

NC – No extra cost

– – Not applicable

ZCV – Convenience Package

ZPP – Premium Package

ZTP – Technology Package (requires ZCV)

Standard & optional features

2013 X5

Bold within table indicates new feature for 2013. Information on 35d is preliminary.

Comfort & convenience (cont.)	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Anthracite-color headliner	NA	NA	S	ZAP	ZAP/ZMP
Power windows with key-off operation; 1-touch opening & closing of all door windows, anti-trapping feature, opening from remote, closing from exterior lock	S	S	S	S	S
Automatic climate control with separate left/right temperature & air-distribution settings, automatic recirculation control, misting control, bi-directional solar sensor, temperature-controlled rear air outlets, toggle control for custom air-distribution setting, Max A/C function, activated-charcoal micro-filter ventilation & other features	S	S	S	S	S
4-zone automatic climate control with rear blower, separate left/right temperature & air-distribution controls front & rear, additional air outlets in B-pillars & all features of standard system	NA	ZCV	ZCV	ZPP	ZPP
Dual-panel Panoramic moonroof: front panel slides open, both panels tilt up; power interior shade, all functions 1-touch	ZCV	S	S	S	S
AM/FM/HD/CD/MP3 audio system with 10 speakers including 2 sub-woofers, Radio Data System (RDS), auxiliary audio input, weather band & FM diversity antenna system	S	S	S	S	S
Premium audio system with 16 speakers including 2 subwoofers, increased audio power (600W), Surround Sound & Digital Sound Processing; includes upgraded componentry throughout & all features of standard system	NA	ZPS	ZPS	ZPS	ZPS
Auxiliary audio input	S	S	S	S	S
iPod/USB Adapter	S	S	S	S	S
BMW Apps, including Smartphone Integration	NA	OPT ¹⁷	OPT ¹⁷	OPT ¹⁸	OPT
Satellite Radio with 1-year subscription	OPT	OPT	OPT	ZPP/OPT	ZPP/OPT
Rear Seat Entertainment	NA	OPT	OPT	OPT	OPT
Bluetooth mobile-device interface with high-capacity phonebook download	S	S	S	S	S

2 - Priority 1 option.

17 - Requires Convenience Package or Navigation system.

18 - Requires Premium Package or Navigation system.

S - Standard
OPT - Optional
NA - Not available
ZAP - Sport Activity Package

ZCV - Convenience Package
ZMP - M Sport Package
ZPP - Premium Package
ZPS - Premium Sound Package

Standard & optional features

2013 X5

Bold within table indicates new feature for 2013. Information on 35d is preliminary.

Comfort & convenience (cont.)	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Dual front sun visors with illuminated mirrors	S	S	S	S	S
Storage compartments in all 4 doors	S	S	S	S	S
Seatback storage compartments	S	S	S	S	S
Split folding rear (2nd-row) seats with flush-fold function	S	S	S	S	S
Fold-up rear (2nd-row) center armrest	S	S	S	S	S
Ski bag	NA	ZCW	ZCW	ZCW	ZCW
Rear-seat heating (2nd-row outboard seats)	NA	OPT	OPT	OPT	OPT
Rear side-door sunshades	OPT	ZCV	ZCV	ZPP	ZPP
Privacy glass	NA	S	S	S	S
3rd-row seating with independent heating & ventilation, 2 cupholders; left & right seats separately fold flush into cargo floor; includes manual fore-aft & backrest adjustments & easy-entry feature on 2nd row	OPT ¹⁹	OPT ¹⁹	OPT ¹⁹	OPT ¹⁹	OPT ¹⁹
Fully finished cargo area with retractable/removable cover, 4 cargo tie-downs, underfloor toolkit	S	S	S	S	S
Split tailgate with separately opening upper & lower sections; electric release from interior, exterior or remote; heated rear window & rear-window wiper/washer	S	S	S	S	S
Floor mats, front & rear	S	S	S	S	S
Power liftgate (upper portion of tailgate)	OPT	S	S	S	S

Safety & security	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Dynamic Stability Control, including electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Brake Control, Hill Descent Control, Brake Fade Compensation, Brake Standby, Brake Drying & Automatic Hold	S	S	S	S	S
Rollover Protection System: senses possibility of rollover, deploys Head Protection System & safety-belt tensioners, interacts with Dynamic Stability Control	S	S	S	S	S
Side-view cameras	NA	ZTP	ZTP	ZTP	ZTP

19 – Includes self-leveling rear air suspension.

S – Standard
OPT – Optional
NA – Not available

ZCV – Convenience Package
ZCW – Cold Weather Package

ZPP – Premium Package
ZTP – Technology Package (requires ZCV)

Standard & optional features

2013 X5

Bold within table indicates new feature for 2013. Information on 35d is preliminary.

Safety & security (cont.)	X5 xDrive35i	X5 xDrive35i Premium	X5 xDrive35i Sport Activity	X5 xDrive35d	X5 xDrive50i
Automatic High Beams	NA	ZTP/ OPT ²	ZTP/ OPT ²	ZTP	ZTP
Lane Departure Warning	NA	NA	OPT	OPT	OPT ²⁰
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S	S	S	S
3-point safety belts with force limiters at all seating positions	S	S	S	S	S
Front safety belts with automatic tensioners	S	S	S	S	S
LATCH attachments at 2nd-row outboard seating positions (for installation of child restraint seats)	S	S	S	S	S
Head restraints at all seating positions (including optional 3rd-row seating)	S	S	S	S	S
Active head restraints, front seats	S	S	S	S	S
Front- & rear-seat (2nd-row) Head Protection System	S	S	S	S	S
Front-seat side-impact airbags, seat-mounted	S	S	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S	S	S
Post-impact safety measures: Unlocking of central locking system	S	S	S	S	S
Switch-on of hazard flashers	S	S	S	S	S
Disconnect of alternator, fuel pump & starter from battery (Battery Safety Terminal)	S	S	S	S	S
BMW Assist, including enhanced automatic collision notification, SOS button, enhanced Roadside Assistance, TeleService, BMW Assist Safety Plan	S	S	S	S	S
Central locking system with selective unlocking; includes glove compartment	S	S	S	S	S
Enhanced Coded Driveaway Protection	S	S	S	S	S
Alarm system with operation from remote, interior motion detector	S	S	S	S	S

2 – Priority 1 option.

20 – Requires Sport Activity or M Sport Package.

S – Standard
OPT – Optional
NA – Not available

ZTP – Technology Package (requires ZPP on 50i)

Technical specifications

2013 X5

Bold within table indicates new specification for 2013.

General	X5 xDrive35i	X5 xDrive35d	X5 xDrive50i
Curb weight, lb.	4960	5192	5379
Weight distribution, front/rear, %	47.1/52.9	49.2/50.8	49.8/50.2
Wheelbase, in.	115.5 ¹		
Track, front/rear, in.	64.7/65.0 ^{1, 2}		
Length, in.	191.1 ¹		
Width, in.	76.1 ¹		
Height, in.	69.9 ¹		
Sports Activity-specific	X5 xDrive35i	X5 xDrive35d	X5 xDrive50i
Gross Vehicle Weight Rating (GVWR), lb.	6052/6371 ³	6261/6581 ³	6327/6669 ³
Payload, lb.	1290 ¹		
Onroad towing capacity, lb.:			
Maximum trailer gross weight, braked	6000 ¹		
Suggested maximum tongue weight	600 ¹		
Max. roof load, lb.	220 ¹		
Ramp angle, deg.	17.9 ¹		
Front approach angle, deg.	63.3 ¹		
Rear departure angle, deg.	21.6 ¹		
Ground clearance, unloaded, in.	8.7 ¹		
Maximum climbing ability, %	50 ¹		
Maximum lateral tilt, °	50 ¹		
Fording depth @ 4 mph, in.	19.7 ¹		
Body	X5 xDrive35i	X5 xDrive35d	X5 xDrive50i
Type		5-door Sports Activity Vehicle ¹	
Aerodynamic drag coefficient	0.34	0.35	0.35
EPA size classification	SUV 4WD ¹		
Accommodations	X5 xDrive35i	X5 xDrive35d	X5 xDrive50i
Seating capacity, persons	5 ^{1, 4}		
Shoulder room, front/rear, in.	60.0/58.0 ^{1, 4}		
Head room, front/rear, in.:			
Without moonroof	39.3/39.0 ^{1, 4}		
With moonroof	38.4/38.3 ^{1, 4}		
Leg room, front/rear, in.	39.9/36.6 ^{1, 4}		
EPA passenger volume, cu ft.	102.4 ^{1, 4}		
Cargo volume, cu ft.	21.9/61.8 ^{1, 5}		
Cargo volume with 3rd-row seating, cu ft.	18.7/61.8 ^{1, 6}		
Max. cargo volume, SAE/EPA measurement	75.2 ¹		

1 – Specification applies to all models.
 2 – With standard wheels.
 3 – Without/with 3rd-row seating option.

4 – With standard front & 2nd-row seating;
 3rd row optional all models.

5 – DIN measurement; aft and to top
 of 2nd-row seats/aft of front seats,
 2nd-row seating folded flush, cargo
 floor to ceiling.

6 – DIN measurement; aft and to top of
 3rd-row seats/2nd- & 3rd-row seating
 folded flush, cargo floor to ceiling.

Technical specifications

2013 X5

Bold within table indicates new specification for 2013.

Engine & electrical	X5 xDrive35i	X5 xDrive35d	X5 xDrive50i
Engine type	DOHC inline 24-valve 6-cylinder, aluminum construction with cast-iron cylinder liners, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁷ variable intake- & exhaust-valve timing	Diesel DOHC inline 24-valve 6-cylinder, aluminum construction with cast-iron cylinder liners, direct fuel injection with piezo injectors, variable twin turbochargers	DOHC (4-cam) 32-valve V-8, direct fuel injection with piezo injectors, twin single-scroll turbochargers, Double VANOS ⁷ variable intake- & exhaust-valve timing
Bore x stroke, mm/in.	84.0 x 89.6/ 3.31 x 3.53	84.0 x 89.6/ 3.31 x 3.54	89.0 x 88.3/ 3.50 x 3.48
Displacement, cc/cu in.	2979/182	2993/183	4395/268
Compression ratio	10.2:1	16.5:1	10.0:1
Power @ rpm, hp	300 @ 5800-6250 ⁸	265 @ 4200	400 @ 5500-6400 ⁹
Torque @ rpm, lb-ft.	300 @ 1400-5000 ⁸	425 @ 1750-2250	450 @ 1750-4500 ⁹
Engine-management system	MEVD 17.2 with knock control, direct fuel injection, Valvetronic, variable valve timing, engine cooling & other functions included in control strategy	DDE 7.3, BMW Blue Performance with direct fuel injection, oxidation catalyst, SCR catalyst, DEF injection & particle filter included in control strategy	Motronic MSD 85.1 with knock control, direct fuel injection, variable valve timing, engine cooling & other functions included in control strategy
Fuel requirement	Premium unleaded	Diesel fuel	Premium unleaded
Fuel capacity, U.S. gal.	22.4 ¹		
Battery capacity, amp-hr.	70	90	90
Alternator output, amp./W	180/2520	216/3024	220/3080

1 – Specification applies to all models.

7 – VANOS = **V**ariable **N**ockenwellen

Steuerung = variable camshaft control, or variable valve timing.

8 – 315 hp/330 lb-ft. with M Performance Package.

9 – 440 hp/480 lb-ft. with M Performance Package.

Technical specifications

2013 X5

Bold within table indicates new specification for 2013.

Drivetrain	X5 xDrive35i	xDrive35d	xDrive50i
Drive system	Front engine/all-wheel drive; xDrive system with electronically controlled multi-disc clutch for variable front/rear torque split; all-wheel electronic traction control ¹		
Automatic transmission	8-speed, 8 HP 45	6-speed, 6 HP 26 TU	8-speed, 8 HP 70
Ratios: 1st	4.71:1	4.17:1	4.71:1
2nd	3.14:1	2.34:1	3.14:1
3rd	2.11:1	1.52:1	2.11:1
4th	1.67:1	1.14:1	1.67:1
5th	1.28:1	0.87:1	1.28:1
6th	1.00:1	0.69:1	1.00:1
7th	0.84:1	–	0.84:1
8th	0.67:1	–	0.67:1
Reverse	3.30:1	3.40:1	3.32:1
Final drive ratio	3.15:1	3.64:1	3.15:1
Chassis	X5 xDrive35i	X5 xDrive35d	X5 xDrive50i
Body/frame construction	Unitized steel structure ¹		
Front suspension	Multi-link double-wishbone system: upper & lower lateral links with aluminum upper links, steel double-pivot lower links, coil springs, twin-tube gas-pressure shock absorbers, anti-roll bar; aluminum thrust plate ¹ Optional all except base 35i – Active Roll Stabilization & Electronic Damping Control (Adaptive Drive); 35i Sport Activity w/ZMP – sport suspension calibration		
Rear suspension	4-link Integral suspension with aluminum upper & lower arms & wheel carriers; coil springs (base); self-leveling air springs (with optional 3rd-row seating or 50i ZMP) ¹ Optional all except base 35i – Active Roll Stabilization & Electronic Damping Control (Adaptive Drive); 35i Sport Activity w/ZMP – sport suspension calibration		
Steering type: Standard	Rack & pinion, power-assisted		
Optional Active Steering	Rack & pinion, Servotronic vehicle-speed-sensitive power assist (35i Premium & Sport Activity, 50i)		
Overall ratio: Standard steering	Mechanically variable; mean ratio is 19.5:1 ¹		
Active Steering	Electronically variable over wide range (35i Premium & Sport Activity, 50i)		
Turns, lock-to-lock	3.1 (standard system or at mean ratio of Active system) ¹		
Turning circle, ft.	42.0 ¹		
Brakes	4-wheel ventilated discs		
Diameter x thickness, mm/in.:			
Front	348 x 30/13.7 x 1.18	348 x 30/13.7 x 1.18	348 x 30/13.7 x 1.18
Rear	320 x 20/12.6 x 0.79	320 x 20/12.6 x 0.79	345 x 24/13.6 x 0.94
Assist	Vacuum ¹		

1 – Specification applies to all models.

Technical specifications

2013 X5

Bold within table indicates new specification for 2013.

Chassis (cont.)	X5 xDrive35i	X5 xDrive35d	X5 xDrive50i
Cast-alloy wheels:			
18 x 8.5	Base model S	S	S
19 x 9.0	Premium S, Sport Activity OPT	ZAP	ZAP
19 x 9.0 F/19 x 10.0 R	NA	NA	ZMP
20 x 10.0 F/20 x 11.0 R	Sport Activity S	ZAP+OPT	ZAP/ZMP+OPT
Run-flat tires:			
All-season, 255/55R-18	Base model S	S	S
All-season, 255/50R-19	Premium S, Sport Activity OPT	ZAP	ZAP
Performance ¹⁰ , 255/50R-19 F / 285/45R-19 R	NA	NA	ZMP
275/40R-20 F / 315/35R-20 R	Sport Activity S	ZAP+OPT	ZAP/ZMP+OPT
Stability-control system	Dynamic Stability Control (DSC), including all-speed traction (ADB-X) & stability (ASC-X) control via engine &/or brake intervention; Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), Cornering Brake Control, cornering stability enhancement, Dynamic Brake Control, Hill Descent Control, Brake Fade Compensation, Brake Standby, Brake Drying, Automatic Hold		
Performance data	X5 xDrive35i	X5 xDrive35d	X5 xDrive50i
Acceleration, 0-60 mph, sec. ¹¹	6.4	6.9	5.3
Top speed, mph ¹² :			
With all-season tires	130 ¹		
With performance tires	150 ¹		
Fuel economy, EPA est. MPG, city/highway/combined	16/23/19	19/26/22	14/20/16
1 - Specification applies to all models. 10 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X5 models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.	11 - BMW AG test results. Actual acceleration results may vary depending on specification of vehicle; road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.	S - Standard OPT - Optional NA - Not available	ZAP - Sport Activity Package ZAP+OPT - Optional in combination with Sport Activity Package ZMP - M Sport Package ZMP+OPT - Optional in combination with M Sport Package
	12 - Electronically limited.		

2013 X3:

For BMW's popular midsize Sports Activity Vehicle, a new TwinPower Turbo engine for the 28i, automatic engine start/stop, and an ECO PRO driving mode put the accent on even greater efficiency.

Just two model years after its debut, the new-generation X3 could bask in a dramatically successful sales record and rest on its laurels. Not a chance: for 2013, the look is the same but the X3 becomes the fourth BMW line to adopt the brilliantly efficient, yet muscular N20 TwinPower Turbo 4-cylinder engine.

As a result of this new engine, plus automatic engine start/stop and the ECO PRO mode added to its newly standard Driving Dynamics Control, the X3 xDrive28i boosts EPA mileage ratings by 2 mpg city, 3 mpg highway and 3 mpg combined: that's 21/28/24, a remarkable achievement for a high-performing, luxurious and quality-built SAV.

And remember: this is the same new X3 that has been universally welcomed by critics since its debut:

- *auto motor und sport*, Germany, November 18, '10: "That the new BMW X3 is bigger, one sees at first glance. But this midsize all-wheel driver isn't just bigger; it also presents a matured driving character."
- *AutoWeek*, November 22, '10: "Reworked X3 offers better performance, control and ride."
- *Motor Trend*, December '11: "Surprising surefootedness, turbocharged speed, and impressive fuel economy."
- *Automobil Revue*, Switzerland, January 5, '12: "Lots of space, excellent workmanship, great driving dynamics."

The 2nd-generation X3's virtues go well beyond the performance, handling, riding comfort and interior space noted by the experts. It was honored by the coveted Top Safety Pick rating by the authoritative Insurance Institute of Highway Safety. It also earned the full 5 Stars in the Euro-NCAP (New Car Assessment Program) tests that largely shape a vehicle's safety reputation on the Continent.

And this: with the new generation, BMW moved X3 production to Spartanburg, South Carolina, putting it alongside the established X5 and X6 and adding to BMW's American export performance – now BMW builds all X3, X5 and X6 models there and not only sells them in North America but exports them to all the world's markets. So it's not just an impressive vehicle; it's also a very positive business phenomenon.

What's new for 2013

As of 4/12 production:

- New engine for 28i model: N20 4-cylinder TwinPower Turbo (240 hp/260 lb-ft. torque)
- Automatic engine start/stop on both models
- Driving Dynamics Control newly standard, adds ECO PRO mode
- New wheels for 28i: 18-in. V Spoke #307, formerly in 28i Sport Activity Package; 245/50R-18 all-season tires. Previously standard equipment was 17-in.

- All X3 tires now performance all-season
- Power tailgate newly standard on both models
- Exhaust tips now chrome on both models (formerly 35i only)
- Panic button with red symbol added to remote fob
- 28i Sport Activity Package price reduced because previous package wheels now standard
- 28i M Sport Package wheels now 19-in., vs. 18-in. before; wheels now same for both models (M Double Spoke #369)
- New Driver Assistance Package: includes Lane Departure Warning, previously not available on X3s. Other contents are Automatic High Beams and (35i only) Head-up Display, both formerly available as stand-alones.
- 35i Premium Package price reduced because power tailgate now standard
- Convenience Package (28i only) price reduced because power tailgate now standard
- Automatic High Beams and heated steering wheel no longer available stand-alone

X3 models & key features

This information lists major features, and helps position and distinguish the models in the line. For a comprehensive summary of features, see pages 790-797.

X3 xDrive28i

The "entry" model's big news for 2013 is its new N20 4-cylinder TwinPower Turbo engine. As sweet and smooth as the previous N52 6-cylinder was, the N20 helps lift fuel economy by 3 mpg in both highway and combined driving, boosts torque by 30 lb-ft., and responds more eagerly to the accelerator pedal at everyday driving speeds. For '13 it comes with new standard features, including larger, sportier wheels and a power tailgate. Altogether, the 28i's robust performance, outstanding fuel economy and extensive standard equipment add up to a convincing exemplar of BMW's youthful, agile Sports Activity Vehicle concept.

Exterior design & function

- Automatic headlight control
- Halogen free-form foglights
- Welcome Light
- Aluminum Matte vertical grille slats
- Rain-sensing windshield wipers
- Power/heated exterior mirrors in body-color/black finish
- Auto tilt-down feature for right exterior mirror
- Roof spoiler
- High-lift power tailgate
- Chrome-tipped dual exhaust outlets

Performance & efficiency

- 2.0-liter DOHC 16-valve inline 4-cylinder engine with aluminum construction, twin-scroll turbocharger, direct fuel injection, Valvetronic variable intake-valve lift and Double VANOS¹ variable intake- and exhaust-valve timing. 240 hp/260 lb-ft., 0-60 mph in 6.6 sec., EPA combined rating 24 mpg.

- 8-speed STEPTRONIC automatic transmission (standard)
- Latest-generation xDrive all-wheel drive system
- Double-pivot strut-type front suspension
- 5-link rear suspension
- Servotronic vehicle-speed-sensitive variable-assist electric power steering
- Brake Energy Regeneration
- Dynamic Stability Control
- Electromechanical parking brake + Automatic Hold
- 18 x 8.0 alloy wheels, V Spoke design #307
- 245/50R-18 all-season tires
- Tire Pressure Monitor

Comfort & convenience

- Vehicle & Key Memory with Personal Profile
- Keyless entry with multi-function remote control
- BMW Ambiance Lighting of console and center stack
- Dynamic cruise control
- Tilt/telescopic leather-wrapped steering wheel with fingertip multi-function controls
- 8-way power front seats
- Memory system for driver's seat and exterior mirrors
- iDrive system
- Leatherette upholstery
- Silver Matte interior trim
- High-gloss Black dash trim
- Power windows with key-off and 1-touch operation
- Automatic climate control with left/right (dual-zone) temperature settings, automatic recirculation control, misting control, bi-directional solar sensor, activated-charcoal microfilter ventilation, ALL control
- Anti-theft AM/FM/HD/CD/MP3 audio system with Radio Data System, 12 speakers, auxiliary audio input

- Split folding rear seats
- Privacy glass
- Floor mats, front and rear
- Fully finished cargo area
- Retractable cargo cover
- High-lift power tailgate

Safety & security

- Rollover Protection System
- Dual-airbag Supplementary Restraint System with 2-stage Smart Airbags
- Safety belts with automatic tensioners and force limiters at all seating positions
- Front- and rear-seat Head Protection System
- Front-seat-mounted side-impact airbags
- Front-seat Active head restraints
- Central locking system with selective unlocking
- Coded Driveaway Protection

Packages & options

- Available option packages:
 - Premium (Nevada leather upholstery, dual-panel Panoramic Contour moonroof, 4-way power front-seat lumbar support, auto-dimming interior and exterior mirrors, power-folding exterior mirrors, BMW Universal Transceiver, ambiance lighting package, storage package)
 - Convenience (Xenon Adaptive headlights, Comfort Access keyless entry, rear door-window sunshades)
 - Driver Assistance (Automatic High Beams, Lane Departure Warning)
 - Sport Activity (X-Line exterior trim, Aluminum Satin roof rails, sport steering wheel, front sport seats, Anthracite-color headliner)
 - M Sport (19-in. wheels and performance all-season tires², Performance Control, specific

exterior color selection, M aerodynamic exterior treatment, Shadowline exterior trim, high-gloss roof rails, M sport steering wheel, front sport seats, Anthracite-color headliner)

- Cold Weather (heated steering wheel and front seats, 40/20/40 split folding rear seat)
- Cold Weather II (retractable headlight cleaning system, heated rear seats)
- Premium Sound (premium audio system, Satellite Radio with 1-year subscription)
- Technology (Park Distance Control, rear- and top-view cameras, Navigation system, BMW Assist with 4-year subscription, enhanced Bluetooth mobile-device interface + USB connectivity)

- P1 Package³:
 - Dynamic Handling (Dynamic Damping Control, Performance Control, Variable Sport Steering)
- Stand-alone options:
 - Xenon Adaptive headlights
 - Park Distance Control
 - Aluminum Satin roof rails
 - Rear-view camera (without top-view cameras)
 - Dual-panel Panoramic Contour moonroof

- 1 - VANOS = Variable Nockenwellen Steuerung = variable camshaft control, or variable valve timing.
- 2 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.
- 3 - Priority 1 options accurate at time of publication but subject to changes. For current model-specific standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

X3 models & key features

This information lists major features, and helps position and distinguish the models in the line. For a comprehensive summary of features, see pages 790-797.

- Navigation system
- Head-up Display (28i)
- BMW Apps including Smart-phone Integration
- Satellite Radio with 1-year subscription
- Heated front seats
- Alternate interior trims at no extra cost (require Premium Package)
- 40/20/40 split folding rear seat
- Retractable cargo net
- BMW Assist with 4-year subscription, enhanced Bluetooth mobile-device interface + USB connectivity
- Priority 1 options³:
- Comfort Access keyless entry
- Head-up Display (35i)
- Rear door-window sunshades
- 40/20/40 split folding rear seats
- Priority 1 metallic exterior colors:
 - Blue Water
 - Vermilion Red
 - Sparkling Bronze
- Priority 1 Nevada leather colors:
 - Mojave
 - Chestnut
- 3.0-liter DOHC 24-valve inline 6-cylinder engine with aluminum construction, twin-scroll turbocharger, High Pressure direct fuel injection, Valvetronic variable intake-valve lift, Double VANOS¹ variable valve timing, full dual exhaust system; 300 hp/300 lb-ft. torque, 21 mpg combined EPA rating
- 18 x 8.0 alloy wheels, Y Spoke design #308
- 245/50R-18 performance all-season tires
- Xenon Adaptive headlights, cornering lights, Daytime Running Lamps via luminous rings
- Sport steering wheel
- Fine Line Siena wood interior trim
- Packages and options as 28i, except:
 - Premium Package adds Comfort Access keyless entry and rear door-window sunshades; deletes Panoramic moonroof because standard
 - M Sport Package adds Sport automatic transmission and steering-wheel shift paddles
 - Sport Activity Package specifies 19-in. wheels/tires², deletes sport steering wheel, because standard; adds sport automatic transmission and shift paddles
- Convenience Package not offered; its content either standard or in other packages
- Stand-alone options not offered: Panoramic moonroof and Xenon headlights, because standard; rear side-window sunshades

X3 xDrive35i

Step-up X3 model, with Twin-Power Turbo engine: highest performance level ever offered in the X3, combined with remarkable fuel efficiency. The 35i also adds standard equipment in nearly every category. Key distinctions from the 28i model include:

X3 key features

Except as noted, both current X3 models offer the following features:

Exterior design & function

The front view

Thrusting forward as on other newly introduced BMW Series, the traditional BMW “kidney” grilles carry widely spaced vertical slats in Aluminum Matte finish. Though most of the frontal surfaces are body-color, protective black cladding sets a visual accent across the front end and wraps around to the front wheelwells. The cladding is attached to the bottoms of the doors, thus moving out of the way when the doors are open; this helps keep the doorsill dry and thus lessens the chance of soiling pants legs when entering or exiting.

Black screening fills out the air intakes: one just below the kidneys, three at lower levels. With the X-Line treatment that’s included with the Sport Activity Package, these screens get a titanium finish. Headlight clusters, continuing BMW’s signature 4-lamp theme, are framed in chrome; with Xenon Adaptive headlights (optional 28i, standard 35i) these employ the luminous rings for the Daytime Running Lamps function. Standard foglights below the headlight clusters are placed at the front end’s outer limits; at night, these combine with the headlights to present an impressively wide illumination profile.

The available dual-panel Panoramic Contour moonroof adds a subtle touch to the front view: its front edge is curved to match the windshield’s top edge; that’s the meaning of “contour.” It’s standard on the 35i, optional on the 28i.

In all, the front end presents an elegant aspect, approaching the X5’s imposing character without duplicating it.

In profile

This view is powerfully accented by three character lines. A subtle accent line first parallels the front lighting cluster’s edge, then rises gently to fade away at the A-pillar. A stronger line begins aft of the front wheelwell, curving and rising boldly through the doors to touch the wraparound taillight cluster. Yet another, parallel line begins farther down and accents the side sill.

Having wrapped around from the front end, black cladding continues rearward to frame both wheelwells, side sills and the rear bumper’s lower portions. With the available X-Line treatment (Sport Activity Package), the side sills are additionally accented by a Satin Aluminum strip.

Other details of the profile view include exterior mirrors in body-color/black finish, and a fresh interpretation of BMW’s traditional “Hofmeister Knick” at the rear quarter window’s aft edge. Standard side-window framing is black; with X-Line it adds Satin Aluminum/high-gloss black

- 1 – VANOS = **V**ariable **N**Ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.
- 2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.
- 3 – Priority 1 options accurate at time of publication but subject to changes. For current model-specific standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

X3 key features

Except as noted, both current X3 models offer the following features:

framing all the way around the windows. The M Sport Package specifies high-gloss Shadowline trim here.

In this and other views, available roof rails, of aluminum with satin finish, add an esthetic and functional accent. A sophisticated manufacturing method has helped the designers create a harmonious, integrated design; these reach all the way from the windshield to the rear roof spoiler – the latter a feature shared with the previous X3, one adding style and aerodynamic value.

There are now four wheel designs. With the 28i going to standard 18-in. wheels and tires (previously 17-in), its Sport Activity Package no longer changes the wheel/tire equipment. The 35i's standard equipment is also 18-in., but with a different wheel design from the 28i. For both models, the M Sport Package now includes 19-in. wheels and tires, as does the 35i's Sport Activity Package.

At the rear

Now power-operated on both models, the X3's 1-piece tailgate lifts high to provide ample clearance for the person loading cargo. The taillights maintain BMW's established "L-form"; black cladding wraps around from the sides to form the bumper's intermediate surface, with body color reappearing at the bottom. On both models, the dual exhaust pipes emerge on the left and are chrome-tipped.

As part of the Sport Activity Package, the X-Line group includes a handsome, scratch-resistant ribbed stainless-steel loading threshold.

Performance & efficiency

New N20 2.0-liter DOHC 16-valve TwinPower Turbo 4-cylinder engine with Valvetronic (28i)

First seen in 2012 3, 5 and Z4 models, this all-new 28i engine offers especially fuel-efficient yet also robust performance, while leaving the 35i with its familiar TwinPower Turbo 6-cylinder engine as the higher-performance X3 alternative. Described in detail in **BMW features**, its key features and attributes are:

- **4 cylinders** – the first 4-cylinder BMW engine offered in the U.S. since 1998, the N20 applies BMW's latest engine technology to achieve a higher level of fuel efficiency while maintaining typical BMW performance.
- **Valvetronic variable valve lift**, replacing the traditional throttle and enhancing power, efficiency and response to the driver's demands.
- **Twin Scroll turbocharger**, providing a hearty performance boost in combination with Valvetronic.
- **Direct fuel injection** contributing to both performance and efficiency.
- **Twin balance shafts**, BMW's first application of a feature that endows a 4-cylinder engine with smoothness approaching that of engines with more cylinders.

In the X3 28i, this brilliant powerplant offers the virtues that earned praise by critics who tested it in the other 28i models. Here's how the new 28i compares to its 6-cylinder predecessor:

	2012 X3 28i	2013 X3 28i
Power @ rpm, hp	240 @ 6600	240 @ 5000-6000
Torque @ rpm, lb.-ft.	230 @ 2600-3000	260 @ 1250-4800
0-60 mph, sec.	6.6	6.7
EPA mileage, city/highway/combined	19/25/21	21/28/24
Engine weight, lb.	355	335
Vehicle curb weight, lb.	4112	4112
Weight distribution, front/rear, %	49.9/50.1	49.9/50.1

This comparison makes clear that comparable performance has been achieved with greater fuel efficiency. What it does not show so clearly is that in the daily cut-and-thrust of today's driving at urban and suburban streets, the new engine has a heartier response reflecting its significantly higher torque output.

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (35i)

This outstanding engine, introduced in '11 and appearing in more models for '13, has been named one of the world's 10 Best Engines by Ward's Auto, a longtime purveyor of auto data, news and analysis for the worldwide auto and truck industry.

In the X3 35i, as in most other current models with this engine, the N55 delivers 300 hp. It achieves a 0-60-mph acceleration time of just 5.5 sec., yet also turns in the excellent combined EPA rating of 21 mpg. Such a combination of performance and efficiency is just as impressive in its own, higher-performing way as the that of the 28i.

For full details on the N55 engine, see **BMW features**.

8-speed STEPTRONIC automatic transmission (standard both models)

In both X3 models, BMW's outstanding 8-speed automatic transmission brings smooth shifting, sportiness and efficiency to a new level of perfection.

This aspect of the X3, too, belongs to the BMW EfficientDynamics concept: the 8-speed transmission plays a significant role in the excellent EPA mileage ratings achieved by both new X3 models.

For details on this ultimate powertrain achievement, see the **BMW features** section.

Automatic engine start/stop function

Both '13 X3 models come with the auto start/stop function, which is being phased into more BMW models as time goes on. Under certain defined conditions, the engine shuts off when the vehicle comes to a stop, and re-starts in a fraction of a second for drive-off. This eliminates most of the fuel consumption that occurs when the engine is idling, such as at traffic stops. For details on this intriguing feature, see **BMW features**.

X3 key features

Except as noted, both current X3 models offer the following features:

X3 body/chassis structure: engineered for state-of-the-art strength and refinement

As good as the original X3's structure was, BMW engineers set out to achieve even higher standards of vault-like rigidity and the feeling of substance that characterize every BMW vehicle. As always with BMWs, the unit body/frame construction also contributes to the "stable platform" from which the suspension system operates to give the X3 its uniquely agile and competent handling – this in contrast to SUVs that are based on a truck chassis with separate frame and body.

A more comfortable ride, yet even more agile handling

The original X3 was universally praised for handling that was right at the top of the sport-utility field. Yet it was also criticized by some for a very firm ride. It was the goal of BMW's engineering team to improve riding comfort while maintaining the X3's legendary agility. As Germany's authoritative *auto motor und sport* magazine put it in its November 18, '10 issue: "Whoever knew the 'old' X3, understands that this was no easy task, because the X3 was so agile and light on its feet that in our first test, we called it 'the tallest sports car in the world.'"

The engineers tackled their challenge from several directions:

Vibration characteristics and the increased inputs from run-flat tires. Every motor vehicle generates vibrations; the challenge is to control and limit them. This involves harmonizing the structure's own vibration characteristics with the inputs it receives from the suspension.

For starters, the structure – already BMW-typically rigid – was designed to achieve 30% greater rigidity than before. This began with computer simulations of the new structure, which reduced the number of actual structure prototypes that needed to be built. Then came an optimization of the suspension's force inputs to the chassis/body and their interaction with the structure's characteristics. In this way, the increased forces due to the planned run-flat tires could be compensated for.

Acoustics. More powerful engines with emission- and fuel-consumption-reducing combustion also increase vibration inputs into the chassis/body. The need to "lock up" the torque converter at low rpm (also to reduce fuel consumption) imposes further vibration. Addressing these various challenges called for separate testing and development of drivetrain components and mutually harmonizing them with the structural characteristics.

Another area of progress was to be found in the sound insulation. But simply adding insulation increases weight; intensive testing and optimization led to ways to apply insulation just where it was absolutely necessary, and sparing it where it was not. Considerable on-the-road testing of prototype vehicles was required for this. One outcome was the use of sandwich panels bonded with vibration-absorbing materials to achieve great rigidity in the acoustically important center tunnel.

Front suspension: BMW's unique double-pivot system

At the front, the X3 continues with BMW's unique, universally

acclaimed double-pivot strut-type suspension. This system features dual lower control arms as a unique element promoting stability under widely varying road conditions and allowing space for the new models' larger disc brakes. Like the more elaborate multi-link system in X5 and X6 models, the X3's front suspension is in steel for the all-road ruggedness our SAV customers expect.

The subframe carrying the front suspension and engine is also steel, and configured as a very strong tubular/stamped/welded structural element. This subframe carries the engine on two hydraulic mounts that are highly effective in damping powertrain vibration – after all, the silky smoothness of BMW engines is a signature quality of our brand and is supported by attention to this kind of detail. To add strength to this robust construction, the electric power steering's mechanism is engineered to be an integral element of the subframe's rigidity. Yet this very strength, which implies rigidity that could exacerbate vibration and harshness, was countered by the engineers in their detail development of mountings and bushings; handling response has been further optimized by new low-friction balljoints.

5-link rear suspension

Here the X3 moves to a new generation of suspension. In its concept, the system could be described as a double-A-arm system with an additional lateral track rod; the upper and lower A-arms actually consist of two links each, their vertical positions differing. (This is similar to the front suspension's dual lower

arms.) Advantages are extensive:

- As at the front, there is a **virtual pivot point** for each pair of links (the upper and lower "A-arms"), giving the engineers similar freedom in optimizing the system's geometry for best handling. Also as at the front, the axis connecting these virtual points is configured so that driving, braking and road forces all act effectively on short leverage. The result is very precise handling, especially insensitive to road disturbances.
- Under cornering forces, the system controls geometry in such a way as to achieve great agility while also ensuring predictable, stable handling. These are fundamentally contradictory qualities; the degree to which they are mutually achieved is a measure of a suspension system's excellence.
- For the first time in an X3, all suspension links connect to the subframe; no longer does any link pivot directly from the body structure. This further reduces any effects of road irregularities on passenger comfort, and improves handling precision as well.

Similarly to the front, the entire system is carried on an elaborate subframe that is mounted to the main structure through precisely shaped rubber cushions. As always with BMWs, the final drive (rear differential) is also mounted to the subframe through rubber, creating **acoustic decoupling** that minimizes the transmission of driveline noises into the body. Widely spread subframe mounts to the body, positioned in an area where the structure is particularly rigid and supplemented by thrust

X3 key features

Except as noted, both current X3 models offer the following features:

braces, further help optimize the combination of precision and riding comfort. The system also provides a very favorable setup for a vehicle that, like the X3, places a premium on cargo space and versatility: because it is relatively low-built, it accommodates a low, flat cargo floor and wide tailgate opening.

Finally, here too the entire system has been optimized for energy management in an accident impact.

xDrive: BMW's "intelligent" all-wheel drive system

As with all BMW Sports Activity models to date, BMW's excellent xDrive system is standard on the new X3. The concept and operation of xDrive is explained in the **BMW features** section.

As employed in the X3 (also the current 5, 6 and 7 Series and X5), xDrive has been updated to the newest version, with calibration and programming refined for even greater agility than that of its legendary predecessor. Though the system is biased toward rear-wheel drive under most normal driving conditions, BMW's Integrated Chassis Management (ICM) identifies and limits understeer by shifting torque rearward while preserving the stability for

which xDrive has been so widely recognized. As a second step, ICM can then apply a precise combination of throttle and individual rear-wheel braking in order to maintain neutral handling in a corner – regardless of road surface conditions.

Every BMW xDrive model incorporates Hill Descent Control, which when activated allows the driver to descend slopes while maintaining a preset speed.

Choice of two steering systems

The X3 offers customers two excellent steering systems:

- **Standard**, with an evolved rack-and-pinion gear and electric Servotronic power assist, which varies assist according to vehicle speed.
- **Variable Sport Steering**, included in the Dynamic Handling Package. This adds a variable ratio – the number of degrees the steering wheel must be turned for each degree of steering angle at the wheels – to the standard variable power assist. It is not Active Steering, which electromechanically varies the ratio according to vehicle speed. Instead, VSS varies the ratio via special profiling of the rack and pinion's gear teeth.

Variable Sport Steering, first offered on the X3 and now also offered on 3 Series Sedans, is described in **BMW features**.

4-wheel ventilated disc brakes

Like all current BMW models, X3s come standard with 4-wheel ventilated disc brakes. They are larger than before: Front diameter is up from 325 to 328 mm (12.9 in.), rear more significantly from 320 to 330 mm (13.0 in.). For the 35i, the increased dimensions mean tailoring braking to the higher engine performance; for the 28i, they simply mean more powerful brakes, maintaining and evolving an important BMW brand value that elicits comments like "fantastic brakes" from the media. (This quote is from a July '07 *Car and Driver* comparison of the then-X3 with Acura RDX and Land Rover LR2.)

In another aspect of braking, the X3 adopts a feature seen in other recent new BMW models: the electromechanical parking brake, served by a pull-up handle and released by a press-down button on the console.

18- or 19-in. wheels, run-flat tires across the board

Run-flat tires, now standard on most BMW models, appear on the X3 for the first time.

The previous X3 had a relatively firm ride; because of their necessarily rigid sidewalls, run-flat tires might have resulted in undesirable firmness. But the X3 has evolved, and so have run-flat tires. Thus X3 and run-flats are now compatible, as critics in the automotive media confirm:

- *auto motor und sport*, Germany, November 18, '10: "... surprises with a gain in comfort that could hardly be more obvious."
 - *AutoWeek*, October 25, '10: "The biggest improvement is in the ride. While the old X3 was overly firm, the new one is more supple; the reworked suspension helps make it a more inviting long-distance proposition."
- Newly for '13, the 28i model comes standard with 18-in. wheels; both models and all versions now have performance all-season tires. As shown in the table below, wheel/tire upgrades are part of the 35 Sport Activity Package and both models' M Sport Package.

Model & version	Wheel size & design/code	Run-flat tires ²	Changes for '13
28i standard & Sport Activity Package	18 x 8.0 V Spoke #307 2K8	245/50R-18 performance all-season	Wheels: new design, 18-in. vs. 17-in. Tires: performance all-season, vs. all-season before
35i standard	18 x 8.0 Y Spoke #308 2EC	245/50R-18 performance all-season	No change
35i Sport Activity Package	18 x 8.0 Double Spoke #309 2A1	245/45R-19 performance all-season	No change
28i & 35i M Sport Package	19 x 8.5 M Double Spoke #369M 2A8	245/45R-19 performance all-season	Previously 35i M Sport Package only

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X3 models are

not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X3 key features

Except as noted, both current X3 models offer the following features:

Comfort & convenience

The interior and cargo area are a major focus of the 2nd-generation X3's concept. Among its comprehensive advances are increased passenger space, particularly in the rear seat; a lower beltline for an enhanced outward view and feeling of space; higher rear seating level, yet also greater head room; increased cargo convenience, a taller and wider tailgate, enhanced passenger/cargo-space versatility via the available 40/20/40 rear seat; expanded storage provisions including bottle holders in the rear doors; first-time appearance of iDrive in X3; materials and finishes that more clearly earn the "premium" description. This section describes such evolutionary advances as well as specific aspects and features of the 2nd-generation X3's inner world.

Increased space in all directions

Outwardly, the new X3 is larger than its predecessor: Its wheelbase is 0.6 in. longer, overall length 3.3 in. greater, width up by 1.1 in. Yet it's still smaller than the 1st-generation X5 – wheelbase 4.8 in. shorter, overall length 8.1 in. shorter, width 2.0 in. less – and of course the current X5 presents an even greater size increment. And with the X1 now defining BMW's most compact SAV, the X3 stakes out a new position in terms of size.

Inside, the X3 is roomier all around than its predecessor:

- **Driver and front passenger** sit about 0.8 in. farther apart and have slightly more foot room. Despite the lower vehicle height, there's an impressive 1.4 in. more head room up front

(without moonroof) or 1.7 in. more (with moonroof) than in the comparable predecessor. Front shoulder room is up by a substantial 1.7 in. Thus there's an airier, freer feeling for those up front.

- **Rear passengers** sit about 0.8 in. farther apart, and have a full inch more shoulder and leg room. Their seating position is higher too, about 0.4 in. higher than in the front; this gives them a pleasant forward view. Rear head room is slightly greater than before.
- **A greater feeling of space too**, thanks to a window line about a half-inch lower than before. So, not just more space itself; subjective aspects also contribute.
- **A cargo area that's evolved** in terms of layout, utility and design details. More about this space and its variability under cargo area.

For the driver and front passenger

The "cockpit" – up-front space for the driver and front passenger – is of course representative of the latest BMW design and ergonomics. The instrument cluster and center stack present a handsome, ergonomically arranged control center with BMW's customary attention to control placement and tactile excellence; the four main instruments are gray with white numerals for excellent legibility.

High-quality molded/grained PVC spans the full width, in single- or 2-color execution according to the interior color scheme selected. Adjustable dash-level center air vents are discreetly trimmed in galvanic material; above these is

the now-standard iDrive control display. Below are the dual-zone climate controls, farther down the CD player, basic radio controls and Programmable Memory Keys.

Two well sized, robust cupholders sit ahead of the E-shift transmission selector, while the Driving Dynamics Control – now standard – is at its left. Trim areas in the selected material appear on the console top, above the glove compartment, and on the ledges of all four doors. See **trim choices** (next page) for the available materials.

Three steering-wheel designs are available, all with three spokes: standard; the sport wheel with smaller diameter and galvanic trim; and the M sport wheel sharing the smaller diameter and thicker rim but adding an M logo, thumb rests and other distinctive touches. The sport wheel comes with the 28i Sport Activity Package and is standard in the 35i; the M sport wheel is in the M Sport Package of both models. With the 35i version of both of these packages, the wheel includes shift paddles for the automatic transmission.

The wheel is manually adjustable for height and reach (tilt/telescopic). All designs are leather-wrapped and have multi-function controls such as cruise control, audio volume and tuning, hands-free phoning, and Voice Command in connection with the Navigation option.

Upholstery: standard leatherette, five leather colors to choose from

Once again the X3 comes standard with leatherette in a choice of Black or Beige; called Sensatec, this is U.S.-specific as many American customers favor this durable, attractive material.

Nevada leather upholstery is available as part of the Premium Package or stand-alone, in three standard colors (Sand Beige, Oyster, Black) plus two P1 colors (Mojave, Chestnut). The upper dash color is always Black; except with Beige (leatherette or leather), the lower dash is also black, but in Beige interiors it's Beige for a handsome 2-tone look.

Again considering Beige interiors, leatherette or leather, almost everything except the upper dash is Beige; only the upper door sections/ledges are Black. So are non-upholstery areas such as steering wheel, door-open recesses and cargo-area storage tray. With the other color schemes, Black appears more extensively: lower dash, glove-compartment door, safety belts, sides and back sides of front seats, full door panels and armrests, lower B-pillar trim and cargo cover. The headliner is another area of difference: Beige with Beige interiors, Sky (light) Gray with other colors. In these interiors, Sky Gray also appears in spots that with the Beige interiors would be Beige: sun visors, grab handles/clothes hooks and upper trim on all body pillars. Naturally, with both leatherette and leather interiors, Black means Black – only the headliner, sun visors and grab

X3 key features

Except as noted, both current X3 models offer the following features:

handles/clothes hooks are in Sky Gray. With the M Sport Package, the headliner is in Anthracite.

Why all this detail? To illustrate the attention BMW devotes to such seemingly small – yet esthetically important – elements of the outstanding environments where our customers live.

Trim choices: setting the accents in a typical BMW way

In the 28i, Silver Matte trim material is standard; in the 35i, the standard trim is a light-toned Fine Line Siena wood. Other choices are available, all at no extra cost (in the 28i, only in combination with the Premium Package):

- **Fine Line Wave**, a dark-toned wood that lives up to its name with sweeping grain patterns.
- **Brushed Aluminum**, finely brushed lengthwise.
- **Fine Line Siena** in the 28i.

Both models also include an accent of High-gloss Black trim on the dash.

Overall interior space and ambiance: moving upscale

Mere words or even pictures don't suffice to describe the quality ambiance of the new X3 interiors, so let us turn to an authoritative and critical source for some credibly complimentary words, Germany's *auto motor und sport* magazine:

First, in its October 31, '10 issue, the magazine commented on the new space: "The 2nd-generation [interior] is amply dimensioned and also flexible. One can't speak of deprivation in the back row; leg and head room are just as adequate for large adults as entry into the back seat is non-problematical.

"And what goes for the rear compartment is even truer for the front: a pleasant feeling. Not merely because of the effective dual-zone climate control, but also attributable to the high seating position, the generously laid-out space and a good overview of everything. A fresh breeze of pleasant aroma wafts through the new X3 cabin; door panels and dash are a treat to the eyes as well as the touch. There are even plenty of storage places."

Seating: space for five, extensive amenities – more of both

The standard front seats have 8-way power adjustments, including cushion tilt; these also include memory for the driver's seat and exterior mirrors, as well as automatic tilt-down of the outside righthand mirror for backing up. System Personal Profile stores various personal preferences for recall by two different users, as identified by their remotes; these (such as seat and mirror adjustments and audio presets) are captured by the system, specifically to each of the two remotes.

Power sport seats, included in the Sport Activity and M Sport Packages, include power-adjustable backrest width; see **packages & options**.

The standard rear seats are split 60/40, their two portions folding down to provide cargo- and people-carrying versatility. Contained in the "60" portion, a folding center armrest includes dual cupholders and the center head restraint. Then there's the optional 40/20/40 rear seat offered in the Cold Weather Package or as a stand-alone option;

for details on this, see **packages & options**.

With either the standard or optional rear seat, there are padded and upholstered side wings, fixed to the body but providing lateral support for the outboard rear passengers.

Cupholders and storage

Two robustly built, amply dimensioned cupholders are provided in the center console, their utility unaffected by movements of the E-shift lever or parking-brake control.

Storage areas are more numerous and useful than before. In X3s without the Navigation option, center-dash storage augments the glove compartment; all vehicles include a small additional compartment to the left of the steering column. There's open storage ahead of the cupholders with anti-slide ribs, and lifting the center armrest reveals further open storage. The rear doors include spacious bins, configured to hold 1.5-liter drink bottles stably. Further storage provisions are provided in the cargo area; see **cargo area** for details.

Standard dual-zone climate control

In a layout familiar from other current BMW models, dual rotary temperature controls are surrounded by touch controls for air distribution (single controls for both sides), air recirculation, defrosters and air-conditioning compressor for those times when users want to override the automatic program. MAX and ALL buttons are conveniently placed in the rotary temp knobs, the latter giving the driver control

over both sides.

Yet another control option is 5 settings for the intensity of climatization, selected via iDrive and affecting the system's Automatic operation. The system's air throughput is outstanding, capable of renewing the entire volume of air within the X3 interior up to 3 times per minute. Controls for the available heated front seats are also included here.

As always with BMWs, extensively adjustable climate-control/ventilation air outlets are provided. In particular, those in the center stack include their own left/right air-volume controls and a central temperature wheel; individually adjustable dash-end vents provide additional personal tailoring of the interior climate as well as de-misting and -frosting of the door windows. For rear-seat passengers, similarly adjustable left/right air outlets are set into the rear end of the center console.

Standard privacy glass

Darker glass aft of the B-pillar enhances privacy and comfort for rear-seat passengers.

Audio systems and features

The standard audio system represents another significant advance. With 12 speakers and 205 watts of audio power from its 7-channel digital amplifier with vehicle-specific equalizing, this system should satisfy all but the most audiophilic of our customers. Its speakers are:

- Center-fill midrange, 100 mm, in instrument panel
- Center-fill tweeter, 26 mm, in instrument panel
- 2 tweeters, 26 mm, in mirror triangles

X3 key features

Except as noted, both current X3 models offer the following features:

- 2 midrange, 100 mm, in front doors
- 2 subwoofers, 210 mm, under the front seats
- 2 midrange, 100 mm, in rear doors
- 2 tweeters, 26 mm, in rear doors.

As in other BMW models since the concept was introduced and patented by BMW, the subwoofer locations utilize cavities in the structure at the bases of the B-pillars; in the X3 the speakers are not actually there, but rather under the front seats and acoustically connected to these cavities.

Also customary for BMW's standard audio systems are HD Radio, the Radio Data System, speed-dependent automatic volume compensation, MP3-compatible CD drive and auxiliary audio input.

WING wiring layout in rear window

A new layout of rear-window wires called WING enhances the diversity antenna system and serves window heating as well. Patented by BMW, this development obtains FM signals from heating wires in the semicircular area defined by the rear-window wiper. AM signals cannot be obtained from heating wires, so the AM antenna is usually placed at the top of rear windows; large-area sedan rear windows provide sufficient area for this, but smaller SAVs don't provide nearly as much space for the AM antenna. Here the AM wires are divided into left and right "wings," freeing up that entire semicircular area for heating and FM reception and providing space for a powerful AM antenna.

Extensive audio options, including the 16-speaker/600W premium system, Satellite Radio and BMW Apps with Smartphone Integration, are described in **packages & options**.

Bluetooth and USB connectivity: now standard

With the new X3, a revised connectivity strategy made its first appearance. In place of the previously optional iPod/USB adapter and the coupling of Bluetooth connectivity with BMW Assist, X3s and most other 2013 models come standard with a Bluetooth interface and USB connector. In vehicles equipped with BMW Assist (Technology Package or stand-alone option), additional user benefits are provided via an enhanced version of the Bluetooth/USB connectivity technology.

Cargo area: more versatility than ever for active lifestyles

As in previous X3s, the cargo area is accessible through a 1-piece tailgate that lifts high so that tall users gain convenient access. The rear seats, whether standard 60/40 or optional 40/20/40, fold nearly flat for variable loading lengths and space. Evolution of this highly valued Sports Activity configuration has occurred in many ways:

- **More vertical space under cargo cover**, 18.3 in. vs. 18.1 in. before.
- A **"squarer" load space**, with a minimum width between wheelwells of 43.3 in. vs. 37.6 before.
- A **longer load floor** with the rear backrests folded, 68.8 in. vs. 67.3 in. before.
- **Greater people- and cargo-carrying versatility**, thanks

especially to the optional 40/20/40 rear seat but also to the configuration changes listed above.

- A **power tailgate** is newly standard for '13.

Among the passengers-and-cargo configurations BMW designed for are impressive mixes like these –

- Four pieces of luggage ranging from medium to large in size, or four large golfbags, behind upright rear seat (up to five occupants)
- Three mountain bikes plus assorted gear behind partially folded rear seat (three occupants)
- Multiple drink cases behind upright rear seat.

Thus better than ever, the X3 accommodates the active lifestyles likely to be enjoyed by users of this Sports Activity Vehicle.

Safety & security

Safety concepts and features shared by BMW Sports Activity models, as well as state-of-the-art concepts and features specific to them, are summarized in the X6 section. Safety features added by the 2nd-generation X3 are as follows; unless otherwise noted, these are features that previously were standard or optional on X5 and X6, but not X3: Standard –

- Automatic tensioners and force limiters on all safety belts (first time in an SAV)
- Rollover Protection System
- Active front head restraints

Optional –

- Rear- and top-view cameras.

Packages & options

Packages

Premium Package

(both models, code ZPP) Always a popular option for the BMW Series that offer it, the Premium Package continues its role of upgrading several luxury- and convenience-oriented features.

Both models:

- **Auto-dimming interior and exterior mirrors**, codes 430 and 431
- **Power-fold exterior mirrors**, included in code 430
- **BMW Universal Transceiver** (code 319), the 3-function device that can operate garage doors and other external electrical devices or systems
- **Digital compass in interior mirror**, included in code 319
- **Ambiance lighting package**, code 563; includes ground lighting at all four exterior door handles, additional ambiance lighting (the warm orange lighting that bathes certain controls at night), illuminated visor vanity mirrors, front footwell lighting, separate left/right reading lights front and rear, and lighting of the center-dash storage compartment.
- **4-way power front-seat lumbar support**, code 488
- **Nevada leather upholstery**, codes LU
- **Storage Package**, code 493; provides extensive storage items including inserts for the console cupholders, accessory power outlet under front center armrest, storage net on backs of front seats, storage nets on left side of cargo area, rails with adjustable lashing eyes on cargo floor; multi-function hooks,

X3 key features

Except as noted, both current X3 models offer the following features:

elastic strap and net on right side of cargo area; accessory power outlet in compartment under cargo floor.

28i only:

- **Dual-panel Panoramic Contour moonroof.** Includes a 2-way power forward panel and fixed rear panel; 2-piece power interior sunshade; forward wind deflector; and 1-touch power operation of all functions with anti-trapping protection, including the sunshade. Code 402.

35i only:

- **Comfort Access keyless entry,** code 322, with all its convenience advantages
- **Rear door-window sunshades,** manual, code 417.

Sport Activity Package

(both models, code ZAP)

This package combines traditional Sport Package esthetic and functional elements:

Both models:

- **X-Line exterior trim,** code 3XL. Includes titanium-finish bumper inserts, Satin Aluminum side-window framing and side-sill trim, doorsill trim plates with BMW lettering, ribbed stainless-steel cargo loading sill
- **Roof rails** in Satin Aluminum finish, code 3AT
- **Power front sport seats,** code 481

28i only:

- **Sport steering wheel,** code 255; diameter 380 mm vs. standard wheel's 385 (15.0 in. vs. 15.2), pearl-gloss galvanic chrome trim

35i only:

- **Sport automatic transmission** (code 2TB) with steering-wheel shift paddles (code

2XA). Complementing the 35i's TwinPower Turbo performance, this combination includes mode selection via the console Driving Dynamics Control, Direct Selection of manual mode via downshift paddle, and other features. Applied to the 8-speed transmission, this popular BMW system becomes even more appealing to sport-minded drivers; it is described in **BMW features**.

- **19-in. wheels and tires.**

Wheels in Double Spoke design #309, with 5 spoke pairs; 19 x 8.5 with 245/45R-19 performance all-season tires². These replace the standard 18 x 8.0 wheels and 245/50R-18 performance all-season tires. Code 2A1.

M Sport Package

(both models, code ZMP; requires Premium Package)

This ultimate sports outfit for the X3 consists of:

Both models:

- **Performance Control.** As a less costly variant of the Dynamic Performance Control of X6 and X5-X6 M models, adds the capability to vary torque distribution between the inner and outer rear wheels to enhance cornering and agility. Code 2VG.
- **M aerodynamic exterior treatment,** including body-color front and rear bumpers, wheel-arch trim and side sills; Dark Shadow insert in the rear bumper. Code 715.
- **Stainless-steel trim on side sills,** part of factory package code 337
- **High-gloss Shadowline exterior trim,** code 760

- **Roof rails** in high-gloss Shadowline finish, code 3MC
- **M sport steering wheel** with M logo, thumb rests and other M features; code 710
- **Driver's footrest** with metal trim and M logo, also part of 337
- **Power front sport seats,** code 481
- **Anthracite-color headliner,** code 775
- **19-in. wheels and tires.** Wheels in M Double Spoke design #369M, with 5 pairs of double spokes; 19 x 8.5 with 245/45R-19 performance all-season tires². Code 2A8.

35i only:

- **Sport automatic transmission** (code 2TB) with steering-wheel shift paddles (code 7XA). As with Sport Activity Package.

As with other models' ZMP, exterior colors are specific: It is available with non-metallic Alpine White and metallic Titanium Silver, Black Sapphire, Space Gray, Deep Sea Blue and (P1 color) Vermilion Red. Additionally, metallic Carbon Black is available only in combination with this package.

Driver Assistance Package

(both models, code ZDA; requires Premium Package + Sport Activity or M Sport Package)

A new package for '13, including a first offering for X3s:

Both models:

- **Lane Departure Warning,** making its first appearance in the X3; code 5AD. This important safety system is described in **BMW features**.

- **Automatic High Beams,** code 5AC

35i only:

- **Head-up Display,** code 610, in its brilliant and fascinating 2nd-generation version.

Technology Package

(both models, code ZTP; requires Premium Package)

Although a familiar concept from other BMW Series, this group comes to the X3 for the first time. It is identical for both models and consists of the following:

- **Park Distance Control,** front/rear, code 508
- **Rear-view camera,** the familiar system now offered on several Series. With its extensive functions to enhance safety and security in backing up, this feature is described in **BMW features**. In combination with the top-view camera, next, this is code 3AH.
- **Top-view camera.** Consists of two video cameras, one in each exterior mirror housing; activated when the selector lever is moved to the "R" position, or manually by pushbutton. These cameras' views are shown in the iDrive control display as a plan view, i.e. as if the vehicle were being viewed from above – "wicked cool if you've ever seen it, and it should eliminate ever curbing your wheels again!" noted *Roundel* in its October '10 issue.

2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X3 key features

Except as noted, both current X3 models offer the following features:

- **Navigation system, code 609.** Adds GPS Navigation and other, extensive functions to the standard iDrive system and enlarges the control display from 6.5 to 8.8 in. Includes hard-drive data storage, Real Time Traffic Information and Online Information Services. For current information on this combination as it appears in all BMW Series, see **BMW features**.
- **BMW Assist plus enhanced Bluetooth and USB interfaces** with code 6NL. With the standard Bluetooth and USB interfaces, this option adds BMW Assist with its 4-year BMW Assist Safety Services subscription, plus other enhancements. See **BMW Assist** and **BMW features** in this edition for details.

Convenience Package (28i only, code ZCV)

This group embodies more than merely convenience with the following content:

- **Xenon Adaptive headlights,** codes 522+524. In addition to the more powerful and concentrated Xenon lamps, this combination includes "steering" of the headlights at higher speeds, separate cornering lights for low-speed maneuvers, auto-leveling, and Daytime Running Lamps via the lights' four luminous rings. (Standard DRLs are via dimmed high beams.)
- **Comfort Access keyless entry,** code 322.
- **Rear door-window sunshades,** manual pull-up type, code 417

Cold Weather Package (both models, code ZCW)

A time-honored concept at BMW, enhancing cold-weather comfort and driveability. But there's a departure here: There are two Cold Weather Packages. This "basic" group includes the features most customers consider essential, while a "supplemental" Package (next) adds further, perhaps less widely desired, features. ZCW contents include:

- **Heated steering wheel,** code 248
- **Heated front seats,** code 494
- **40/20/40 split folding rear seats,** code 465; add load versatility beyond that provided by the standard 40/60 setup.

Cold Weather Package II (both models, code ZCX; requires ZCW)

- **Retractable headlight cleaning system** via pop-up nozzles in the front bumper. Code 502.
- **Heated rear seats** (rear-seat heating for outboard passengers), code 496.

Premium Sound Package (both models, code ZPS)

Includes two audio features:

- **Premium audio system,** code 677. Audiophile system, specifically designed for the X3 interior and matching the highest speaker count among current BMW models. Its enhancements and attributes are:
 - Nearly tripled audio power (600 watts) compared to the standard system's 205
 - Even higher-caliber speakers and more of them (16, vs. standard 12)
 - 7-band Digital Sound Processing (DSP), when combined with Navigation system
 - Surround Sound simulation.

Where the speakers have equivalents in the standard system, they are identical in dimensions but have audio-ophile Neodymium drivers. An asterisk (*) denotes additional speakers over the X3 standard system:

- 2 midrange, 100 mm, in front doors
- 2 tweeters, 26 mm, in front doors' mirror triangles
- 2 midrange, 100 mm, in rear doors
- 2 tweeters, 26 mm, in rear doors
- 2 subwoofers, 100 mm, under front seats
- Center-fill midrange, 100 mm, in dash
- Center-fill tweeter, 26 mm, in dash
- 2 midrange, 100 mm, in D-pillars*
- 2 tweeters, 26 mm, D-pillars*.

All midrange speakers are Kevlar-coated; tweeters are aluminum-coated. The 9-channel digital amplifier (standard: 7-channel) is located in the cargo area. As with the standard system, vehicle-speed-dependent volume compensation is included.

- **Satellite Radio with 1-year subscription.** Code 655; for details, see **BMW features**.

Priority 1 Package³

Dynamic Handling Package (both models, code ZDH)

For drivers who especially value vehicle dynamics, this package is a "must"; it's also an appropriate enhancement to the Sport Activity or M Sport Package. Its contents are identical for both models:

- **Dynamic Damping Control,** code 223. With Normal, Sport and Comfort settings for electronically controlled variable shock absorbers, this is essentially the same DDC system offered on other Series; it is described in **BMW features**.
- **Variable Sport Steering,** code 2VL. Shared only with 3 Series Sedans, this development is described in detail in **BMW features**.
- **Performance Control,** appearing for the first time on any BMW. A less costly variant of the Dynamic Performance Control of X6 and X5-X6 M models; adds the capability to vary torque distribution between the inner and outer rear wheels to enhance cornering and agility. Code 2VG.

Because its content overlaps that of the M Sport Package, it is priced lower when combined with ZMP.

3 – Priority 1 options accurate at time of publication but subject to changes. For current model-specific standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guide.

X3 key features

Except as noted, both current X3 models offer the following features:

Stand-alone options

Xenon Adaptive headlights (optional 28i, standard 35i; codes 522+524)

Though included in the Convenience Package, this popular option is also available on the 28i on a stand-alone basis.

Park Distance Control (both models, code 508)

Watching over both ends of the vehicle, PDC is included in the Technology Package but also available as this stand-alone option.

Rear-view camera (both models, code 3AG; requires Park Distance Control)

Whereas the rear- and top-view cameras are included in the Technology Package, this stand-alone option enables the customer to specify only the rear-view camera.

Dual-panel Panoramic Contour moonroof (optional 28i, standard 35i; code 402)

Embodying the refined features of BMW's dual-panel moonroofs – dual glass panels, power-operated sunshade, 1-touch operation of all power functions – that of the X3 adds Contour, which means that its front edge is curved to parallel the windshield's top edge. This subtle difference adds to the X3's design elegance, and is shared with the 5, 6 and 7 Series.

Each glass panel is 20.5 in. long and 35.6 in. wide; the front glass panel slides back 17.1 in. or lifts 1.1 in. at its rear edge. The rear glass panel is fixed.

Roof rails (both models, code 3AT)

Sleekly designed and handsomely finished in Satin Aluminum, these rails are included in the Sport Activity and M Sport Packages but also available as a stand-alone option. As always with BMW's roof rails, the rails are designed to accommodate the full range of attachments available at the BMW center.

Nevada leather upholstery (both models, codes LU)

Though part of the Premium Package for both models, Nevada leather can also be ordered separately on vehicles not equipped with ZPP. It is available in three standard colors – Sand Beige, Oyster and Black – plus two Priority 1 colors³, Mojave and Chestnut.

Alternate interior trim (both models, codes 4AD, 4CH & 4DE; in 28i, requires Premium Package)

Available at no extra cost in the 35i or ZPP-equipped 28i units, the two special trims are Brushed Aluminum interior trim (code 4AD) and Fine Line Wave wood (code 4CH). Fine Line Sienna wood, standard in the 35i, is also available on the same basis in the 28i.

Heated front seats (both models, code 494)

A new technique, involving sewing in the heating elements directly into the upholstery's inner material, facilitates fully automatic thermostatic control.

Navigation system (both models, code 609)

Available as part of the Technology Package or as this stand-alone option.

Head-up Display (both models, code 610)

The 2nd-generation HUD includes a height adjustment to accommodate drivers of different statures. In standard form, it displays –

- vehicle speed
- current transmission mode and gear
- safety warnings

– and with the Navigation option,

- Navigation guidance.

Additionally, with the Navigation option, HUD can be configured to display Check Control (vehicle function monitoring) alerts.

Satellite Radio with 1-year subscription (both models, code 655)

This familiar option is available in the X3 in the new Premium Sound Package or on a stand-alone basis. For details, see BMW features.

BMW Apps (both models, code 6NR; includes Smartphone Integration, requires Technology Package or Navigation.)

This further advance in BMW's ConnectedDrive strategy is now available in all BMW models; see BMW features for a description.

Cargo net (both models, code 413)

Can be mounted two ways (to upright or folded rear seats) to separate the passenger and cargo compartments.

BMW Assist (both models, code 6NL)

BMW Assist is available as this stand-alone option or as part of the Technology Package. For further information, see Technology Package or the BMW Assist pages of this Fast Facts edition.

Priority 1 stand-alone options³

Priority 1 exterior colors (both models, color codes)

Metallic colors Blue Water 896, Vermilion Red A82 and Sparkling Bronze B06 are available as P1 paints.

Comfort Access keyless entry (both models, code 322)

Included in the Convenience or Premium Package, but also available as a P1 option.

Priority 1 leather colors (both models, upholstery codes)

The leather colors available on P1 basis are Mojave and Chestnut.

Rear door-window sunshades (28i only, code 417)

Included in the Convenience Package (28i) or Premium Package (35i), but also available as this P1 option.

40/20/40 split folding rear seat (both models, code 465)

This excellent enhancement of X3 passenger-and-cargo versatility is described under Cold Weather Package.

³ – Priority 1 options accurate at time of publication but subject to changes. For current model-specific standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

X3 key features

Except as noted, both current X3 models offer the following features:

BMW center-installed accessories

A very extensive line of X3 accessories is offered, with particular emphasis on items for active lifestyles. Among them are:

- **Complete wheel and tire sets**, 20 x 8.5 front/20 x 10.0 rear with Pirelli performance tires, in three choices:
 - Star Spoke wheels in silver finish (design #311, 5 wide spokes)
 - Star Spoke wheels in chrome (design #311)
 - M Double Spoke wheels (design #310, 5 pairs of slim spokes, bi-color grey/polished wheels)
- **Winter wheels and tires**
- **Wheel-bolt locks**
- **Valve-stem caps** with BMW lettering or logo
- **Mud flaps**
- **Silver Matte mirror caps** (not for use with X-line trim)
- **License-plate frames**
- **UV sunshade**
- **Floormats**, velour and all-weather
- **Chrome Line Package** for vehicles with wood interior trim; includes chrome accents for door panels, center console front/rear, passenger's side of dash, iDrive display, lighting control center, and roof control group.

- **Snap-in adapters** for iPhone models including standard, 3G, 3GS and 4; music and media adapters available
- **Seatback storage pocket**
- **Protective rear-seat cover**
- **Snowboard/ski bag**
- **Sunshades** for rear door, rear side and rear windows
- **Multi-function cargo mat and storage box**. Non-slip, stain-resistant mat; collapsible storage box interlocks with mat to stay in place, protector for loading sill
- **Protector for loading sill** separately
- **Cargo tray**
- **Floor and side nets** for cargo compartment
- **Cargo restraining belts** for vehicles with storage package code 493 (Premium Package)
- **Cargo restraining straps**
- **Adaptive cargo restraining system**
- **Roof carrier systems** – lockable base support, universal holder, bicycle lift, racing- and touring-bicycle carriers, luggage rack, raised carrier bars, tensioning straps, roof boxes in various sizes, ski rests, surfboard holder

For details, see the latest **Accessories** listing for X3 models on bmwusa.com.

Standard & optional features

2013 X3

Bold within table indicates new feature for 2013.

Exterior design & function	X3 xDrive28i	X3 xDrive35i
Impact-absorbing bumpers front & rear with combination body-color & protective black surfaces	S	S
Bumpers with titanium-finish inserts	ZAP	ZAP
Protective black cladding on side sills (rocker panels) & wheel arches	S	S
BMW M aerodynamic treatment (body-color bumpers front & rear, wheel-arch trim & side sills; Dark Shadow insert in rear bumper)	ZMP	ZMP
Halogen free-form headlights	S	–
Xenon Adaptive headlights w/ auto-leveling, cornering lights and luminous rings	ZCV/OPT	S
Automatic headlight control	S	S
Automatic High Beams	ZDA	ZDA
High-intensity headlight cleaning system with retractable washer jets	ZCX	ZCX
Front foglights	S	S
Welcome Light	S	S
Ground lighting at exterior door handles	ZPP	ZPP
Daytime Running Lamps via luminous rings	OPT 1,2	S
Aluminum Matte vertical grille slats	S	S
Black side-window framing	S	S
High-gloss black + Satin Aluminum side-window framing	ZAP	ZAP
High-gloss Shadowline side-window framing	ZMP	ZMP
Stainless-steel trim on side sills	ZAP/ZMP	ZAP/ZMP
Park Distance Control, front & rear	ZTP/OPT	ZTP/OPT
Rear- & top-view cameras	ZTP	ZTP
Rear-view camera	OPT 3	OPT 3
Rain-sensing windshield wipers with adjustable moisture sensitivity & single-wipe operation	S	S
Heated windshield-washer jets	S	S
Power/heated exterior mirrors in body-color/black finish	S	S
Auto tilt-down feature for right exterior mirror	S	S
Power-fold exterior mirrors	ZPP	ZPP
Metallic paint	OPT	OPT
Satin Aluminum roof rails	ZAP/OPT	ZAP/OPT
High-gloss Shadowline roof rails	ZMP	ZMP

Exterior design & function (cont.)	X3 xDrive28i	X3 xDrive35i
High-lift power tailgate	S	S
Rear-window wiper/washer	S	S
Roof spoiler	S	S
Dual chrome exhaust outlets	S	S
Performance & efficiency	X3 xDrive28i	X3 xDrive35i
2.0-liter TwinPower Turbo 4-cylinder engine	S	–
3.0-liter TwinPower Turbo 6-cylinder engine	–	S
Engine features:		
Aluminum construction	S	S
Cylinder technology	Arc-electro-plated steel coating	Iron liners, cast into block
High Pressure direct fuel injection	S	S
Valvetronic system	S	S
Double VANOS 4 steplessly variable valve timing	S	S
Twin-scroll turbocharger	S	S
Dual balance shafts	S	–
Electrically controlled engine cooling	S	S
Electric coolant pump	S	S
Volume-controlled oil pump	S	S
Electronic sensing of oil level & condition	S	S
Exhaust system	Single	Single
Automatic engine start/stop with function display in tachometer	S	S
Comfort Go starting (no slot for remote)	S	S
8-speed STEPTRONIC automatic transmission with Adaptive Transmission Control, E-shift, selectable Normal, Sport & Manual shift modes	S	S

- 1 – Selectable via Vehicle Memory System (programming by BMW SAV center).
- 2 – Included with available Xenon Adaptive headlights.
- 3 – Requires Park Distance Control.
- 4 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

- S – Standard
 OPT – Optional
 – – Not applicable
 ZAP – Sport Activity Package
 ZCX – Cold Weather Package II
 ZDA – Driver Assistance Package (requires Premium Package + Sport Activity or M Sport Package)
 ZMP – M Sport Package
 ZPP – Premium Package
 ZTP – Technology Package (requires Premium Package)

Standard & optional features

2013 X3

Bold within table indicates new feature for 2013.

Performance & efficiency (cont.)	X3 xDrive28i	X3 xDrive35i
Sport automatic transmission with steering-wheel shift paddles	NA	ZAP/ZMP
xDrive all-wheel drive system, electronically controlled with variable front/rear torque split & traction control	S	S
Double-pivot strut-type front suspension	S	S
5-link rear suspension	S	S
Rear subframe on four mounts, with acoustically decoupled mounting of suspension system & final drive	S	S
Front & rear anti-roll (stabilizer) bars	S	S
Twin-tube gas-pressure shock absorbers	S	S
Dynamic Damping Control with Comfort, Normal & Sport modes	ZDH	ZDH
Servotronic vehicle-speed-sensitive variable-assist electric power steering	S	S
Variable Sport Steering: variable-ratio, vehicle-speed-sensitive variable-assist electric power steering	ZDH	ZDH
Brake Energy Regeneration with function indication in fuel-economy instrument	S	S
Driving Dynamics Control – 3 settings (Comfort, Sport & ECO PRO) affecting engine response, transmission shift characteristics, shock-absorber firmness ⁵ &/or steering assist; additional setting (Sport+) switches DSC to DTC	S	S
Dynamic Stability Control	S	S
Performance Control	ZDH/ZMP	ZDH/ZMP
4-wheel ventilated disc brakes	S	S
Electromechanical parking brake	S	S
Alloy wheels:		
18 x 8.0 V Spoke, design #307	S	–
18 x 8.0 Y Spoke, design #308	–	S
18 x 8.0 Double Spoke, design #309	NA	ZAP
19 x 8.5 M Double Spoke, design #369M	ZMP	ZMP
245/50R-18 performance all-season tires	S	S
245/45R-19 performance all-season tires ⁶	ZMP	ZMP
Tire Pressure Monitor	S	S
Trailer-hitch kit	C	C

Comfort & convenience	X3 xDrive28i	X3 xDrive35i
Vehicle & Key Memory with Personal Profile	S	S
Keyless entry with multi-function remote control:		
Selective unlocking	S	S
Remote tailgate release	S	S
Panic button with red icon	S	S
Comfort Access keyless entry	ZCV/OPT ⁷	ZCV/OPT ⁷
Keyless engine start	S	S
Aluminum doorsill trim plates with BMW lettering	ZAP	ZAP
Aluminum doorsill trim plates with chrome inserts & M lettering	ZMP	ZMP
Auto-dimming interior & exterior mirrors	ZPP	ZPP
Digital compass in interior rearview mirror	ZPP	ZPP
BMW Universal Transceiver (garage-door opener)	ZPP	ZPP
Courtesy lights with fade-in/fade-out feature, actuation from remote control & automatic switch-on when engine is turned off	S	S
BMW Ambiance Lighting (console & center stack)	S	S
Ground lighting at exterior door handles; lighting of front footwells, visor vanity mirrors & dash-center compartment; additional ambiance lighting, separately switched left/right reading lights front & rear	ZPP	ZPP
Lockable glove compartment	S	S
Dynamic cruise control	S	S
3-spoke, leather-wrapped tilt/telescopic steering wheel with fingertip cruise, audio & phone controls	S	–
Sport steering wheel with same functional features as standard wheel, galvanic trim	ZAP	S

- 5 – If vehicle has Dynamic Handling Package. Settings for Dynamic Damping Control are Comfort & Sport.
 6 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X3 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.
 7 – Priority 1 option.

- S – Standard
 OPT – Optional
 NA – Not available
 – – Not applicable
 ZAP – Sport Activity Package
 ZCV – Convenience Package
 ZDH – Dynamic Handling Package (P1 option)
 ZMP – M Sport Package
 ZPP – Premium Package

Standard & optional features

2013 X3

Bold within table indicates new feature for 2013.

Comfort & convenience (cont.)	X3 xDrive28i	X3 xDrive35i
M sport steering wheel with same functional features as standard wheel, plus BMW M logo, thumb rests & other features	ZMP	ZMP
Heated steering wheel	ZCW	ZCW
8-way power front seats with driver's-seat & exterior-mirror memory, right exterior-mirror auto tilt-down	S	S
10-way power + 2-way manual front sport seats with driver's-seat & exterior-mirror memory, right exterior-mirror auto tilt-down	ZAP/ZMP	ZAP/ZMP
4-way power lumbar support, both front seats	ZPP	ZPP
3-stage, thermostatically controlled heated front seats	ZCW/OPT	ZCW/OPT
3-stage, thermostatically controlled heated rear seats	ZCX	ZCX
Front center armrest	S	S
Electronic analog instrumentation	S	S
LCD main & trip odometers	S	S
Central information display showing ambient temperature with freeze warning, Check Control of extensive functions, current transmission gear, Condition-Based Service indications	S	S
iDrive system with 6.5-in. (diagonal) high-resolution control display; direct-select radio, CD & phone ^a menus, Back & Option keys, 8 Programmable Memory Keys, On-Board Computer & other functions	S	S
Navigation system with 8.8-in. (diagonal) high-resolution control display, additional direct-select Navigation menu key, enhanced Voice Command, Real Time Traffic Information, expanded On-board Computer functions, automatic ventilation & many other features	ZTP/OPT	ZTP/OPT
Integrated owner's manual via iDrive	S	S
Head-up Display	OPT ⁷	ZDA/OPT
Sensatec leatherette upholstery	S	S
Nevada leather upholstery	ZPP/OPT	ZPP/OPT
Silver Matte interior trim	S	-
Fine Line Siena wood interior trim (light)	NC ⁹	S
Fine Line Wave wood interior trim (dark)	NC ⁹	NC
Brushed aluminum interior trim	NC ⁹	NC

Comfort & convenience (cont.)	X3 xDrive28i	X3 xDrive35i
Power windows with 1-touch open/close front & rear windows, anti-trapping feature, opening from remote S		S
Dual-zone automatic climate control with left/right temperature controls, automatic recirculation control, misting control, bi-directional solar sensor, activated-charcoal microfilter ventilation, 5 intensity settings, ALL control	S	S
Dual-panel power Panoramic Contour moonroof with 2-way (tilt/slide) operation of forward glass panel, fixed rear glass panel; power interior shade; 1-touch operation of all power functions with anti-trapping feature	ZPP/OPT	S
Anti-theft AM/FM/HD/CD/MP3 audio system with 12 speakers including center-fill speakers, 2 subwoofers, WING layout of rear window wires for enhanced antenna system, Radio Data System (RDS), automatic volume control, auxiliary audio input & other features	S	S
Logic7 premium audio system with upgraded audio power & speakers; 16 speakers including midrange + tweeters in D-pillars; Surround Sound mode, 7-band Digital Sound Processing & all features of standard system	ZPS	ZPS
Satellite Radio with 1-year subscription	ZPS	ZPS
Bluetooth/USB connectivity	S	S
Enhanced Bluetooth mobile-device interface + USB connectivity	ZTP/OPT ¹⁰	ZTP/OPT ¹⁰
BMW Apps including Smartphone Integration	OPT ¹¹	OPT ¹¹
Front cupholders	S	S
Rear cupholders (in center armrest)	S	S
Storage compartments in front & rear doors, at left of steering column	S	S
Open storage trays at front of center console & under center armrest	S	S
7 - Priority 1 option.	NC - No extra cost	
8 - Phone controls active when approved mobile device is paired with Bluetooth interface.	ZAP - Sport Activity Package	
9 - Requires Premium Package.	ZCW - Cold Weather Package	
10 - Included with BMW Assist.	ZCX - Cold Weather Package II (requires Cold Weather Package)	
11 - Requires Navigation option or Technology Package.	ZMP - M Sport Package	
S - Standard	ZPP - Premium Package	
OPT - Optional	ZTP - Technology Package (requires Premium Package)	

Standard & optional features

2013 X3

Bold within table indicates new feature for 2013.

Comfort & convenience (cont.)	X3 xDrive28i	X3 xDrive35i
Storage nets in front passenger's footwell & on backs of front seats	ZPP	ZPP
Roof grab handles, one above each door	S	S
Split folding rear seats (60/40) with fold-up center armrest	S	S
3-segment folding rear seats (40/20/40) with fold-up center armrest	ZCW/OPT ⁷	ZCW/OPT ⁷
Privacy glass	S	S
Rear door-window sunshades	ZCV/OPT ⁷	ZPP
Accessory electrical outlet in front center console	ZPP	ZPP
Accessory electrical outlet at rear of center console	S	S
Rear-window defroster	S	S
Anthracite-color headliner	ZAP/ZMP	ZAP/ZMP
Floor mats, front & rear	S	S
Variable cargo compartment with velour carpeting, retractable cover, 4 fixed tie-downs, left/right compartment lights, light in tailgate	S	S
Accessory electrical outlet in storage compartment under cargo floor	ZPP	ZPP
Cargo fastening rails with 4 adjustable tie-downs, multi-function hook, reversible slip-proof floor mat & bottle retainer strap	ZPP	ZPP
Retractable, 2-position cargo net	OPT	OPT
Nets in tailgate & at left & right sides of cargo area, elastic strap & second multi-function hook	ZPP	ZPP
Organizer for storage under cargo floor	ZPP	ZPP
Toolkit under cargo floor	S	S
Scratch-resistant ribbed stainless-steel loading threshold	ZAP	ZAP
Safety & security	X3 xDrive28i	X3 xDrive35i
Enhanced Dynamic Stability Control including all-speed traction (ADB-X) & stability (ACS-X) control, Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), Cornering Brake Control, cornering stability enhancement, Dynamic Brake Control, Hill Descent Control, Brake Fade Compensation, Brake Standby, Brake Drying, Start-off Assistant & Automatic Hold	S	S

Safety & security (cont.)	X3 xDrive28i	X3 xDrive35i
Rear- & top-view cameras	ZTP	ZTP
Rear-view camera	OPT ³	OPT ³
Lane Departure Warning	ZDA	ZDA
Rollover Protection: sensor detects possibility of rollover, deploys Head Protection System & safety-belt tensioners, interacts with Dynamic Stability Control in case of rollover	S	S
Automatic High Beams	ZDA	ZDA
Dual-airbag Supplementary Restraint System with 2-stage Smart Airbags	S	S
Automatic safety-belt tensioners & force limiters at all seating positions	S	S
Automatic-locking retractors (ALR) on all passenger safety belts (for installation of child restraint seats)	S	S
LATCH attachments for attachment of child restraint seats	S	S
Front- & rear-seat Head Protection System	S	S
Front-seat side-impact airbags	S	S
Height-adjustable head restraints at all seating positions ¹² , front Active head restraints	S	S
Battery Safety Terminal	S	S
Automatic fuel-pump shutoff upon severe accident impact	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S
BMW Assist Safety Services including enhanced automatic collision notification, SOS button, enhanced Roadside Assistance for 4 years	ZTP/OPT ¹³	ZTP/OPT ¹³
Central locking system with selective unlocking & interior locking switch	S	S
Coded Driveaway Protection	S	S
Alarm system with operation from keyhead remote, panic button with red icon	S	S

- 3 – Requires Park Distance Control.
 7 – Priority 1 option.
 12 – With optional 40/20/40 rear seat, center head restraint is fixed.
 13 – Requires annual fee after 4 years

- S – Standard
 OPT – Optional
 ZAP – Sport Activity Package
 ZCV – Convenience Package
 ZCW – Cold Weather Package
 ZDA – Driver Assistance Package
 ZMP – M Sport Package (requires Premium Package)
 ZPP – Premium Package
 ZTP – Technology Package

Technical specifications

2013 X3

Bold indicates new specification for 2013.

General	X3 xDrive28i	X3 xDrive35i
Curb weight, lb.	4112	4222
Weight distribution, front/rear %	49.9/50.1	50.4/49.6
Wheelbase, in.	110.6 ¹	
Track, front/rear, in.	63.6/64.3 ^{1,2}	
Length, in.	183.0 ¹	
Width, in.	74.1 ¹	
Height, in.	65.4 ¹	
Sports Activity-specific	X3 xDrive28i	X3 xDrive35i
Gross vehicle weight rating (GVWR), lb.	5138	5214
Payload, lb.	904 ¹	
Onroad towing capacity, lb.:		
Maximum trailer gross weight, braked	3500 ¹	
Suggested max. tongue weight, lb.	350 ¹	
Suggested maximum roof load, lb.	220 ¹	
Ground clearance, unloaded, in.	8.3 ¹	
Approach/departure angle, deg.	25.8/22.6 ¹	
Ramp breakover angle, deg.	19.4 ¹	
Body	X3 xDrive28i	X3 xDrive35i
Type	5-door Sports Activity Vehicle ¹	
Aerodynamic drag coefficient	0.35	0.36
EPA size classification	Special Purpose ¹	
Accommodations	X3 xDrive28i	X3 xDrive35i
Seating capacity, persons	5 ¹	
Shoulder room, front/rear, in.	57.3/56.0 ¹	
Head room, front/rear, in.:		
without moonroof	40.7/39.1	–
with moonroof	39.8/38.0 ¹	
Leg room, front/rear, in.	39.9/36.8 ¹	
EPA passenger volume, cu ft.	100.5 ¹	
Max. cargo volume, cu ft.	27.6/63.3 ³	

Engine & electrical	X3 xDrive28i	X3 xDrive35i
Engine type	DOHC inline, 4 valves/cylinder, aluminum construction, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁴ variable intake- & exhaust-valve timing ¹	
Model-specific details	16-valve 4-cylinder, arc-electro-plated steel cylinder surfaces, dual balance shafts	24-valve 6-cylinder, liners cast into block
Bore x stroke, mm/in.	84.0 x 90.1/ 3.31 x 3.55	84.0 x 89.6/ 3.31 x 3.53
Displacement, cc/cu in.	1997/122	2979/182
Compression ratio	10.7:1	10.2:1
Power @ rpm, hp	240 @ 5000-6000	300 @ 5800
Torque @ rpm, lb-ft.	260 @ 1250-4800	300 @ 1300-5000
Engine-management system	Motronic MEVD 17.2.4 with knock control, Valvetronic, variable valve timing, engine cooling & other functions included in control strategy	Motronic MEVD 17.2 with knock control, direct fuel injection, Valvetronic, variable valve timing, engine cooling & other functions included in control strategy
Fuel requirement	Premium unleaded ¹	
Fuel capacity, U.S. gal.	17.7 ¹	
Battery capacity, amp-hr.	90	90
Alternator output rating, amp./W	210/2940 ¹	

1 – Specification applies to both models.

2 – With standard wheels.

3 – Rear seats upright/folded, loaded to ceiling.

4 – VANOS = **V**ariable **N**ockenwellen

Steuerung = variable camshaft control, or variable valve timing.

Technical specifications

2013 X3

Bold indicates new specification for 2013.

Drivetrain	X3 xDrive28i	X3 xDrive35i
Drive system	Front engine/all-wheel drive; 3rd-generation xDrive system with electronically controlled multi-disc clutch for variable front/rear torque split, all-wheel electronic traction control ¹	
Optional Dynamic Handling Package (ZDH)	Performance Control modifies xDrive's front/rear & left/right torque split for enhanced agility ¹	
Automatic transmission	8 HP 45, 8-speed ¹	
Ratios: 1st	4.71:1 ¹	
2nd	3.14:1 ¹	
3rd	2.11:1 ¹	
4th	1.67:1 ¹	
5th	1.28:1 ¹	
6th	1.00:1 ¹	
7th	0.84:1 ¹	
8th	0.67:1 ¹	
Reverse	3.30:1 ¹	
Final drive ratio	3.38:1	3.38:1
Chassis	X3 xDrive28i	X3 xDrive35i
Body/frame construction	Unitized steel structure ¹	
Front suspension	Struts, double-pivot lower arms, twin-tube gas-pressure shock absorbers, anti-roll bar ¹	
Rear suspension	5-link system with coil springs, twin-tube gas-pressure shock absorbers, anti-roll bar	
Optional Dynamic Handling Package (ZDH)	Dynamic Damping Control	
Servotronic steering system (standard)	Rack & pinion, vehicle-speed-sensitive electric power assist	
Overall ratio	17.8:1	
Variable sport steering	Rack & pinion with mechanically variable ratio	
Overall ratio, max./min.	18.0/13.0:1	
Turning circle, ft.	39.0 ¹	
4-wheel ventilated disc brakes:		
Diameter, front, mm/in.	328/12.9 ¹	
Diameter, rear, mm/in.	330/13.0 ¹	

Chassis (cont.)	X3 xDrive28i	X3 xDrive35i
Alloy wheels:		
Standard	18 x 8.0	18 x 8.0
Sport Activity Package	18 x 8.0	19 x 8.5
M Sport Package	19 x 8.5	19 x 8.5
Performance all-season tires:		
Standard	245/50R-18	245/50R-18
Sport Activity & M Sport Package	Performance all-season ^{1,5} , 245/50R-18	245/45R-19
M Sport Package	245/45R-19⁵	245/45R-19 ⁵
Stability-enhancement system	Dynamic Stability Control (DSC), including all-speed traction (ADB-X) & stability (ASC-X) control via engine &/or brake intervention; Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), Cornering Brake Control, cornering stability enhancement, Dynamic Brake Control, Hill Descent Control, Brake Fade Compensation, Brake Standby, Brake Drying, Start-off Assistant & Automatic Hold. Dynamic Handling Package adds Performance Control, which varies left/right rear-wheel torque distribution to enhance cornering & agility.	
Performance data	X3 xDrive28i	X3 xDrive35i
Acceleration, 0-60 mph, sec. ⁶	6.6	5.5
Top speed, mph	130 ¹	
EPA estimated MPG, city/highway/combined	21/28/24	19/26/21

1 – Specification applies to both models.

5 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X3 models are equipped with a space-saver spare wheel and tire. Performance tires are not recommended for driving in snow and ice conditions.

6 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle, road and environmental conditions, testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

2013 X1:

BMW takes its unique Sports Activity Vehicle concept to a new, more attainable entry price point with a new Premium Subcompact SAV.

Once again, BMW moves the center of gravity of its Sports Activity Vehicle line. First came the X5, which expressed core BMW values in an upper-midsize SAV; everyone knows what a fantastic success the X5 has been and continues to be.

Next came the X3, moving the SAV concept downward on size and price class but, quite naturally, maintained those core values and Premium attributes – while making them attainable for more customers. The X3's success is just as well known.

The X6, by contrast, remained in the X5's size class while moving the Sports Activity ideal in a sportier direction. This too was a new concept, packaging the X5's familiar and outstanding qualities in a sleek 4-door Coupe style. There were skeptics; they have been surprised at the success of this bold combination of attributes. At BMW, we were not surprised; we knew what we were doing.

Now comes the next step in BMW's Sports Activity strategy: an SAV that moves the size and price points to a new, more compact and more attainable level: the X1. And while doing so, it preserves the capabilities and premium character that have made BMW SAVs coveted the world over.

So, as the first Premium Subcompact SAV, the X1 is set to expand the circle of those who enjoy the extraordinary qualities and quality of BMW's family of all-road "X" vehicles.

What's new for 2013

As of 7/12 production:

General

- **A whole new size category** for a BMW SAV. Compared to the X3, the X1's wheelbase is 1.9 in. shorter, vehicle length 6.5 in. shorter, width 3.3 in. less.
- **First SAV** to be offered in rear- and all-wheel-drive versions.
- **Compared with X3 xDrive28i**, the X1 xDrive28i weighs 386 lb. less; X1 sDrive28i (RWD¹) a further 199 lb. less. These increments lend the X1 the potential for higher fuel economy, combined with the lively performance BMW drivers expect.
- **X1 vehicle height is 4.6 in. lower** than that of X3. Combined with RWD availability, this lends it a measure of "crossover" character.
- **Spacious passenger and cargo accommodations** with extensive standard equipment and premium features.
- **Like the new 3 Series**, X1 offers a choice of Lines that create customer choices in exterior and interior design, materials and overall vehicle character. X1 lines are xLine, Sport Line and M Sport Line.

Exterior design & function

- Typical BMW proportions within a smaller footprint: long hood, passenger compartment set well back
- A somewhat less squared, lower overall look than X3 or X5, visually expressing the "crossover" character while retaining much of other BMW SAVs' purposeful look

- Scratch-resistant cladding along lower body, carrying through from front to rear bumper via wheelwells and side sills
- LED taillights
- xLine, Sport Line and M Sport Line provide distinctions in front and rear aprons, side sills, air inlets, grille slats, wheel designs, exhaust tips

Performance & efficiency

- 28i models powered by same TwinPower Turbo 4-cylinder engine as other 28i models (328i Sedan, 528i, Z4, X3) for abundant low-speed torque, strong power (240 hp) and excellent fuel economy
- 35i model powered by TwinPower Turbo 6-cylinder engine as in other 35i/40i models (135i, 335i, 535i, 640i, 740i, X3, X5, X6); 300 hp
- 8-speed automatic transmission standard in 28i models, 6-speed in 35i
- 28i models have automatic engine start/stop function, ECO PRO mode in Driving Dynamics Control; both enhance fuel efficiency
- All models have Brake Energy Regeneration
- xDrive models (28i and 35i) include current generation of BMW's acclaimed xDrive all-wheel drive (AWD) system
- Electric power steering of 28i models also enhances fuel efficiency
- 4-wheel ventilated disc brakes as on all current BMW models
- 17-, 18- and 19-in. wheels offered; all-season or performance run-flat tires

Comfort & convenience

- 5-passenger seating
- 3-segment (40/20/40) folding rear seats
- iDrive control system optional in combination with Navigation
- Power front seats optional in 28i models, standard in 35i
- Leatherette upholstery standard in all models, leather optional
- Dual-zone automatic climate control
- 8-speaker audio system standard, 11-speaker Harman Kardon system optional
- Bluetooth mobile-device interface and USB connectivity
- Extensive interior storage provisions and accessory power outlets
- Spacious, variable cargo area with many amenities for carrying and storing belongings

Safety & security

- Full range of BMW active and passive safety features, including Dynamic Stability Control, front- and rear-seat Head Protection System, front-seat side-impact airbags, standard alarm system

The Lines

- In addition to the base version, each model is available in three Lines that add distinctive character, esthetics and features: xLine, Sport Line and M Sport Line

1 – Rear-wheel drive.

Packages & options

- Packages are Premium, Driver Assistance, Lighting, Cold Weather and Technology, plus a new Ultimate Package that combines Premium, Driver Assistance and Technology Packages at a savings from these packages' individual cost
- Stand-alone options include:
 - Servotronic vehicle-speed-sensitive power steering (optional 28i models, standard 35i)
 - 18-in. wheels with all-season tires (28i models) or performance tires (35i)
 - Steering-wheel shift paddles
- Metallic paints including new Mineral Gray and Valencia Orange
- Chrome Line exterior treatment
- Roof rails, Satin Aluminum finish
- Dual-panel Panoramic moonroof
- Leather upholstery
- Various optional interior trims
- Heated front seats
- Harman Kardon surround-sound audio system
- BMW Apps + Smartphone Integration
- BMW Assist + enhanced Bluetooth connectivity

X1 models & key features

This information lists major features, and helps position and distinguish the models in the line. For a comprehensive summary of features, see pages 824-835.

X1 sDrive28i

As the most compact BMW Sports Activity Vehicle and the first with rear-wheel drive, the first X1 model is able to offer at a newly attractive price point most of the comprehensive features and capabilities our customers have come to expect and value in our ever-growing line of SAVs. Joining the X Family at its new position in terms of size, price position and fuel efficiency, it is sure to attract new customers, particular younger ones.

Exterior design & function

- Front and rear bumpers, combination of body-color and protective cladding
- Halogen free-form headlights
- Automatic headlight control
- Front foglights
- LED taillights
- LED turn signals in exterior mirrors
- Rain-sensing windshield wipers
- Heated windshield-washer jets
- Ground lighting at door handles
- Welcome Light
- Roof rails
- Adaptive brakelights

Performance & efficiency

- 2.0-liter DOHC 16-valve inline 4-cylinder engine with aluminum construction, twin-scroll turbocharger, direct fuel injection, Valvetronic variable intake-valve lift and Double VANOS² variable intake- and exhaust-valve timing, 240 hp/260 lb-ft., 0-60 mph in 6.2 sec., EPA combined rating 28 mpg
- Automatic start/stop function for engine
- 8-speed STEPTRONIC automatic transmission

- Double-pivot strut-type front suspension with aluminum components
- 5-link rear suspension
- Energy-saving electric power steering
- ECO PRO mode for optimum fuel efficiency
- 4-wheel ventilated disc brakes
- Brake Energy Regeneration
- 17 x 7.5 alloy wheels, Star Spoke design #317
- 225/50R-17 all-season tires
- Tire Pressure Monitor

Comfort & convenience

- Vehicle & Key memory with Personal Profile
 - Multi-function remote control
 - Dual power/heated exterior mirrors
 - Leather-wrapped tilt/telescopic sport steering wheel with fingertip cruise, audio and phone controls
 - Dynamic Cruise Control
 - 6-way adjustable front seats
 - Condition-Based Service system
 - Leatherette upholstery
 - Silver Matte interior trim
 - Power windows with key-off operation, 1-touch open/close and anti-trapping function
 - Dual-zone automatic climate control
 - AM/FM/HD/CD/MP3 audio system with Radio Data System, 8 speakers including 2 subwoofers
 - Bluetooth mobile-device interface and USB connectivity
 - Cupholders, 2 front + 2 rear
 - Extensive storage provisions
 - 3-segment folding rear seats with fold-up center armrest, adjustable backrest
 - Floor mats, front and rear
- 2 - VANOS = VAriable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

X1 models & key features

This information lists major features, and helps position and distinguish the models in the line. For a comprehensive summary of features, see pages 824-835.

- Variable cargo area with folding/removable cargo cover, many other amenities
- 1-piece tailgate with interior and remote releases, rear-window wiper/washer
- Technology (Navigation system + iDrive, BMW Assist, Enhanced Bluetooth connectivity)
- Ultimate (combines Premium, Driver Assistance & Technology Packages at reduced price)

Safety & security

- Dual-airbag Supplementary Restraint System
- Front and outboard rear safety belts with automatic tensioners and force limiters
- Front- and rear-seat Head Protection System
- Front-seat side-impact airbags
- Height-adjustable front- and outboard rear-seat head restraints
- Pathway Lighting
- Coded Driveaway Protection

Lines

- xLine, Sport and M Sport Lines – see **The Lines – esthetics & features**, page 816

Packages & options

- Available packages:
 - Premium (Comfort Access keyless entry, Nevada leather upholstery, power front seats with driver's-seat memory, 4-way power driver's-seat lumbar support, BMW Universal Transceiver, auto-dimming interior and exterior mirrors, digital compass in interior mirror, power-folding exterior mirrors, dual-panel Panoramic moonroof)
 - Driver Assistance (Park Distance Control front + rear, rear-view camera)
 - Lighting (Xenon Adaptive headlights, Automatic High Beams, Ambiance Lighting)
 - Cold Weather (retractable headlight cleaning system, heated steering wheel, heated front seats)

- Stand-alone options:
 - Servotronic vehicle-speed-sensitive power steering
 - 18-in. Double Spoke wheels with all-season tires³
 - Steering-wheel shift paddles
 - Chrome Line exterior trim
 - Satin Aluminum roof rails
 - Dual-panel Panoramic moonroof
 - Heated front seats
 - Fine Line Light wood interior trim
 - Harman Kardon premium audio system
 - Satellite Radio with 1-year subscription
 - BMW Apps + Smartphone Integration
 - BMW Assist + Enhanced Bluetooth connectivity

X1 xDrive28i

As the first X1 step-up model, the xDrive28i is equipped essentially like its RWD stablernate, but adds BMW's acclaimed xDrive all-wheel drive system and some distinctions in equipment and features. Here's how the xDrive model differs from the sDrive:

- xDrive all-wheel drive system
- DSC system adds Hill Descent Control
- Front suspension and sub-frame in steel, vs. sDrive's aluminum; aluminum thrust plate added for enhanced strength
- Hydraulic power steering, vs. sDrive's electric

- Performance and fuel efficiency somewhat affected by additional weight and mechanism of AWD⁴ mechanism: curb weight +199 lb., 0-60 mph + 0.1 sec., EPA combined rating 26 mpg
- Different wheel design: V Spoke #318, vs. sDrive model's Star Spoke #317; 5 pairs of slender V spokes vs. 5 wide spokes
- Packages and options as for sDrive model, except M Sport Line adds Performance Control
- 18-in. wheels and all-season tires standard, vs. optional; wheel design Star Spoke #320 with 5 ribbed spokes
- Xenon Adaptive headlights standard, vs. Lighting Package
- Retractable headlight cleaning system standard, vs. Cold Weather Package
- Vertical grille slats chrome, vs. black
- Side-window trim black/chrome, vs. black
- Black-chrome exhaust tips, vs. matte-chrome

X1 xDrive35i

Top X1 model, powered by the brilliant 300-hp N55 6-cylinder engine. In addition to the performance upgrade this delivers, the 35i embodies a number of increments in equipment and features. Here's how it differs from the xDrive28i:

- 3.0-liter DOHC 24-valve inline 6-cylinder engine, same basic engineering architecture as 28i models' 4-cylinder unit; 300 hp/300 lb-ft., 0-60 mph in 5.6 sec., EPA combined rating 21 mpg
- 6-speed automatic transmission
- Automatic engine stop/start and ECO PRO driving mode not included
- Servotronic vehicle-speed-sensitive power steering, standard vs. optional

- Fine Line Light wood interior trim standard, vs. optional
- Dual-panel Panoramic moonroof standard, vs. Premium Package or stand-alone option
- Packages and options as for xDrive28i, except:
 - Premium Package deletes moonroof and power front seats, as standard; thus lower package price
 - Sport and M Sport Lines' front sport seats include 8-way power adjustments; in 28i these require Premium Package (2-way power-adjustable backrest width standard on all sport seats)
 - Lighting Package omits Xenon Adaptive headlights, as standard
 - Stand-alone 18-in. optional wheels in differentiated sizes front/rear, vs. same size; performance tires vs. all-season

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X1 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

4 – All-wheel drive.

X1 key features

Except as noted, all current X1 models offer the following features:

X1 design concept

Typical BMW proportions, creative contours and a strong BMW X Family identity define X1's overall look. Within a footprint that addresses today's priorities in a more compact, somewhat lower profile, typical BMW design themes announce that "I am the new, subcompact BMW SAV. I am trim, modestly sized, and every inch a BMW":

- BMW's typical long hood
- Substantial wheelbase and rearward-set "greenhouse"
- Elegant details from the traditional-but-fresh "kidneys" grilles to low-profile roof rails to LED-powered, L-form taillights.

At the front

Vertically set, discreetly forward-thrusting BMW "kidney" grilles flare out widely at the top; their vertical slats appear in different finishes according to model or Line. Ample, creatively shaped headlight clusters are stylish and filled with up-to-the-minute technology: On models with Xenon Adaptive headlights (35i standard, 28i optional), slender chrome "eyebrow" accents are replaced by an LED accent strip of the same shape, and BMW's now-traditional luminous rings are also LEDs.

Bumper designs are innovatively composed and vary according to the Lines; details in **The Lines – aesthetics and features.** The standard treatment contrasts predominantly body-color surfaces with a scratch-resistant Anthracite-color sweep from lower-body cladding into a raised "crossbar" that frames a large lower center air intake. Foglights, round and nicely recessed into the main bumper surface, are

standard on all models and versions.

In profile

Helping establish the X1 as an exemplar of today's BMW design idiom, the main character line sweeps upward from behind the front wheelwell to join the taillight as it wraps around the rear corner. A typical BMW progression of side windows helps provide adequate outward vision for the driver, while being framed variously according to Line. (Matte black is standard). In standard form, the lower cladding runs all the way around, framing both wheelwells.

In this view as well as $\frac{3}{4}$ front or rear angles, the standard slimline roof rails – a design familiar from the 3 Series Sports Wagon and X3 – play a pleasant role in accenting the silhouette; these are in standard powder-coat matte black or, with M Sport Line, high-gloss Shadowline finish.

At the rear

Powered by two LED bars each, the large-area taillights taper inward toward the license-plate recess. The wide, single-piece tailgate contains rear-window glass that stretches the full width and is topped by a roof spoiler that's as dashing as it is functional.

As at the front, the main expanse of bumper area is body color; Anthracite cladding wraps around from the side, then rises and tapers to a higher level above an undertray that's matte silver in base form, Glacier Silver in xLine form and gloss black with the Sport and M Sport Lines. Altogether, the rear view is one of function, grace and tasteful style.

Performance & efficiency

Two TwinPower Turbo powerplants give X1s outstanding performance

Powering the three X1 models is the same choice of TwinPower Turbo engines that give 3 and 5 Series Sedans and X3s their stellar combination of performance and fuel efficiency. By now these two units are familiar; their place in such a trim and relatively light SAV, however, puts the equation of utility-versatility-performance-efficiency into new terms. For more detailed elucidations of the N20 and N55 engines and BMW automatic transmissions, see **BMW features.**

N20 2.0-liter DOHC 16-valve TwinPower Turbo 4-cylinder engine with Valvetronic

(28i models)

First seen in 2012 3, 5 and Z4 models, the new 28i engine offers especially fuel-efficient yet also robust, high-torque performance while leaving the similarly engineered TwinTurbo 6-cylinder as the even higher-performance alternative. In the X1, it delivers 240 hp and 260 lb-ft. of torque. Thanks partly to its rear-wheel drive but also its compact dimensions and weight-efficient structural engineering, the X1 sDrive28i can accelerate from zero to 60 mph in just 6.2 seconds – right in the ballpark of the also N20-powered 528i Sedan. Equally impressive are the RWD model's EPA preliminary ratings of 24 mpg city and 33 mpg highway.

N55 3.0-liter DOHC 24-valve TwinPower Turbo inline 6-cylinder engine with Valvetronic (xDrive35i)

This outstanding performance engine, introduced in '11 and appearing in more models for '13, has been named one of the world's 10 Best Engines by Ward's Auto, a longtime and authoritative purveyor of data, news and analysis for the worldwide auto and truck industry.

In the X1 35i, as in most other current models with this engine, the N55 delivers 300 hp and 300 lb-ft. of torque. It achieves a 0-60-mph acceleration time of just 5.3 sec., yet also turns in the excellent EPA preliminary ratings of 18 mpg city/27 mpg highway.

And such extraordinary "objective data" are only part of the N55 story. Silky smoothness, musical sound and quick response to every driver command are the rest.

8-speed STEPTRONIC automatic transmission (28i models)

BMW's outstanding 8-speed automatic transmission brings smooth shifting, sportiness and efficiency to a new level of perfection.

This aspect of the X1 28i models is integral to the BMW EfficientDynamics concept; the 8-speed transmission plays a significant role in these models' excellent EPA mileage ratings. For details on this ultimate powertrain achievement, see **BMW features.**

6-Speed STEPTRONIC automatic transmission (35i)

For the 35i model, BMW engineers took advantage of the 6-cylinder engine's higher torque

X1 key features

Except as noted, all current X1 models offer the following features:

and superior smoothness to utilize the proven, also outstandingly smooth and responsive 6-speed automatic. Like the 28i models' 4-cylinder/8-speed combination, it can be enhanced by shift paddles on the steering wheel, either as an option in combination with the Sport Line or as part of the M Sport Line.

BMW automatic transmissions in general are described in **BMW features**.

Automatic engine start/stop function

Both 28i models come with the auto start/stop function, which is being phased into more BMW models as time goes on. Under certain defined conditions, the engine shuts off when the vehicle comes to a stop, and re-starts in a fraction of a second for drive-off. By eliminating most of the fuel consumption that occurs when an engine is idling, this contributes to the 28i models' outstanding fuel economy. For details, see **BMW features**.

ECO PRO mode (28i models)

In these X1 models, the ECO PRO mode appears not as part of a Driving Dynamics Control, but as a single additional mode selected by a console button. But its functions and benefits are parallel to those in other models:

ECO PRO allows the X1 driver to optimize vehicle behavior in many ways and encourages energy-conscious driver behavior as well. Vehicle behavior is influenced by optimizing the accelerator-to-engine relation, transmission shifting and climate-control operation. The driver is informed about ECO PRO's

advantages as follows:

- Without Navigation/iDrive option – the miles-per-gallon advantage over the driver's driving behavior before selecting ECO PRO is shown in the central information display of the instrument cluster.
- With Navigation/iDrive – additionally, tips as to how the driver can optimize fuel efficiency can be displayed via the iDrive display's Vehicle Information menu.

ECO PRO's concept and operation are explained in greater detail in **BMW features**.

Double-pivot front suspension

The X1 employs this typically BMW front suspension system, featuring two lower arms working in combination with a spring/shock-absorber strut. These two lower arms are the reason for its name "double-pivot."

In the current product range, this system is employed in all 1 and 3 Series, Z4 and X3 models, including the new-generation 3 Series Sedans. It is explained in detail in **BMW features**.

5-link rear suspension

This system could be described as a double-A-arm system⁵ with an additional lateral track rod; the upper and lower A-arms actually consist of two links each, their vertical positions differing. (This is similar to the front suspension's dual lower arms.) Its advantages are extensive, and are explained in detail in **BMW features**.

Observant "gearheads" may note that the 5, 6 and 7 Series also have a 5-link rear suspension system. But the two systems differ. Whereas the larger Series' "5th element" is a so-called Integral link,

essentially vertical and connecting the upper and lower forward lateral arms, the 5th element here is an additional lateral link. Each serves essentially the same purpose: to optimize suspension geometry in a highly sophisticated way, appropriate to the size and weight class of these different-size Series.

xDrive: BMW's "intelligent" all-wheel drive system (all xDrive models)

xDrive provides a widely, steplessly and fast-acting variable torque split between the front and rear wheels and has many advantages for both traction and handling. The version employed in X1 xDrive models is newly refined with further optimized operation, an enhanced lubrication system and a modest weight reduction. xDrive is explained in **BMW features**.

Steering: legendary precision, choices in power assist

As with its suspension systems, the X1's steering system relates to that of the 3 Series, which is universally praised: an auto magazine once described it as "nearly telepathic." Coming closer to today's 3 Series, an *AutoWeek* editor called the 328i Sports Wagon's steering "so connected and weighted – I really like it" in an online posting of December 29, '10. And finally, in its April 7, '11 issue, Germany's authoritative *auto motor und sport* magazine described the X1 28i's steering as "finely communicative."

X1 steering comes in three forms. All share the rack-and-pinion steering gear, which is essentially the same mechanism of

all current 3 Series models:

- **Electric assist** in the sDrive28i, as in the new Sedans
- **Hydraulic assist** in the two xDrive models, as lauded by *AutoWeek*.
- **Servotronic vehicle-speed-sensitive assist**, which modifies the level of assist from maximum at a standstill to minimum at high cruising speeds. This is optional on both 28i models, standard on the 35i, and especially desirable in X1s with low-profile tires (see **wheels and tires** on the next page).

So: with any of these setups, the X1 driver will enjoy legendary BMW steering.

4-wheel ventilated disc brakes: generous dimensions, advanced technology

All X1 brake systems feature ventilated cast-iron rotors and (as another contribution to balanced weight distribution) aluminum calipers at the front. Here are some details:

Dimensions. The front brakes' diameter is 312 mm/12.3 in.; that of the rear is 300/11.6, also a generous dimension. Disc thickness is 24 mm/0.94 in. front, 20 mm/0.79 in. rear.

Non-asbestos organic (NAO) brake pads, which not only address an environmental concern but also produce less dust. In turn this means that the wheels don't soil as quickly. All X1 brake systems employ this relatively new technology.

5 – "Double A-arm" refers to the classic system of two A-shaped lateral arms, one upper and one lower, determining suspension geometry. This principle also appears in the X5, X6, 5, 6 and 7 Series front suspension, and is sometimes referred to as "double-wishbone."

X1 key features

Except as noted, all current X1 models offer the following features:

Wheels and tires: all-season or performance tires in 17-, 18- and 19-in. sizes

As on almost all BMWs these days, all the X1's available tires are run-flats, the latest generation with riding comfort comparable to that of non-run-flats. And maintaining a BMW tradition, each model offers two or more wheel-and-tire combinations. Highlights include:

- **Standard 17-in. on both 28i models, 18-in. on 35i**
- **Stand-alone optional 18-in. on all models; all-season on 28i models, performance on 35i**
- **18-in. all-season with xLine and Sport Line**
- **18-in. performance with M Sport Line, all models**
- **19-in. performance as M Sport Line upgrade, all models.**

The table below summarizes all available combinations.

Comfort & convenience

Interior design: refined elegance, SAV functionality

The X1 cabin combines a 3 Series-like design theme with the enhanced functionality of a 40/20/40 split folding rear seat. Interior materials are of typical BMW quality, with highly functional leatherette upholstery standard, leather optional in various colors; a broad choice of quality trim materials; and elegant design touches everywhere.

The control center

The most central information element is BMW's traditional pair of round analog speedometer and tachometer, with a central information display between the two. The instrument panel is a predominantly horizontal format with an expanse of the selected trim material spanning from the center air outlets to the right side. In standard form there is a central storage compartment at dashtop; with the Navigation/iDrive option, this is replaced by the 8.8-in. iDrive control display.

Model & version	Wheel size & design/code	Run-flat tires ³
sDrive28i standard	17 x 7.5 Star Spoke #317 2S7	225/50R-17 all-season
xDrive28i standard	17 x 7.5 V Spoke #318 2KZ	225/50R-17 all-season
xDrive35i standard	18 x 8.0 Star Spoke #320 2S9	225/45R-18 all-season
All models xLine	18 x 8.0 Y Spoke #322 2LR	225/45R-18 all-season
All models Sport Line	18 x 8.0 Double Spoke #421 2A2	225/45R-18 all-season
sDrive/xDrive 28i stand-alone option	18 x 8.0 Double Spoke #321 2B3	225/45R-18 all-season
xDrive35i stand-alone option (no extra cost)	18 x 8.0 front/18 x 9.0 rear #323 2AG	225/45R-18 front / 255/40R-18 rear performance
All models M Sport Line	18 x 8.0 front/18 x 9.0 rear M Double Spoke #355M 2PD	225/45R-18 front / 255/40R-18 rear performance
All models M Sport Line upgrade	19 x 8.0 front/19 x 9.0 rear M Double Spoke #225M 2MP	225/35R-19 front / 255/30R-19 rear performance

Sweeping rearward from the center stack, the center console is functionally stylish. At its head, a row of touch buttons controls a number of functions, including one for the ECO PRO driving mode that's standard in 28i models. Directly behind this is the automatic transmission's shift lever (E-shift 28i, mechanical 35i) aft of that, a small open storage tray and two open cupholders fulfill their functional roles. If the vehicle is equipped with Navigation/iDrive, its controller takes the place of the tray and front cupholder; a detachable/storable second cupholder with an elegant chrome ring inserts into a ring at the right edge. Standard in all U.S. models are an adjustable center armrest and, beneath it, a roomy storage compartment.

Steering wheels: two styles, both sporty

Standard in all models is BMW's pleasingly grippy sport steering wheel, with three spokes, relatively small diameter and thick rim, handsome galvanic trim framing the spokes, and BMW's complement of fingertip controls. With the Sport Line, the wheel's stitching is red.

Included in the M Sport Line is the even sportier M sport wheel, with slightly smaller diameter, thicker rim, M stitching and M logo. The M wheel also presents galvanic-finished shift paddles for the standard automatic transmission. Additionally, shift paddles are available as a stand-alone option with all other equipment combinations.

Upholstery, colors and special touches

In the standard upholstery-and-colors scheme, all models are available with –

- Sensatec leatherette – in Beige or Black
- Nevada leather – Sand Beige or Black.

With Black, the entire dash is also Black. With Beige (leatherette or leather), the panels' lower sections are in Savanna Beige (which of course harmonizes with the upholstery beige) and its upper sections are Black. Headliner is Sky Gray with Black interiors, Savanna with Beige.

With the xLine and Sport lines, things get more expressive:

- **xLine** – the standard leatherette is Beige or Black. At extra cost, there are three special Nevada leather schemes. All have an "X" embossed on the front head restraints:
 - Oyster with orange-black piping
 - Black with gray-brown piping
 - Terra with gray-Petrol piping (Petrol is a blue-green); Terra upper/lower dash, glove-compartment lid, front center armrest, head restraints, door inserts and door armrests.
- **Sport Line** – Beige or Black leatherette is standard. At extra cost, there are two special Nevada leather schemes:
 - Black with gray-red piping
 - Coral Red with gray-black piping; Coral Red head restraints, door inserts and door armrests

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X1 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X1 key features

Except as noted, all current X1 models offer the following features:

Interior trim: as with upholstery, many choices

A total of 7 standard, optional and Lines trim materials provide variety and eye-catching aesthetics to satisfy customers' diverse tastes. Start with the standard trims:

- sDrive/xDrive28i – Silver Matte
- xDrive35i – Fine Line Light wood.

Then a stand-alone option for non-Line vehicles:

- 28i models – Fine Line Light wood.

Each of the three Lines offers its own choice of trims, all distinct from the standard and stand-alone optional materials:

- xLine –Dark Copper Gloss standard; Fine Line Bay Matte wood at extra cost in 28i models, no extra cost in 35i
- Sport Line – Diamond Black Gloss standard, Fine Brushed Aluminum at extra cost in 28i models, no extra cost in 35i
- M Sport Line – Cross-brushed Dark Aluminum standard, Fine Line Light wood optional at no extra cost in all models.

Climate control

All X1s come standard with a dual-zone climate-control system that's essentially identical with that of 3 Series Coupes and Convertibles. Features include:

- Separate left/right temperature settings via two convenient rotary knobs
- Selection of MAX A/C and ALL settings by pushing these knobs
- Override of automatic settings for blower speed and air distribution
- Digital display of temperature settings and blower speed.

Certain labeling changes also appearing in other BMW models for '13 are:

- "A/C" replaces the former snowflake symbol on the A/C on/off switch.
- The letter "M" is added to the air-recirculation switch to indicate manual operation (via a green LED).
- "OFF" is added to the blower control's "slower" side to indicate that the user can completely turn off the system by reducing blower speed to zero.
- Heating symbols (squiggly vertical lines) added to each side of the digital display.

Audio systems

Two systems are offered:

- Standard, with 8 speakers including BMW's customary 2 subwoofers
- Optional Harman Kardon surround-sound system, with 11 speakers.

With either system, the subwoofers are in BMW's patented positions, in cavities at the bases of the B-pillars (generally referred to as "under the front seats").

The standard system's 8 speakers are:

- 2 midrange, 100 mm, in front doors
- 2 midrange 100 mm, in side-panels of cargo compartment
- 2 subwoofers, 210 mm, under front seats
- 2 tweeters, 25 mm, in front-door mirror triangles.

After the X3, the X1 is BMW's second platform to adopt the patented WING antenna system for optimum AM and FM radio reception as well as effective rear-window heating. See **BMW features** for a description.

For a detailed listing of the system's features, see **audio systems in 3 Series key features**.

The optional 11-speaker Harman Kardon system is described in **options & packages**.

Standard 40/20/40 folding rear seat

This versatility-enhancing amenity, familiar from the 5 Series GT and X3, comes standard in every X1. In place of the more usual 60/40 split, the rear seats have three separately folding segments, the center one with a folding armrest containing two cupholders.

The left-hand and center segments are linked together so that when the left is folded down, the center goes with it; however, the center segment can be folded down by itself so that long objects can be loaded while retaining 2-passenger seating. A ski bag is not offered as a factory option, but one is planned as a center accessory. As yet another convenience feature for rear-seat passengers, net pockets are provided on the front seats' backrests.

Additionally, the backrest segments are adjustable for:

- A vertical position (1°) for maximum cargo space behind the seats
- A standard seating position of 25° from vertical
- A maximum-comfort position of 31° from vertical
- Backrests folded down.

The backrest angle is adjustable in 3° increments between standard seating (25°) and max-cargo behind the seats (1°); there are no ratchet positions between the vertical position and the backrests fully folded down.

Cargo area: great versatility for active lifestyles

The cargo area is accessible through a 1-piece tailgate; standard is a 2-piece shelf that (with backrests set between 28° and 31°) effectively conceals cargo or can be removed easily and stored away.

Extensive storage and usage amenities are provided; these include a storage package that's standard in U.S. models:

- Two open trays, one on each side, behind wheel arches
- Two removable securing straps on load floor
- Securing strap on left sidewall
- Elastic net on right sidewall, which can be spanned across an open tray to secure objects there
- Left and right hooks
- Four lashing eyes
- 2-level underfloor compartment with organizer
- Accessory power outlet on right side.

Safety & security

Safety and security features of the X1 are shared with those of other BMW Series, and in particular those of the E9x 3 Series. These represent BMW's state of the art in these all-important areas of vehicle attributes.

X1 models have 3-point safety belts at all seating positions (5) and all belts include automatic tensioners and force limiters. These and other safety features and systems shared with other Series are described in **BMW features**.

X1 key features

Except as noted, all current X1 models offer the following features:

The Lines – aesthetics & features

Content applies to all models unless otherwise noted. Contents of Lines cannot be mixed.

Exterior	Standard	xLine	Sport Line	M Sport Line
Paint selection	Non-metallic standard, metallic at extra cost	↔	↔	Le Mans Blue exclusively available
Kidney grilles' vertical slats	Matte black	Matte Titanium Silver	Gloss black	Matte black
Main front bumper surfaces	Body color	↔	↔	↔
Lower air intakes	Matte-black screens without trim bars	Glacier Silver lateral trim bars	Gloss-black lateral trim bars	Gloss-black screens without trim bars
Front-bumper bottom lip	Matte silver	Glacier Silver	Gloss black	Body color
Kidney-grille vertical slats	Black	Titanium Silver	Gloss black	Gloss black
Side sills	Black	Black + Glacier Silver trim	Black + gloss-black trim	Body color
Lower protective cladding & crossbar, body-side/wheelwell cladding	Black	↔	↔	Distinctive design, all body color; no cladding or crossbar
Mirror caps	Body color	↔	Black	Body color
Roof rails	Matte black	↔	↔	High-gloss Shadowline
Side-window trim	Matte black	↔	↔	High-gloss Shadowline
Beltline trim	–	Chrome	–	–
Rear-bumper undertray	Matte silver	Glacier Silver, larger	Gloss black, larger	↔
Dual exhaust tips	28i: matte chrome 35i: black chrome	↔	Black chrome	↔

Interior	Standard	xLine	Sport Line	M Sport Line
Front doorsills	BMW script	BMW xLine script	BMW Sport script	M logo, chrome trim
Ambiance lighting	Classic orange	Adds color switch, classic orange or cool white; also adds ambiance lighting of front footwells & door storage pockets	↔	Ambiance lighting available via Ambiance Lighting Package; color switch not available
Steering wheel	Sport	Sport	Sport w/red stitching	M Sport with shift paddles
Other features	–	–	–	M driver's footrest
Front seats	6-way manual or 8-way power	↔	Sport seats, manual or power	Sport seats, manual or power
Upholstery: standard	Leatherette Black or Beige	↔	↔	Same as non-Line, plus Nappa leather shift knob & boot, hand brake grip & boot
optional	Nevada leather, Black or Sand Beige	Nevada leather Oyster w/ Yellow-Black piping, Black w/ Gray-Brown piping or Terra w/Gray-Petrol piping; embossed "X" on head restraints	Nevada leather Black w/ Gray-Red piping or Coral Red w/ Gray-Black piping	Same as non-Line

X1 key features

Except as noted, all current X1 models offer the following features:

The Lines – aesthetics & features

Interior (cont.)	Standard	xLine	Sport Line	M Sport Line
Interior trim: standard	Silver Matte	Dark Copper Gloss	Diamond Black Gloss	Cross-brushed Dark Aluminum
optional	Fine Line Light wood	Fine Line Bay Matte	Aluminum w/ brushed accents	Fine Line Light wood
Headliner	Knit cloth, Sky Gray or Savannah Beige	↔	↔	Anthracite color
Floormats	Anthracite or Savannah Beige	Velour w/ Everest Gray border ¹	Velour with Coral Red border	Anthracite or Savannah Beige
Performance	Standard	xLine	Sport Line	M Sport Line
Top-speed limiter	Standard (127 mph)	↔	↔	Increased (150 mph)
Suspension	Standard calibration	↔	↔	M sport; xDrive models add Performance Control
Wheels: standard	sDrive28i: 17 x 7.5 Star Spoke #317 xDrive28i: 17 x 7.5 V Spoke #318 xDrive35i: 18 x 8.0 Star Spoke #320	18 x 8.0 Y Spoke #322	18 x 8.0 Double Spoke #422	18 x 8.0 F/18 x 9.0 R M Double Spoke #355M
optional	28i models: 18 x 8.0 Double Spoke #321 xDrive35i: 18 x 8.0 F/18 x 9.0 R #323	–	–	19 x 8.0 F/19 x 9.0 R M Double Spoke #225M
Tires ² : standard all-season	28i models: 225/50R-17 xDrive35i: 225/45R-18	225/45R-18	↔	–
optional all-season	28i models: 225/45R-18	–	–	–
standard performance	–	–	–	225/45R-18 F / 255/40R-18 R
optional performance	xDrive35i: 225/45R-18 F / 255/40R-18 R	–	–	225/35R-19 F / 255/30R-19 R

1 – This border not with Beige leatherette.
2 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X1 models

are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

F – Front

R – Rear

Packages & options

Packages

Premium Package

(all models, code ZPP)

Extending a traditional BMW offering to the new X1, this package adds desirable and popular features to each model.

All models:

- Comfort Access keyless

entry, enabling locking, unlocking and engine start/stop without activating the remote. Code 322.

- Auto-dimming exterior and interior mirrors, 430 + 431
- Power-fold exterior mirrors. A valued convenience for parking in tight spaces and for navigating some car washes. Included in code 430.

- Digital compass in interior rearview mirror, code 4NA
- BMW Universal Transceiver, the 3-function device for garage doors and other external electrical devices. Code 319.
- 4-way power lumbar support on the front seats, code 488
- Nevada leather upholstery, Sand Beige or Black in non-Line vehicles. Code LUB4.

- 28i models only (standard in 35i): Dual-panel Panoramic moonroof. Its large roof opening gives occupants almost the feeling of being in a convertible. Both panels can be tilted up at the rear; the forward, larger panel can also be slid open. Though the glass is effectively tinted, there is also a power-operated interior

X1 key features

Except as noted, all current X1 models offer the following features:

shade; a wind deflector rises at the front of the opening to reduce wind buffeting when the forward panel is open. 1-touch operation for all motions, even that of the interior shade. Code 402.

- **Power front seats**, 8-way power + 4-way power lumbar. Driver's-seat and exterior-mirror memory, with two memory settings for each driver. Code 459.
- **Auto tilt-down feature** for right-hand exterior mirror; mirror tilts down for view of curb or other possible obstruction when reverse gear is engaged. Included in code 459.

Technology Package (all models, code ZTP)

Another major package for X1s, bundling three features that add to convenience, security and the overall ownership experience:

- **Navigation system + iDrive**, code 609. The instrument panel gains the 8.8-in./1280x480-pixel iDrive control display, recessed at dash center, plus –
 - Controller on console, with surrounding direct-select menu keys
 - Voice Command system
 - Hard-drive database
 - Programmable Memory Keys, which enable users to program frequently used functions and recall them with a single keystroke.

Other amenities included with Navigation are described in **BMW features**.

- **BMW Assist**, BMW's comprehensive system of customer services and in-car telematics; code 639

- **Enhanced Bluetooth/USB connectivity**. With basic Bluetooth connectivity standard, this expands the interaction of mobile devices with iDrive and allows simultaneous pairing of two mobile devices and one audio player. The combination of Navigation, BMW Assist and this Bluetooth/USB connectivity is coded 7KB.

Driver Assistance Package (all models, code ZDA; requires Technology Package)

Combining two features that enhance the convenience and safety of parking and low-speed maneuvering:

- **Rear-view camera**, code 3AG. Its images and guidance are viewed in the iDrive control display.
- **Park Distance Control front/rear**, code 508. In addition to audible warnings, a plan-view vehicle diagram in the control display graphically depicts obstacle's locations relative to the vehicle.

Lighting Package (all models, code ZLP; requires Premium Package)

Augments the extensive standard lighting amenities with a further range of functional and atmospheric illumination:

- All models:
- **Automatic high beams**, code 5AC
 - **Ambiance lighting**, code 563 –
 - White – front footwells, rear reading lights & visor vanity mirrors
 - Orange – mood lighting front & rear, center console, door pockets front & rear.

28i models only:

- **BMW Adaptive headlights**, code 522.

Cold Weather Package (all models, code ZCW)

A "must have" package for drivers who live in northern climates or travel to winter sports.

All models:

- **Heated steering wheel**, code 248
- **Heated front seats** (code 494) with impressive features including a large heated area, extending to the side bolsters; and high (130-watt) heating power.

28i models only:

- **Retractable headlight cleaning system**, code 502; standard on 35i.

This package is not available in combination with the M Sport Line.

Ultimate Package (all models, code ZMV)

Making its BMW debut, this package bundles three of the packages described above at prices significantly lower than their combined individual prices:

- Premium (ZPP)
- Technology (ZTP)
- Driver Assistance (ZDA).

Because the 35i Premium Package deletes the Panoramic moonroof, power front seats and exterior-mirror tilt-down function, that model's Premium Package is priced lower and so is the Ultimate Package.

Stand-alone options

Servotronic power steering (28i models, code 216)

Servotronic varies power assist according to speed: At a standstill, assist is maximum for ease in parking and low-speed maneuvers; then, as vehicle speed increases, assist is progressively

reduced to give firm road feel at cruising speeds.

Optional wheels and tires (all models, availability & codes as described)

In addition to the wheel/tire choices that go with the three Lines, each model offers a stand-alone option for non-Line-equipped vehicles:

- **28i models** – 18 x 8.0 Double Spoke wheels (design #321) with 225/45R-18 all-season tires³. These upgrade the sDrive/xDrive28i to the same dimensions as are standard on the 35i. Extra cost, code 2B3.
- **35i** – 18 x 8.0 front/18 x 9.0 wheels (design #323) with 225/45R-18 front / 255/40R-18 rear performance tires. No extra cost, code 2AG.

Shift paddles

(all models, code 2XA or 7XA)

The paddle-shifted automatic (drivers can still shift with the lever as well) also adds Direct Selection of the Manual mode. If, while driving in D, the driver manually downshifts via paddle, the Manual mode engages and the transmission holds that gear. If the driver makes no further manual shifts within 15 seconds, the transmission returns to automatic operation.

2XA is the version with the sport steering wheel. 7XA is the version with the M sport steering wheel and is available within the M Sport Line.

3 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X1 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X1 key features

Except as noted, all current X1 models offer the following features:

Chrome Line exterior trim (all models, code 346)

Adds discreet sparkle to the X1 exterior via:

- Chrome –
- Door-window trim
- High-gloss Black –
- Mirror triangle, bases, frames and cover
- B-pillars
- Rear door-window vertical guide/divider

Roof rails in Satin Aluminum finish (all models, code 3AT)

As an alternative to the standard matte-black finish of the standard rails, these lend a dressy touch.

Metallic paint

(all models, color codes)

On all X1 models, metallic paint is an extra-cost option. One metallic color, Le Mans Blue, is available only in combination with the M Sport Line.

Dual-panel Panoramic moonroof (28i models, code 402)

Standard on 35i; available as this stand-alone option or as part of 28i models' Premium Package. Described under Premium Package.

Leather upholstery

(all models, upholstery codes)

In addition to being part of the Premium Package, leather upholstery is available on a stand-alone basis in two colors: Black and Sand Beige. Leather appears on the seat facings and head restraints.

For the special leather schemes available in the xLine and Sport Line, see **The Lines – esthetics & features** on page 816.

Heated front seats (all models, code 494)

As described under Cold Weather Package.

Harman Kardon surround-sound audio system (all models, code 688)

This premium system was developed by famed audio purveyors Harman Kardon especially for BMW. Compared to the standard 8-speaker system, the Harman Kardon offers –

- Increased audio power, 340 watts (vs. standard 180W)
- 11 speakers, higher-caliber throughout
- Digital Sound Processing (DSP), adjusted along with other parameters on the audio panel or (with Navigation/iDrive) control display
- AuraVox equalizing as a further enhancement of audio quality
- Surround-sound simulation.

The upgraded speakers are as follows; an asterisk (*) denotes additional speakers over the standard system –

- 1 midrange fill speaker, 100 mm, center of dash*
- 2 midrange, 100 mm, in front doors
- 2 tweeters, 25 mm, in front-door mirror triangles with "Harman/Kardon" script
- 2 midrange, 100 mm, in upper sidewalls of cargo area
- 2 tweeters, 25 mm, in upper sidewalls of cargo area*
- 2 subwoofers, 217 mm, up-graded, under front seats.

Satellite Radio with 1-year subscription (all models, code 655)

See **BMW features** for details; includes 1-year subscription.

BMW Apps

(all models, code 6NR; includes Smartphone Integration, requires Technology Package) This element of BMW's ConnectedDrive strategy is now available on all BMW models; see **BMW features** for a description.

BMW Assist

(optional all models, code 639) In addition to being part of the Technology Package, BMW Assist is available as a stand-alone option. BMW Assist is BMW's comprehensive system of customer services and in-car telematics; for detailed information, see CenterNet or the **BMW Assist** section of this Fast Facts edition for the latest program details. Includes a 4-year subscription to BMW Assist Safety Services. The included Bluetooth mobile-device interface is the Enhanced version, incorporating numerous refinements and additional functions.

BMW center-installed accessories

Here is a preliminary listing for some of the many accessories to be available for the new X1:

- Complete wheel and tire sets, including 18-in. winter equipment; 19-in. V Spoke #324; 19-in. Star Spoke #311
- Wheel locks
- Tire valve-stem caps with BMW lettering or logo
- Black kidney grilles
- Mud flaps, for vehicles with or without M Sport Line
- Car covers, outdoor and indoor types

- Exterior mirror caps, carbon fiber
- Roof and storage systems, including carriers for surfboard, skis/snowboard and kayak plus universal carriers; roof boxes
- License-plate frames
- M doorsill trims
- M driver's footrest
- Snap-in adapter with USB interface for playing stored music through vehicle audio system, charging smartphone and hard-wiring into vehicle antenna
- Snap-in adapter for BMW Apps and various media
- BMW USB memory stick in style of vehicle remote
- BMW Bluetooth headset and speaker
- Coat hanger and universal hook for mounting under front head restraint
- iPad holder for mounting under front head restraint; accommodates iPad 1 and 2
- Storage bag for mounting on front-seat backrests
- Floor mats, all-weather
- Plastic floor liners in Black or Beige
- Cargo-compartment items: tie-down straps, floor net, organizer tray, fold-down protective floor mat
- Cool bag
- BMW umbrella with LED light
- LED hand lamp

For details and additional items, see the **Accessories** listings for the 2013 X1 on bmwusa.com.

Standard & optional features

2013 X1

This listing applies to base models; features included in Lines are shown in The Lines, pages 816-819.

Exterior design & function	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Impact-absorbing bumpers front & rear with combination body-color & protective black surfaces	S	S	S
Halogen free-form headlights	S	S	-
Xenon Adaptive headlights with LED luminous rings as position/parking lights & Daytime Running Lamps ¹ , LED "razor" accents, auto-leveling, cornering lights, automatic high beams	ZLP	ZLP	S
Front foglights	S	S	S
Automatic headlight control	S	S	S
Retractable high-intensity headlight cleaning system	ZCW	ZCW	S
LED turn signals in exterior mirrors	S	S	S
Rain-sensing windshield wipers	S	S	S
Heated windshield-washer jets	S	S	S
Park Distance Control, front & rear	ZDA	ZDA	ZDA
Rear-view camera	ZDA	ZDA	ZDA
Power-folding exterior mirrors	ZPP	ZPP	ZPP
Welcome Light ²	S	S	S
Ground lighting at door handles	S	S	S
Metallic paint	OPT	OPT	OPT
Vertical grille slats	Black	Black	Black/chrome
Matte-black side-window trim	S	S	-
Chrome side-window trim	NA	NA	S
Chrome Line exterior trim: High-gloss black mirror triangle, base, frame & cap; B-pillar & rear-door window divider; chrome window recess front & rear	OPT	OPT	OPT
Roof rails: Matte-black finish	S	S	S
Satin Aluminum finish	OPT	OPT	OPT
Rear roof spoiler	S	S	S
Matte-chrome dual exhaust tips	S	S	-
Black-chrome dual exhaust tips	NA	NA	S
LED taillights	S	S	S
Adaptive brakelights	S	S	S

1 – Selectable via Vehicle & Key Memory.
2 – Upon unlocking of vehicle, activation for 20 sec. of front luminous rings & turn signals, taillights, license-plate lights, ground lighting and interior lights.

S – Standard
OPT – Optional
NA – Not available
-- – Not applicable

ZCW – Cold Weather Package (not available in combination with M Sport Line)
ZDA – Driver Assistance Package

ZLP – Lighting Package
ZPP – Premium Package

Standard & optional features

2013 X1

This listing applies to base models; features included in Lines are shown in The Lines, pages 816-819.

Performance & efficiency	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
2.0-liter TwinPower Turbo 4-cylinder engine	S	S	–
3.0-liter TwinPower Turbo 6-cylinder engine	–	–	S
Engine features:			
Aluminum construction	S	S	S
Cylinder technology	Arc-electroplated steel coating		Iron liners, cast into block
High Pressure direct fuel injection	S	S	S
Valvetronic variable intake-valve lift	S	S	S
Double VANOS ³ variable valve timing	S	S	S
Twin-scroll turbocharger	S	S	S
Electronically controlled engine cooling	S	S	S
Electric coolant pump	S	S	S
Volume-controlled oil pump	S	S	S
Electronic sensing of oil level & condition	S	S	S
Exhaust system	Single	Single	Single
Automatic start/stop with function display in tachometer	S	S	NA
STEPTRONIC automatic transmission with Normal, Sport & Manual shift modes:			
6-speed with mechanical shift lever	–	–	S
8-speed with E-shift	S	S	–
Differentials with reduced friction:			
Rear	S	S	S
Front	–	S	S
Double-pivot-type front suspension	S	S	S
Aluminum front suspension components	S	NA	NA
5-link rear suspension	S	S	S
Front & rear anti-roll (stabilizer) bars	S	S	S
Subframes front/rear	Aluminum/steel	Steel/steel	Steel/steel
Twin-tube gas-pressure shock absorbers	S	S	S
Rack & pinion steering:			
Power assist	Electric	Hydraulic	Hydraulic
Vehicle-speed-sensitive assist	OPT	OPT	S
4-wheel ventilated disc brakes with no-asbestos organic (NAO) pads	S	S	S
Brake Energy Regeneration	S	S	S
Dynamic Stability Control	S	S	S
ECO PRO setting for driving dynamics	S	S	NA
xDrive fulltime all-wheel drive system, electronically controlled with variable front/rear torque split & traction control	NA	S	S

3 – VANOS = **V**ariable **N**Ockenwellen
Steuerung = variable camshaft control,
or variable valve timing.

S – Standard
OPT – Optional

NA – Not available
– – Not applicable

Standard & optional features

2013 X1

This listing applies to base models; features included in Lines are shown in The Lines, pages 816-819.

Performance & efficiency (cont.)	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
17 x 7.5 alloy wheels: Star Spoke #317	S	–	–
V Spoke #318	NA	S	–
18 x 8.0 alloy wheels: Double Spoke #321	OPT	OPT	–
Star Spoke #320	NA	NA	S
18 x 8.0 front/18 x 9.0 rear alloy wheels, design #323	NA	NA	NC
Run-flat tires ⁴ : 225/50R-17 all-season	S	S	–
225/45R-18 all-season	OPT	OPT	S
225/45R-18 front / 255/40R-18 rear performance	NA	NA	NC
Tire Pressure Monitor	S	S	S
Comfort & convenience	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Vehicle & Key Memory	S	S	S
Multi-function remote control with selective unlocking ¹ & remote trunk or tailgate release	S	S	S
Comfort Access keyless entry	ZPP	ZPP	ZPP
Doorsill trim plates with chrome BMW lettering	S	S	S
Dual power/heated exterior mirrors	S	S	S
Automatic-dimming interior & exterior mirrors	ZPP	ZPP	ZPP
Digital compass in interior rearview mirror	ZPP	ZPP	ZPP
BMW Universal Transceiver (3-function garage-door opener)	ZPP	ZPP	ZPP
Courtesy lights with fade-in/fade-out feature, actuation from remote, automatic switch-on when engine is turned off, separately controlled left/right reading lights	S	S	S
BMW Ambiance Lighting White – front footwells, rear reading lights & visor vanity mirrors Orange – mood lighting front & rear, center console, door pockets front & rear	ZLP	ZLP	ZLP
Lockable & illuminated glove compartment	S	S	S
Tilt/telescopic 3-spoke leather-wrapped sport steering wheel with fingertip audio, air-recirculation & phone controls	S	S	S
Sport wheel with shift paddles	OPT	OPT	OPT
Heated steering wheel	ZCW	ZCW	ZCW
Dynamic Cruise Control	S	S	S
6-way adjustable front seats	S	S	–
8-way power front seats	ZPP	ZPP	S
4-way power front-seat lumbar support	ZPP	ZPP	ZPP

4 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X1 models

are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

S – Standard
OPT – Optional
NA – Not available
NC – No extra cost
– – Not applicable

ZCW – Cold Weather Package (not available in combination with M Sport Line)
ZLP – Lighting Package
ZPP – Premium Package

Standard & optional features

2013 X1

This listing applies to base models; features included in Lines are shown in The Lines, pages 816-819.

Comfort & convenience (cont.)	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Adjustable front center armrest	S	S	S
Memory system for driver's seat & exterior mirrors (2 settings per user)	ZPP	ZPP	S
Auto tilt-down of right-hand exterior mirror for backing up	ZPP	ZPP	S
3-stage, thermostatically controlled heated front seats	ZCW/OPT	ZCW/OPT	ZCW/OPT
Adjustable front center armrest	S	S	S
Electronic analog speedometer & tachometer	S	S	S
LCD main & trip odometers	S	S	S
Check Control vehicle monitor system	S	S	S
iDrive system with 8.8-in. high-resolution control display, GPS Navigation; direct-select radio, media, phone & Navigation menus; 6 Programmable Memory Keys, enhanced Voice Command, Real Time Traffic Information & other features	ZTP	ZTP	ZTP
Leatherette upholstery	S	S	S
Nevada leather upholstery	ZPP/OPT	ZPP/OPT	ZPP/OPT
Silver Matte interior trim	S	S	-
Fine Line Light wood interior trim	OPT	OPT	S
Galvanic trim accents on control and functional elements	S	S	S
Power windows with key-off operation; 1-touch open & close of all door windows, anti-trapping feature, open from remote	S	S	S
Automatic climate control with separate left/right temperature settings, automatic recirculation control, misting control, bi-directional solar sensor, temperature- & volume-controlled rear air outlets, activated-charcoal microfilter ventilation & other features	S	S	S
ECO PRO operational mode	S	S	NA
Dual-panel Panoramic moonroof: front panel slides open, both panels tilt up; power interior shade, all functions 1-touch	ZPP/OPT	ZPP/OPT	S
Anti-theft AM/FM/HD/CD/MP3 audio system with 8 speakers including 2 subwoofers, FM diversity antenna system, Radio Data System (RDS), automatic volume control, auxiliary audio input & other features	S	S	S
Harman Kardon Surround Sound audio system with Logic7 signal processing, increased audio power, vehicle-specific equalizing, upgraded componentry & all features of standard system; 11 speakers	OPT	OPT	OPT
Satellite Radio with 1-year subscription	OPT	OPT	OPT
80-GB hard drive providing data storage for Navigation, audio system, phonebook & enhanced Voice Command; ripping capability from CD, MP3 player or USB stick	ZTP/OPT ⁵	ZTP/OPT ⁵	ZTP/OPT ⁵
Bluetooth mobile-device interface & USB connectivity	S	S	S

5 - Included with Navigation option.

S - Standard
OPT - Optional
NA - Not available
- - Not applicable

ZCW - Cold Weather Package (not available in combination with M Sport Line)

ZPP - Premium Package
ZTP - Technology Package

Standard & optional features

2013 X1

This listing applies to base models; features included in Lines are shown in The Lines, pages 816-819.

Comfort & convenience (cont.)	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Enhanced Bluetooth mobile-device interface & USB functionality, high-capacity phonebook download & other features (Combox Controller)	ZTP/OPT ⁶	ZTP/OPT ⁶	ZTP/OPT ⁶
BMW Apps + Smartphone Integration	OPT	OPT	OPT
Dual front cupholders	S	S	S
Dual front sun visors with illuminated mirrors	S	S	S
Sunglasses compartment in roof on driver's side	S	S	S
Interior storage provisions: center console, dashtop ⁷ , door pockets with bottle holders, under front center armrest, retaining straps in door pockets, nets on front seats' backrests	S	S	S
Accessory power outlets in center console front & rear, under front center armrest, in luggage compartment	S	S	S
Fold-up rear center armrest with dual cupholders	S	S	S
3-segment folding rear seats (40/20/40) with fold-up center armrest, adjustable backrest	S	S	S
Rear-window defroster	S	S	S
Floor mats, front & rear	S	S	S
Variable cargo area with folding/removable cargo cover, recessed open trays left and right, storage net on right side, 2 retaining straps on floor, 1 retaining strap on left side, 2-level underfloor compartment with organizer tray, accessory power outlet	S	S	S
Single-piece tailgate with electric release of tailgate from interior, exterior or remote; rear-window wiper/washer	S	S	S
Safety & security	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Dynamic Stability Control, including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Brake Control, Brake Fade Compensation, Brake Standby, Brake Drying & Start-up Assistant plus Hill Descent Control	S NA	S S	S S
Rear-view camera	ZDA	ZDA	ZDA
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S	S
3-point safety belts at all seating positions	S	S	S
Front & outboard rear safety belts with automatic tensioners & force limiters	S	S	S
LATCH attachments at outboard rear seating positions (for securing child restraint seats)	S	S	S
Head restraints at all seating positions	S	S	S
Interlocking door anchoring system for side impacts	S	S	S
Front & rear-seat Head Protection System	S	S	S

6 – Included with BMW Assist.

7 – Not with iDrive/Navigation option.

S – Standard
OPT – Optional
NA – Not available

ZTP – Technology Package

Standard & optional features

2013 X1

This listing applies to base models; features included in Lines are shown in The Lines, pages 816-819.

Safety & security (cont.)	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Front-seat side-impact airbags, seat-mounted	S	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S	S
Post-impact safety measures:			
Unlocking of central locking system	S	S	S
Switch-on of hazard flashers	S	S	S
Switch-on of interior lighting	S	S	S
Disconnect of alternator, fuel pump & starter from battery (via Battery Safety Terminal)	S	S	S
BMW Assist, including enhanced automatic collision notification, Assist & SOS buttons, enhanced Roadside Assistance, TeleService [®] , BMW Assist Safety Plan [®] , enhanced Bluetooth mobile-device interface	ZTP/OPT	ZTP/OPT	ZTP/OPT
Central locking system with selective unlocking ¹ & interior locking switch	S	S	S
Coded Driveaway Protection	S	S	S
Alarm system with operation from remote, interior motion detector	S	S	S

1 – Selectable via Vehicle & Key Memory. 8 – Requires BMW Assist annual fee after 4th year.

S – Standard
OPT – Optional

ZTP – Technology Package

Technical specifications

2013 X1

All specifications are new.

General	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Curb weight, lb.	3527	3726	3891
Weight distribution, front/rear, %	49.4/50.6	50.6/49.4	52.1/47.9
Wheelbase, in.	108.7 ¹		
Track, front/rear, in.	59.1/60.2 ^{1,2}		
Length, in.	176.5 ¹		
Width, in.	70.8 ¹		
Height, in.	60.8 ¹		
Sports Activity-specific	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Gross vehicle weight rating (GVWR), lb.	4497	4707	4861
Ground clearance, unloaded, in.	7.0 ¹		
Approach/departure angle, deg.	18.0/22.2 ¹		
Ramp breakover angle, deg.	16.8 ¹		
Body	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Type	5-door Sports Activity Vehicle ¹		
Aerodynamic drag coefficient (C _D)	0.34	0.33	0.35
EPA size classification	Small SUV ¹		
Accommodations	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Seating capacity, persons	5 ¹		
Shoulder room, front/rear, in.	55.0/54.6 ¹		
Head room, front/rear:	37.3/36.9 ¹		
Without Panoramic moonroof	41.3/39.6 ¹		
With Panoramic moonroof	38.7/38.1 ¹		
Leg room, front/rear	41.4/34.9 ¹		
EPA passenger-compartment volume, cu ft.	95.9 ¹		
EPA cargo volume, cu ft.	25.0/56.0 ^{1,3}		

1 – Specification applies to all models.

2 – With standard wheels.

3 – Rear seats upright/fully folded. Does not include compartment under cargo floor.

Technical specifications

2013 X1

All specifications are new.

Engine & electrical	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Engine type	DOHC inline, 4 valves/cylinder, aluminum construction, direct fuel injection, twin-scroll turbocharger, Valvetronic variable intake-valve lift & Double VANOS ⁴ variable intake- & exhaust-valve timing ¹		
Model-specific details	16-valve 4-cylinder, arc-electroplated steel cylinder surfaces, dual balance shafts ⁵ 24-valve 6-cylinder, iron cylinder liners cast into block		
Bore x stroke, mm/in.	84.0 x 90.1/3.31 x 3.55 ⁵ 84.0 x 89.6/3.31 x 3.53		
Displacement, cc/cu in.	1997/122 ⁵ 2979/182		
Compression ratio	10.7:1 ⁵ 10.2:1		
Power @ rpm, hp	240 @ 5000-6500 ⁵ 300 @ 5800		
Torque @ rpm, lb-ft.	260 @ 1250-4800 ⁵ 300 @ 1300-5000		
Engine-management system	Motronic MEVD (28i 17.2.4, 35i 17.2.) with knock control, Valvetronic, variable valve timing, engine cooling & other functions included in control strategy ¹		
Fuel requirement	Premium unleaded ¹		
Fuel capacity, U.S. gal.	16.6 ¹		
Battery capacity, amp-hr.	80 ¹		
Alternator output rating, amp./W	210/2940 ¹		
Drivetrain	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Drive system	Front engine/ rear-wheel drive	Front engine/all-wheel drive ⁶	
Automatic transmission	8-speed, 8 HP 45 ⁵ 6-speed, 6 HP 19 TU		
Ratios: 1st	4.71:1 ⁵ 4.17:1		
2nd	3.14:1 ⁵ 2.34:1		
3rd	2.11:1 ⁵ 1.52:1		
4th	1.67:1 ⁵ 1.14:1		
5th	1.28:1 ⁵ 0.87:1		
6th	1.00:1 ⁵ 0.69:1		
7th	0.84:1 ⁵ –		
8th	0.67:1 ⁵ –		
Reverse	3.30:1 ⁵ 3.40:1		
Final drive ratio	3.15:1 ⁵ 3.64:1		

1 – Specification applies to all models.

4 – VANOS = **V**ariable **N**Ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

5 – Specification applies to sDrive28i and xDrive28i models.

6 – Specification applies to both xDrive models.

Technical specifications

2013 X1

All specifications are new.

Chassis	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Body/frame construction	Unitized steel ¹		
Front suspension	Struts, double-pivot lower arms, coil springs, twin-tube gas-pressure shock absorbers, tubular anti-roll bar, subframe ¹ (sDrive28i: aluminum lower arms, wheel carriers & subframe) (M Sport Line: sport suspension calibration ¹)		
Rear suspension	5-link system, coil springs, twin-tube gas-pressure shock absorbers, tubular anti-roll bar, steel subframe ¹ (M Sport Line: sport suspension calibration & Performance Control)		
Rack & pinion steering:			
Power assist	Electric	Hydraulic	Hydraulic
Vehicle-speed-sensitive assist (Servotronic)	Optional	Optional	Standard
Overall ratio	16.1:1	18.5:1 ⁶	
Turns lock-to-lock	3.0	3.2 ⁶	
Turning circle, ft.	37.1	38.7 ⁶	
4-wheel ventilated disc brakes, vacuum-assisted:			
Front, diameter x thickness, mm/in.	312 x 24/12.3 x 0.94 ¹		
Caliper material	Aluminum ¹		
Rear, diameter x thickness, mm/in.	300 x 20/11.8 x 0.79 ¹		
Caliper material	Cast iron ¹		
Cast-alloy wheels:			
Standard	17 x 7.5 ⁵		18 x 8.0
Stand-alone option	18 x 8.0 ⁵		18 x 8.0 F/18 x 9.0 R
xLine & Sport Line	18 x 8.0 ¹		
M Sport Line	18 x 8.0 F/18 x 9.0 R ¹		
M Sport Line option	19 x 8.0 F/19 x 9.0 R ¹		
Run-flat tires ⁷ :			
Standard	225/50R-17 all-season ⁵		225/45R-18
Stand-alone option	225/45R-18 all-season ⁵		225/45R-18 F / 255/40R-18 R performance
xLine & Sport Line	225/45R-18 all-season ¹		
M Sport Line	225/45R-18 F / 255/40R-18 R performance ¹		
M Sport Line option	225/35R-19 F / 255/30R-19 R performance ¹		
Stability-enhancement system	Dynamic Stability Control, including Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, Dynamic Brake Control, Brake Fade Compensation, Brake Standby, Brake Drying & Start-up Assistant ¹ ; xDrive models add Hill Descent Control		

1 – Specification applies to all models.

6 – Specification applies to both xDrive models.

5 – Specification applies to sDrive28i and xDrive28i models.

7 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. X1 models are not equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions. attempted.

F – Front
R – Rear

Technical specifications

2013 X1

All specifications are new.

Performance data	X1 sDrive28i	X1 xDrive28i	X1 xDrive35i
Acceleration, 0-60 mph, sec. ⁸	6.2	6.3	5.3
Top speed, mph ⁹ Standard	127 ¹		
M Sport Line	150 ¹		
EPA estimated MPG, city/highway/combined	24/34/28	22/33/26	18/27/21

1 – Specification applies to all models.

8 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle; road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted.

9 – Electronically limited.

X1

X1

2013 X5 M & X6 M:

In addition to an LCI-freshened X6, both models newly feature standard Multi-Contour seats, available LED headlights and a freer choice of wheel designs.

BMW M's mastery of motor-sports and high-performance sports vehicles has been established over four decades since it was launched as BMW Motorsport in 1972. The first M model sold to the public, logically named M1, was an exotic mid-engine 2-seater coupe launched in 1978. Proceeding next to the first M5 and then through generations of M3, M5, M6 and Z3-Z4 M to an M version of the 1 Series Coupe, all of BMW's production vehicles had been cars – but then, in 2011, the group applied its magic to BMW's X5 and X6 Sports Activity models for the first time.

Now in their third year, the X5 M and X6 M models embody a previously unknown combination of M-style performance attributes with SAV heft, allroad ability and commanding driving position. The competence of these machines is much more than just extreme performance. That is present, of course; but in the BMW M tradition it is combined with aerodynamics, design and driver ergonomics into a harmonious whole. These two utterly unique BMW M vehicles put the driver in a position to extract and enjoy that performance without stress or uncertainty in a wider-than-ever range of roads and driving conditions.

This section of Fast Facts 2013 focuses on the features and attributes that distinguish the two M models from their X5 and X6 50i counterparts; these are listed in the Key Features summary beginning on the next page. For core information on the X5 and X6 models on which they are based, see the X5 and X6 sections of this **Fast Facts** edition.

What's new for 2013

As of 4/12 production:

Both models

- Optional Full LED headlights
- Blue-painted brake calipers
- Both wheel designs now available on both models (formerly each design was exclusive to one model)
- Standard Multi-Contour front seats
- Optional Full Merino leather interior: Mugello Red replaces Sakir Orange as one of five available color schemes

X6 M only

- Revised front end with wider grille + newly sculpted slats
- Aluminum hood with prominent "power dome"
- Newly designed LED taillights

X5 M & X6 M key features summary

Exterior design & function

- X6 hood has new "power dome" hood, same contours as previous ActiveHybrid X6; also of aluminum, vs. previous steel
- Front and rear bumper/spoiler ensembles, wheelwell flares, side sills and protective strips on doors – all exclusive to the M models
- Larger air intakes in bumper/spoiler, especially outboard, satisfy 555-hp Twin Turbo V-8 engine's "breathing" requirements and help cool the huge brakes
- M aerodynamic exterior mirrors, two-toned in Shadowline finish and body color
- In profile, traditional M "gills" are positioned above and aft of front wheelwells
- 20-in. wheels, two designs available on each model; differentiated front/rear sizes, ultra-low-profile performance¹ run-flat tires; these wheel/tire dimensions available optionally on X5 50i and X6 50i, but wheel designs are exclusive to the M models.
- Protective black areas of standard X5 and X6 models replaced by body color
- At rear, air outlets from rear wheelwells are particularly prominent on X6 M
- Both models frame their "quad" chrome exhaust tips with lower diffuser shapes
- Exterior color selection distinct from standard models, features three BMW M metallics: Silverstone, Melbourne Red and Monte Carlo Blue

Performance & efficiency

- 4.4-liter V-8 shares basic architecture and displacement with X5/X6 50i engine, but extensively modified by BMW M to deliver 555 hp vs. 50i's 400 hp, 500 lb-ft. torque vs. 50i's 450 lb-ft.; achieved via two twin-scroll turbochargers, patented crossover exhaust manifold, unique pistons and camshafts, special cooling and lubrication systems
- Engine designation is S63, vs. 50i engine's N63
- Exhaust system provides choice of sound: Sport or Efficient
- M Sport Automatic transmission with steering-wheel shift paddles, special M programming, Launch Control. 6 speeds, vs. 50i models' 8.
- Suspension system's M modifications include specific elastokinematics, more rigid transverse links and firmer hydraulic cushions at front, firmer rear subframe mountings, specially calibrated springs and shock absorbers all around, and 10-mm (0.4-in.) lower ride height
- Adaptive Drive (combination of Electronic Damping Control and Active Roll Stabilization) standard, vs. optional in standard X5 and X6
- Servotronic vehicle-speed-sensitive power steering provides choice of two levels of assist; Active Steering not available

¹ – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. These models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X5 M & X6 M key features summary

- Larger brake dimensions, 4-piston front calipers exclusive to these models; aluminum/cast-iron composite rear rotors, vs. conventional all-cast-iron rotors. New blue-painted calipers.
- Dynamic Performance Control, varying left/right-rear torque distribution to optimize handling, shared with X6 models (not X5s)
- MDrive system offers drivers choice of throttle response, exhaust sound, transmission shift characteristics, steering effort, Electronic Damping Control and Dynamic Stability Control settings; driver can configure all these into a preferred setting and recall it via MDrive button on steering wheel.
- Extended Merino leather upholstery standard, with unique M color selection; all interior options are also Merino
- M Aluminum Shadow interior trim
- Standard anthracite-color headliner (regular-production X5 and X6: Sport Activity, Sport and M Sport Packages)
- Standard audio system is 16-speaker premium (regular-production X5 and X6; this system included in Premium Sound Package)

Options & packages

- Packages and stand-alone options generally less extensive because of M models' higher level of standard equipment
- Five packages, vs. eight for X5 50i, nine for X6 50i
- Premium Sound Package includes Enhanced Premium system (not available in standard X5 models; now available as upgrade in X6)
- X5 M optional roof rails in high-gloss Shadowline finish, vs. X5's matte black (standard) or aluminum (M Sport Package). Roof rails not available as factory option for X6 models.
- Full Merino leather upholstery optional; wider color selection than standard Extended Merino
- Perforated Merino leather upholstery (in Full treatment) available in combination with Active Ventilated Seats Package
- Interior trim materials are M-exclusive
- 3rd-row seating not available (regular-production X5: optional)

Comfort & convenience

- BMW M doorsill trims with traditional tri-color M logo
- M sport steering wheel standard (included in X5 50i M Sport Package, not currently available in X6); includes M logo, MDrive button and distinctive overall M design
- M power front sport seats standard (sport seats in M Sport and Sport Activity Packages of X5 50i, optional in X6 50i)
- Aluminum-trimmed M driver's footrest
- BMW M instrumentation with illuminated white scales, red pointers, oil-temperature gauge
- Navigation system includes MDrive menu

X5 M & X6 M key features

The X5 M and X6 M models differ from their X5 & X6 counterparts in these features:

Exterior design & function

With these two models, typical M performance dynamics are realized in AWD vehicles of the BMW X Family format – and expressed clearly in the exterior design.

From the front, there is more differentiation between the two models than previously. The X5 M's hood and both models' standard headlight clusters derive from the standard X6. On both models, generous air intakes dominate the lower surfaces, communicating that the Twin Turbo/Twin Scroll V-8 requires a large volume of air to produce its 555 hp and its likewise powerful brakes also want to be cooled effectively.

Newly for '13, and like the regular X6, Full LED headlights are optional on both models. and the X6 M has the same widened grille and newly sculpted vertical slats as its regular-production counterpart. Also new to the X6 M is an aluminum hood with an assertive "power dome," adopted from the previous ActiveHybrid X6 but just as appropriately expressing the M's spectacular performance. In this view of both models, the M aerodynamic exterior mirrors, two-toned in dark Shadowline finish and body color, are also prominent.

In profile, traditional M "gills" are positioned above and aft of the front wheelwells, which house 20-in. wheels (two designs, both now available on both models) with ultra-low-profile run-flat performance tires¹. Here as well as at the front and rear, protective black areas of the standard X5 and X6 models are replaced by body color, which accents the fact that the Ms are intended

mainly for onroad use. The entire body-color front bumper/spoiler ensemble is exclusive to the M models.

At the rear, typical M design elements again confirm the bold sportiness of both models; the rear aspects, though, differ markedly as do their standard counterparts. On the X6 M, air outlets from the rear wheelhouses are particularly prominent; both models, however, frame their "quad" chrome exhaust tips with lower diffuser forms. Analogous to the front, the entire body-color bumper/apron/diffuser ensemble is exclusive to these models.

For '13 the X6 M shares the LCI X6's new taillights, whose light source is two stylishly shaped LED bars.

X5 M: "upright" proportions signal presence and versatility

Though the two models' frontal aspects are partly shared, the X5 is notably recognizable by its more upright shape and taller overall height. (Its windshield is taller and not as raked.) In profile, the X5 is of course "squarer," and of the two only the X5 can be factory-equipped with roof rails; these are optional, and in high-gloss Shadowline finish. Parallel to their regular-production counterparts, the X5 M seats five and the X6 M four. The X5 M is not available with the regular X5s' optional 3rd-row seating, but the X6 M can be equipped with optional 3-passenger rear seating that was introduced last year.

¹ – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. These models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X5 M & X6 M key features

The X5 M and X6 M models differ from their X5 & X6 counterparts in these features:

X6 M: more overtly sporty and onroad-oriented

Though both models are very sporty indeed, the X6 is more overtly so. In return for its more rakish profile, it consciously gives away some utility and passenger-carrying ability.

In profile the X6 M's "gills," that traditional BMW M design element, carry the M logo as on the X5 M, but are larger and more elaborately modeled. Wheel designs are also a distinguishing element: Both models come standard with 20-in. wheels in differentiated front/rear sizes¹; as before, the X5 M's standard wheel design is BMW M V Spoke design #299M, the X6 M's Double Spoke #300M; but newly for '13, each model can be fitted with the other design at no extra cost.

Performance & efficiency

With all M models, the accent is on performance, and with these first M Sports Activity Vehicles, that accent is as spectacular as ever. Yet given the heft of these vehicles, and especially because they are the first M vehicles with all-wheel drive, BMW M has taken a new path to achieving M-style performance:

- Twin turbocharging, vs. M's traditional high-rpm approach
- Ultra-high torque, vs. traditional super-high-rpm strategy
- Conventional throttles (two of them), vs. traditional individual throttle for each cylinder
- 6-speed torque-converter automatic, vs. the Double-clutch Transmission (M DCT) that's available on M3s and standard on the new M5 and M6.

S63 4.4-liter M Twin Turbo V-8 engine: unique Twin Scroll/ Twin Turbo technology with crossover exhaust manifold
With these two M models came a significant expansion of the BMW M engine spectrum. A brand-new powerplant was developed, one that shifts the focus of M engine technology from super-high-rpm to high-torque/high-rpm. It is designated the S63.

The new M5 and M6 are powered by a second version of the S63, called S63 TU (Technically Updated). Both the original S63 in these Ms, and the TU in the M5-M6, employ M Twin Scroll/ Twin Turbo technology and a "crossover" exhaust manifold that serves both of the V-8's two cylinder banks to achieve wonderfully spontaneous throttle response, a linear power curve and an unusually high and flat torque curve. For the X5-X6 M these accomplishments deliver 555 hp, peaking at 6000 rpm; and 500 lb.-ft. of torque maintained all the way from 1500 to 5650 rpm. In test-track terms, these outputs lead to a 0-60-mph acceleration time of 4.5 sec. for both M models.

See **BMW features** for a detailed description of the S63 and S63 TU engines that explains not only the fascinating basic engineering shared by both engine versions, but also the distinctions between the two.

M Sport Automatic transmission with E-shift and steering-wheel shift paddles

For the first time in BMW M models, the X5 M and X6 M employ a torque-converter automatic transmission. It is a 6-speed, specially engineered for fast shifting, a relatively direct connection to the engine, and yet also a high level of smoothness. As in the regular-production X5 and X6, basic transmission control is via a console-mounted, illuminated E-shift lever. Driver-selected shifts can be executed in the Manual mode with either the lever itself, or M-specific aluminum shift paddles on the steering wheel.

So far, so normal for a BMW automatic. But this unit incorporates an array of M-specific features and functions that make it wholly appropriate to a BMW M vehicle:

- In the Manual mode, an extra-fast reduction of engine torque, achieved by cutting the ignition and fuel delivery to individual engine cylinders, enabled the M engineers to achieve the quickest shifts ever with a BMW automatic².
- Also in Manual, the driver can take a selected gear right up to the engine's redline, with no automatic upshift as in most automatics. This heightens the driver's control over the vehicle in spirited driving.
- For the first time with a BMW torque-converter transmission, a Launch Control function is available (also in Manual mode). To engage this, the driver first selects M/S with the E-shift, the POWER Sport mode (in the MDrive menu) and either the

DSC's M Dynamic Mode or DSC-off. Then, at a standstill with the brake pedal applied, the driver depresses the accelerator fully. A "starting flag" icon appears in the instrument-cluster display. When the driver releases the brakes, the transmission and engine are instantly programmed for performance-optimized wheel slip and upshifts. (Thus, even though Manual is selected, the shifts do occur automatically.)

If while driving in either the Sport or Drive mode the driver actuates a paddle for a shift, the transmission immediately switches to its Manual mode. Then, if the driver takes no further shift action within a few seconds, the transmission reverts to the mode it was in initially. This is the "direct-select" feature familiar from BMW's Sport Automatic transmission in other models.

xDrive and Dynamic Performance Control: ideal combination for traction and handling

The success of BMW's xDrive system of all-wheel drive results from the fact that it doesn't merely improve traction in slippery road conditions, but also helps optimize handling dynamics under all road conditions.

With xDrive's electronically controlled variable torque distribution

- 1 - Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. These models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.
- 2 - In all BMW automatic transmissions, engine torque is reduced during shifts via the electronic engine/transmission interface to make them smoother.

X5 M & X6 M key features

The X5 M and X6 M models differ from their X5 & X6 counterparts in these features:

between the front and rear wheels (see **BMW features**), any tendency toward undesirable under- or oversteer is kept at bay – before the Dynamic Stability Control system (DSC) detects a need to intervene. Sensors constantly measure any incipient slip at the tires and react lightning-fast to vary the torque distribution appropriately. The programming of this action in the X5 M and X6 M is specific to these models, calibrated for a stronger accent on rear-wheel drive: this is but one of the many ways in which M-typical handling has been imparted to these AWD vehicles.

Dynamic Performance Control (DPC) – standard on regular-production X6s and both M models – augments xDrive by precisely apportioning torque between the left and right rear wheels according to cornering conditions; steering precision, vehicle stability and agility are further optimized. In short, DPC enables BMW to elevate the world standard for handling in AWD vehicles.

DPC consists of a multi-disc clutch and planetary gearset on each side of the rear differential. Each clutch is actuated mechanically by an electric servo motor, which acts on the basis of inputs from the same sensors that feed their information into the DSC system: vehicle speed, throttle position, wheel rotational speed, steering angle and yaw rate. For further details on DPC, see **BMW features**.

For drivers keen to know just what xDrive and DPC are doing at any moment, a specific display can be called up in the Drive monitor. In a graphic representation of the

four wheels, arrows indicate the distribution of driving torque to each wheel: this is not only entertaining, but also technologically informative about these systems' workings.

M Dynamic Mode for the most satisfying track driving

In the X5 M and X6 M, the potential of both systems – xDrive and DPC – is exploited in a specifically BMW M manner. Via the console DSC switch or (for recall via the M button) MDrive menu, the driver can “go all the way” by switching DSC to the M Dynamic Mode (MDM), in which –

- DSC's threshold for intervening via the brakes and engine power is raised, allowing the driver to “push harder” in curves.
- xDrive programming imparts a handling characteristic more like that of rear-wheel drive.

Together with DPC action, these measures result in ultimate M-typical handling attributes. MDM facilitates maximum cornering speeds with very “late” DSC intervention...and, under the extreme tire-loading conditions at a curve's apex, outstandingly high exit speeds.

And if all this isn't quite enough, DSC can be fully de-activated (except for anti-lock braking) by a longer push on its button. What more could the expert driver ask for on a test track?

M suspension plus standard Adaptive Drive and self-leveling rear air springs

The X5/X6 suspension system, with its double-wishbone/multi-link front and Integral IV (4-link) rear suspension, is modified by BMW M with –

- **Specific elastokinematics** (bushings and other flexible elements)
- **More rigid transverse links** and rigid hydraulic cushions at the front trailing lower links
- **Firmer mounting of rear sub-frame** to the body structure
- **10-mm (0.4-in.) lower ride height**
- **M-calibrated main and auxiliary springs** front and rear
- **3-path spring mounting** to help disperse the higher forces that accompany the increased handling capability.
- **Self-leveling rear air springs**, a feature included with the standard X5's 3rd-row seating or the X5 50i M Sport Package.

Both models come standard with Adaptive Drive, the combination of Electronic Damping Control (EDC) and Active Roll Stabilization (ARS) that is optional on standard X5s and X6s; and self-leveling rear air springs. EDC provides adjustable shock absorbers and, in its Normal mode, steplessly adjusts them to any level of firmness between their most compliant and firmest settings. Thus at any given moment, it precisely adapts to the road conditions and driver's demands. In the Sport setting, the shocks remain at a single, relatively firm setting for absolutely optimum smooth-road handling at some sacrifice in ride comfort.

M steering system

BMW's Servotronic (vehicle-speed-sensitive) power steering has also been specially developed for the X5 M and X6 M, and is quite distinct from either of the two available steering systems on standard X5s and

X6s. In contrast to the standard Servotronic vehicle-speed-sensitive power steering, two levels of power assist are selectable by the driver via either the EDC button or MDrive: Normal or Sport, the latter providing an uncompromisingly high, sporty level of steering effort for the most dynamic driving situations. Active Steering, optional on standard X5 and X6 models, is not available on the Ms. (Indeed, to date BMW M, with its more “purist” approach to steering, has not offered Active Steering on any of its models.)

Massively dimensioned, yet weight-saving brakes

The prodigious performance of an M vehicle must of course be harnessed by correspondingly powerful 4-wheel disc brakes. On the X5/X6 Ms, this is ensured by massively dimensioned – 15.6 in. front/15.2 in. rear – rotors. The rear rotors consist of an aluminum “hat” connecting the rotor to the hub and a high-carbon cast-iron outer section as the friction surface; the two portions are riveted together. This patented composite construction is described in **BMW features**.

At the front the rotors are acted upon by 4-piston fixed calipers, at the rear by single-piston floating calipers. This too is a distinction from standard X5s and X6s, which have single-piston floating calipers all around. Newly for '13, the calipers have an attractive, heat-resistant blue finish that visually accents the brakes' immense capabilities.

X5 M & X6 M key features

The X5 M and X6 M models differ from their X5 & X6 counterparts in these features:

20-inch wheels and run-flat performance tires

Transmitting the tremendous capabilities of the M suspension and brakes to the road are 20-in. wheels of 10.0-in. front/11.0-in. rear width shod with 275/40R-20 front / 315/35R-20 rear run-flat performance tires¹ – these Ms are the first M models to employ run-flats. Wheel designs are specific for these two models; both are BMW M configurations with five pairs of spokes:

- X5 M standard, X6 M alternate – M V Spoke design #299M
- X6 M standard, X5 M alternate – M Double Spoke design #300M.

Even with their different design names, both designs are in the M Double Spoke tradition, and both designs' spoke pairs have a V-form. But they are quite distinct from each other. The alternates are at no extra cost.

Dynamics at the driver's fingertip: the MDrive system

In addition to the DSC, EDC and steering modes already described, the Ms' powertrain also offers a choice of characteristics. Here the two settings are –

- **Sport** – quicker throttle response from the engine, sportier shift characteristics from the transmission and extra-sporty exhaust sound.
- **Efficient** – more relaxed throttle response, shifts that occur at lower vehicle speeds and relatively quiet exhaust sound. Given the M engine's phenomenal torque, especially at low to medium speeds, this mode is recommended for relaxed driving moods and is beneficial to fuel efficiency.

This Power mode selection, as well as those for DSC, EDC and steering, can be pre-configured within the MDrive menu of the iDrive system, and then recalled by the driver by a simple touch of the M button on the steering wheel. MDrive is an M-specific enhancement of the iDrive system.

Comfort & convenience

M-specific instrumentation, standard Multi-Contour seats

BMW M's philosophy of sporting vehicles comes through just as clearly in the Ms' cockpit as it does in their performance, handling and exterior design. Both these AWD sports vehicles have M-specific instrumentation that includes a variable tachometer rpm limit (redline), specific functional displays and white instrument illumination.

Newly for '13, BMW's 20-way Multi-Contour type; these provide all the power adjustments drivers expect in sporting vehicles. Also standard is the compact-diameter, thick-rimmed M sport steering wheel, with fingertip controls that include the unique M button for quick recall of drivers' favored vehicle-dynamics settings.

Lavish upholstery and trim, with many available choices

In standard form, the X5 and X6 interiors offer generous space, elegant and distinctive design, and fine materials. The X5 M and X6 M further add to this ambiance with special details of esthetics and function; beyond their own special standard equipment, they also offer an appealing selection of optional enhancements, some of them created by the talented

and inspired BMW Individual people.

Up front, the two models are essentially the same, with the special M instrumentation and standard Aluminum Shadow trim across the dash as well as on the doors and front center console. Optional interior trim materials are BMW Individual's high-gloss Piano Black, a red/brown-tone Eucalyptus wood or the BMW M Carbon Leather, all offered at no extra cost.

Driver and passengers are welcomed into the M models by handsome doorsill trims sporting the M logo; other special touches include knee pads on the center console for the driver and front passenger (standard in all X6s but not regular X5s) and an aluminum-trimmed M driver's footrest.

In the M interiors, fine Merino leather is standard in Extended form, appearing on the seats with M-specific stitching, doors including armrests and pulls, front head restraints with embossed M logo, and center console. Merino is notable for its gentle surface and natural grain; only hides without damage or irregularities are selected, no artificial surface treatment is done, and color goes all the way through so that this leather can retain its beauty and natural breathing ability over the years. This standard Merino treatment is available in three colors: Silverstone, Bamboo Beige and Black.

There are two upholstery options: Full Merino, which adds leather to the upper and lower dash; the front backrests' rear sides and their storage pockets; upper

and lower door panels. This Full treatment is offered in two additional color choices. In combination with the Active Ventilated Seats Package, the seating upholstery is perforated and the leather treatment is Full.

Premium audio system standard

The X5 M and X6 M's standard equipment includes a premium 16-speaker audio system with 600 watts of amplification power and Digital Sound Processing, a system that's part of the Premium Sound Package for standard X5 and X6 models. (For a detailed description of this outstanding system, see the X5 section, **packages & options**. Beyond this, X5/X6 M customers have yet another audio choice: the Enhanced Premium system, which is part of these models' Premium Sound Package. This ultimate audiophile system is described in **BMW features**.

Safety & security

X5 M and X6 M safety and security features are identical to those of their regular-production counterparts; for a summary of these see the X6 section and **BMW features**.

¹ – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. These models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

X5 M & X6 M key features

The X5 M and X6 M models differ from their X5 & X6 counterparts in these features:

Packages & options

The list of options and packages for the X5 and X6 M models is shorter than those of their standard-production stablemates, mainly because the two M models incorporate many of the regular models' options into their standard equipment. For the five packages that are offered on the Ms, the contents also depart from those of the standard models for the same reason. This section describes all packages and stand-alone options for the two Ms, and notes differences from the standard models' equipment configurations. Unless otherwise noted, packages and options are the same for both models.

Packages

Driver Assistance Package (code ZDA)

There is no package by this name for the standard models, though it shares the rear-view camera with the X5s' and X6s' Convenience and Premium Packages. Contents are:

- **Rear- and top-view cameras**, code 3AH. As a useful adjunct to the standard Park Distance Control, this combination is described under **exterior cameras** in BMW features.
- **Automatic High Beams**, code 5AC. Described in the **BMW features** section.
- **M Head-up Display**, code 610. Like the standard HUD, it displays important driving information in color on a 6 x 3-in. field in the windshield. This special M version can display either the standard selection of information (see **BMW features**) or a special

M set. It is switched on or off in the same manner as in other Series, via a switch in the lighting control center to the left of the steering column; selection between the standard and M display sets occurs in the MDrive menu, and that selection can be captured for recall by the MDrive button.

- For the standard set, the user selects the iDrive's i-menu and chooses any or all of Navigation instructions, cruise-control set speed and current vehicle speed.
- The M set includes –
 - Dynamic engine-speed band in green, yellow and red
 - Upshift indicator (yellow and red bands illuminate progressively, entire display flashes as rpm limit is reached)
 - The gear currently engaged
 - As with the standard display, the vehicle speed.

Cold Weather Package (code ZCW)

The contents of this Package are:

- **Heated steering wheel**, code 248
- **Rear-seat heating**, code 496
- **Ski bag** with pass-through in the rear seat, code 464.

Rear Climate Package (code ZRC)

This Package includes:

- **4-zone climate control**, code 4NB. The standard dual-zone climate system is a comprehensive, highly capable system; this adds full-featured climate control for the rear-seat passengers, including –
 - Separate left/right temperature controls
 - Separate blower

- Additional air outlets in B-pillars
- Control panel with temperature and air-distribution settings, including individual heating elements in foot space
- Its own automatic program.
- **Rear side-window sunshades**, code 417; conveniently raised or lowered by hand.

Active Ventilated Seats Package (code ZAV; requires Perforated Merino leather upholstery)

Sophisticated seating features make up this package. On all models it includes:

- **Active Seat Ventilation**, code 453. Nine fans inside each front seat cushion and backrest gently blow air upward and outward through an internal web and special perforated leather to provide pleasant ventilation and help keep occupants' clothes free of perspiration. The perforated Full Merino leather upholstery that facilitates and is required with this Package is available in the same Silverstone, Bamboo Beige and Black colors as the standard Extended Merino.
- **Active Support** feature on driver's seat, code 451. Employs two stretchable hollow cavities, filled and emptied alternately with a freeze-proof liquid. This slow, gentle process creates a cyclical raising and lowering (about once a minute) of the cushion's left and right halves by about half an inch, and can be switched on or off as desired. The movement is virtually imperceptible, yet helps relieve fatigue during extended driving.

Premium Sound Package (code ZPS; requires BMW Apps)

Features an audiophile-quality sound system, specifically designed for the X5 and X6 interior and featuring the highest speaker count found on BMW models. Its contents are:

- **Enhanced Premium audio system**, code 752. This BMW M-developed system goes another step toward perfection in audiophile sound systems. For details on this amazing 16-speaker system, see **BMW features**.
- **Satellite Radio with 1-year subscription**, replacing the former 6-disc DVD changer in this package. Code 655.

Stand-alone options

Full LED headlights (both models, code 552; requires Cold Weather Package)

This cutting-edge lighting technology made its debut in the new 6 Series in '12 and is now available for the standard X6 as well as these X5-X6 M models.

Full LED adds LED-powered headlights to the standard LED luminous rings, plus wedge-shaped LED strips above them. All forward lighting functions, including turn signals and Daytime Running Lamps, are LED-sourced and the standard Adaptive feature is retained. Both the low and high beams each employ all four lights for the first time.

X5 M & X6 M key features

The X5 M and X6 M models differ from their X5 & X6 counterparts in these features:

Side-view cameras

(code 5DK, requires Driver Assistance Package)

This highly functional and valuable system provides views to the sides at the front of the vehicle that driver couldn't necessarily see directly, such as when pulling out from a driveway or parking garage into a busy street.

Comfort Access keyless entry (code 322)

Eliminates the need to activate a remote to unlock or lock the vehicle, or to insert it into the dash slot before starting the engine. This increasingly popular BMW option is described in BMW features.

High-gloss Shadowline-finished roof rails

(X5 M only, code 3MC)

A specially finished version of BMW's versatile roof rails; lends functional and aesthetic enhancement to the X5 M.

Soft-close doors

(code 323)

The user closes the door gently; an electric mechanism draws it fully in.

6-disc DVD changer

(code 696)

This feature is now available only as a stand-alone option.

BMW Apps

(code 6NR, includes Smartphone Integration)

BMW Apps facilitates controlling specific iPhone Apps via iDrive. Each time a new function or app is released, users can update and customize their vehicle's infotainment capabilities by updating their BMW Connected App or downloading a new BMW third-party app.

Further details are presented in BMW features.

5-passenger seating

(X6 M only, code 4UK)

This option replaces the standard for-two-only rear seats with a semi-bench seat contoured for three.

Rear Seat Entertainment

(code 6FF)

This option includes –

- An 8-in. monitor that can be folded away
- DVD player
- Wireless remote control
- Two headphone jacks
- Two accessory power outlets
- An infrared interface for wireless headphones.

Full Merino leather upholstery

(codes X3)

Full Merino adds leather to the upper and lower dash; the front backrests' rear sides and their storage pockets; and the upper and lower door panels. Also, two additional color choices are offered: Mugello Red (new for '13) and Cinnamon. Option 4M5, the leather-trimmed upper dash and center console, is added when Full Merino is ordered, and included in the Full Merino option price.

Perforated Full Merino leather upholstery

(codes X2, requires & is required with Active Ventilated Seats Package)

In combination with the Active Ventilated Seats Package, the seating upholstery is perforated and the leather treatment is Full. The perforated leather is available in the same three color schemes as the standard Extended treatment. Here too, the leather-

trimmed upper dash and center console are added to the order and included in the leather option price.

Alternate interior trims

(codes 4ML, 4MU & 4MY)

Three alternatives to the standard M Aluminum Shadow interior trim are available at no extra cost for personalization of the M interior to individual tastes:

- **Piano Black**, code 4ML; lives up to its name with a rich, deep luster
- **Red-brown Eucalyptus wood**, code 4MU
- **Carbon Leather**, code 4MY; a distinctive BMW trim material that's familiar from other M models.

Space-saver spare wheel and tire

(code 300)

As the X5 M and X6 M are equipped with run-flat tires, a spare is not included in the standard equipment. For customers who desire the added reassurance of an onboard spare, this option provides a 19-in. space-saver spare wheel/tire for both M models.

Priority 1 options³

M Head-up Display

(code 610)

Described under Driver Assistance Package, this special M version of BMW's much-appreciated Head-up Display is also available as this stand-alone option.

Satellite Radio with 1-year subscription

(code 655)

The system beams programming to satellites orbiting the earth; satellite-equipped vehicles receive the programming. Newly enhanced with an expanded channel selection. See the BMW features section for information on Satellite Radio.

BMW center-installed accessories

Among the accessories available for the X5 M and X6 M are:

- **Valve-stem caps** with BMW logo or lettering
- **Trailer-hitch kit**
- **Override protection**
- **Roof carrier systems** for luggage box, skis, snowboard and bicycles (X5 M)
- **Sun/wind deflector** for moonroof
- **Side-window rain deflectors**
- **Hood protector** and protective coatings
- **Nose mask**
- **Mud flaps**
- **Floormats**, various types
- **2-bicycle carrier** for cargo area (X5 M)
- **Car covers**
- **Cargo organizer box** and other cargo accessories
- **Rubber cargo mats**

3 – Priority 1 options accurate at time of publication but subject to change. For current model-specific Priority 1 standard, optional and Priority 1 equipment, see CenterNet | Automotive Sales Portal | Ordering and Pricing Guides.

Standard & optional features

2013 X5 M & X6 M

Bold within table indicates distinction of M model from X5 xDrive50i & X6 xDrive50i respectively.

Exterior design & function	X5 M	X6 M
Impact-absorbing bumpers front & rear with special M body-color cladding	S	S
Xenon Adaptive headlights with dynamic auto-leveling	S	S
Full LED headlights	OPT	OPT
Cornering lights	S	S
Automatic headlight control	S	S
Aluminum hood with power dome	NA	S
High-intensity headlight cleaning system with retractable jets	S	S
Daytime Running Lamps via luminous rings	S ¹	S ¹
Rain-sensing windshield wipers	S	S
Heated windshield-washer jets	S	S
Park Distance Control front & rear, with graphic display	S	S
Rear-view and top-view cameras	ZDA	ZDA
Ground lighting in door handles	S	S
Running boards	C	C
LED taillights	–	S
Adaptive brakelights	S	S
Choice of standard or metallic paint, including special M colors	NC	NC
High-gloss Satin Chrome Shadowline side-window trim	S	S
Rear-window wiper/washer with adjustable wiping interval	S	NA
High-gloss Shadowline roof rails (accommodate various BMW carrier systems)	OPT	NA
Rear roof spoiler with separation edges	S	–
Body-color door handles & roof-seam trim	S	S
BMW M exterior mirrors in body color/black finish	S	S
Power-fold exterior mirrors	S	S
Special BMW M exterior treatment in body color (front & rear bumper/spoiler ensembles, wheelwell flares, side sills & protective strips on doors)	S	S
Quad chrome exhaust outlets	S	S

X5 M & X6 M

Performance & efficiency	X5 M	X6 M
4.4-liter BMW M Twin Turbo/Twin Scroll V-8 engine	S	S
Engine features:		
Aluminum construction with silicon-impregnated cylinders	S	S
High Precision direct fuel injection with piezo injectors	S	S
Double VANOS ² steplessly variable valve timing	S	S
Twin-scroll twin turbochargers	S	S
Variable throttle response (2 settings)	S	S
Electronically controlled engine cooling with electric main pump & auxiliary pumps for intercooler & turbocharger bearings	S	S
Volume-controlled oil pump	S	S
Direct ignition system with knock control	S	S
Dual exhaust system with electronically controlled flaps for Sport or Efficient exhaust sound	S	S
Electronic sensing of oil level & condition	S	S
6-speed M Sport automatic transmission with Adaptive Transmission Control, Sport & Manual modes, electronic selector, steering-wheel shift paddles & Launch Control	S	S
Specially equipped & calibrated BMW M suspension system:		
Multi-link double-wishbone front suspension	S	S
4-link Integral rear suspension	S	S
Self-leveling rear air springs	S	S
Active Roll Stabilization ³	S	S
Electronic Damping Control ³	S	S
Vehicle-speed-sensitive variable-assist, variable-ratio power steering with Normal & Sport levels of power assist	S	S
4-wheel ventilated disc brakes with aluminum/cast-iron rear rotors, blue-painted 4-piston front calipers	S	S
Brake Energy Regeneration	S	S
Electromechanical parking brake & Automatic Hold	S	S

X5 M & X6 M

1 – Selectable by user, stored in Vehicle & Key Memory.

2 – VANOS = Variable NOckenwellen Steuerung = variable camshaft control, or variable valve timing.

3 – These two systems combined are called Adaptive Drive.

S – Standard

– Not applicable

ZDA – Driver Assistance Package

Standard & optional features

2013 X5 M & X6 M

Bold within table indicates distinction of M model from X5 xDrive50i & X6 xDrive50i respectively.

Performance & efficiency (cont.)	X5 M	X6 M
Dynamic Stability Control with Hill Descent Control	S	S
xDrive fulltime all-wheel drive system, specially calibrated by BMW M , electronically controlled with variable front/rear torque split & traction control	S	S
Dynamic Performance Control	S	S
20 x 10.0/20 x 11.0 alloy wheels: M V Spoke, design #299M	S	NC
M Double Spoke, design #300M	NC	S
275/40R-20 front / 315/35R-20 rear run-flat performance tires ⁴	S	S
Space-saver spare tire	OPT	OPT
Tire Pressure Monitor	S	S
Comfort & convenience	X5 M	X6 M
BMW M doorsill trim	S	S
Vehicle & Key Memory	S	S
Multi-function remote control with selective unlocking ¹ & remote liftgate release	S	S
Comfort Access keyless entry	OPT	OPT
Soft-close doors	OPT	OPT
Auto-dimming interior & exterior mirrors	S	S
Digital compass in interior mirror	S	S
Automatic High Beams	ZDA	ZDA
BMW Universal Transceiver (garage-door opener)	S	S
Courtesy lights with fade-in/fade-out feature, actuation from remote, automatic switch-on upon engine shutoff, separately controlled left/right front reading lights, front footwell lighting, entry/exit light above each rear door, 2 cargo-compartment lights in tailgate	S	S
BMW Ambiance Lighting of console area	S	S
Ground lighting, ambiance lighting of exterior door handles & interior storage compartments, illumination of interior door handles, entry/exit light in each door, left/right rear reading lights & rear footwell lighting	S	S
Power tilt/telescopic leather-wrapped M sport steering wheel with memory, automatic tilt-up & fingertip multi-function controls including MDrive button	S	S
Heated steering wheel	ZCW	ZCW
Dynamic Cruise Control	S	S

Comfort & convenience (cont.)	X5 M	X6 M
20-way power/heated Multi-Contour front seats	S	S
Active Seat Ventilation, both front seats	ZAV ⁵	ZAV ⁵
Active Comfort driver's seat	ZAV ⁵	ZAV ⁵
Knee pads on center console	S	S
M driver's footrest, aluminum-trimmed	S	S
Auto tilt-down of right-hand exterior mirror for backing up	S	S
Front center console compartment with dual lids/armrests, auxiliary audio input & accessory power outlet	S	S
Dual cupholders front & rear	S	S
Accessory electric power outlets in front ashtray, rear of center console & cargo area	S	S
Glove compartment with dual open-up/open-down, electrically operated doors; included in central locking system	S	S
BMW M instrumentation with – Illuminated white scales on speedometer & tachometer	S	S
Red pointers	S	S
Oil-temperature gauge	S	S
Variable warning segment on tachometer	S	S
LCD main & trip odometers	S	S
iDrive system with 8.8-in. high-resolution control display, GPS Navigation, MDrive menu , direct-select radio, CD, phone & Navigation keys, BMW Search, Programmable Memory Keys, Voice Command, Real Time Traffic Information & other features	S	S
M Head-up Display	ZDA/OPT⁶	ZDA/OPT⁶
Extended Merino leather upholstery, including lower dash trim, door panels & pulls, center console, head restraints & front/rear armrests	S	S

1 – Selectable by user, stored in Vehicle & Key Memory.

4 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. These models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

5 – Requires perforated Full Merino leather upholstery.

6 – Priority 1 option.

S – Standard

OPT – Optional

NC – No extra cost

– – Not applicable

ZAV – Active Ventilated Seats Package

ZCW – Cold Weather Package

ZDA – Driver Assistance Package

Standard & optional features

2013 X5 M & X6 M

Bold within table indicates distinction of M model from X5 xDrive50i & X6 xDrive50i respectively.

	X5 M	X6 M
Comfort & convenience (cont.)		
Full Merino leather upholstery; adds Nappa upper dash trim; Merino front-seat backrests & storage pockets, upper & lower door areas	OPT	OPT
Perforated Full Merino leather upholstery; same extent as Full but with perforated seat surfaces	OPT ⁷	OPT ⁷
M Aluminum Shadow interior trim	S	S
High-gloss piano Black interior trim	NC	NC
Eucalyptus red-brown wood interior trim	NC	NC
Carbon Leather interior trim	NC	NC
Anthracite-color headliner	S	S
Power windows with key-off operation; 1-touch opening & closing of all door windows, anti-trapping feature, opening from remote, closing from exterior lock	S	S
Automatic climate control with separate left/right temperature & air-distribution settings, automatic recirculation control, misting control, bi-directional solar sensor, temperature-controlled rear air outlets, toggle control for custom air-distribution setting, Max A/C function, activated-charcoal microfilter ventilation & other features	S	S
4-zone automatic climate control with rear blower, separate left/right temperature & air-distribution controls front & rear, additional air outlets in B-pillars & all features of standard system	ZRC	ZRC
Dual-panel Panoramic moonroof: front panel slides open, both panels tilt up; power interior shade, all functions 1-touch	S	NA
Power 2-way moonroof with 1-touch operation, sliding interior shade	–	S
Anti-theft AM/FM/HD/CD/MP3 premium audio system with 16 speakers including 2 subwoofers, 7-band Digital Sound Processing , Radio Data System (RDS), auxiliary audio input, weather band & FM diversity antenna system	S	S
Enhanced Premium Sound System with 16 Neodymium/Hexacone speakers, DIRAC acoustic compensation, 9-channel amplifier with increased power, Digital Sound Processing, Surround Sound & other high-end audio features (also includes all features of standard system)	ZPS	ZPS

X5 M & X6 M

	X5 M	X6 M
Comfort & convenience (cont.)		
6-disc single-feed DVD changer in glove compartment	OPT/C	OPT/C
Auxiliary audio input	S	S
iPod/USB Adapter	S	S
BMW Apps, including Smartphone Integration	OPT	OPT
Satellite Radio with 1-year subscription	ZPS/OPT ⁶	ZPS/OPT ⁶
Rear Seat Entertainment	OPT	OPT
Bluetooth mobile-device interface with high-capacity phonebook download	S	S
Dual front sun visors with illuminated mirrors	S	S
Storage compartments in all 4 doors	S	S
Seatback storage compartments	S	S
Split folding rear seats with flush-fold function	S	S
Fold-up rear center armrest	S	S
Ski bag	ZCW	ZCW
Rear-seat heating	ZCW ⁸	ZCW ⁸
Rear side-door sunshades	ZRC	ZRC
Privacy glass	S	S
Fully finished cargo area with retractable/removable cover (X5) or folding/removable cover (X6), 4 cargo tie-downs, accessory power outlet, underfloor toolkit	S	S
Dual cargo rails with 4 adjustable tie-downs, storage net & strap, multi-function hooks; lockable underfloor storage; removable rubber mats in front door bins; accessory power outlet & illumination in front center compartment (storage package)	S	S
Split tailgate with separately opening upper & lower sections; electric release from interior, exterior or remote; heated rear window & rear-window wiper/washer	S	–
Power liftgate (upper portion of tailgate)	S	–
Power liftgate with 5-position opening height, adjustable within iDrive	–	S

6 – Priority 1 option.

7 – Requires and is required with Active Ventilated Seats Package.

8 – In X5, or X6 with 5-seater option, outboard seats are heated.

S – Standard

OPT – Optional

NA – Not available

C – BMW center-installed

NC – No extra cost

– – Not applicable

ZCW – Cold Weather Package

ZDA – Driver Assistance Package

ZPS – Premium Sound Package

ZRC – Rear Climate Package

X5 M & X6 M

Standard & optional features

2013 X5 M & X6 M

Bold within table indicates distinction of M model from X5 xDrive50i & X6 xDrive50i respectively.

Safety & security	X5 M	X6 M
Dynamic Stability Control, including electronic brake proportioning, antilock braking (ABS), cornering/braking stability enhancement, M Dynamic Mode, Dynamic Brake Control, Hill Descent Control, Brake Fade Compensation, Brake Standby, Brake Drying & Automatic Hold	S	S
Rollover Protection System: senses possibility of rollover, deploys Head Protection System & safety-belt tensioners, interacts with Dynamic Stability Control	S	S
Side-view cameras	OPT	OPT
Rear- & top-view cameras	ZDA	ZDA
Dual front-impact airbag Supplementary Restraint System (SRS) with dual-threshold deployment, 2-stage Smart Airbags	S	S
3-point safety belts with force limiters at all seating positions	S	S
Front safety belts with automatic tensioners	S	S
LATCH attachments at rear outboard seating positions (for installation of child restraint seats)	S	S
Head restraints at all seating positions	S	S

Safety & security (cont.)	X5 M	X6 M
Active head restraints, front seats	S	S
Front- & rear-seat Head Protection System	S	S
Front-seat side-impact airbags, seat-mounted	S	S
Advanced Crash Safety Management for deployment of safety systems	S	S
Post-impact safety measures: Unlocking of central locking system	S	S
Switch-on of hazard flashers	S	S
Disconnect of alternator, fuel pump & starter from battery (Battery Safety Terminal)	S	S
BMW Assist, including enhanced automatic collision notification, SOS button, enhanced Roadside Assistance, TeleService, BMW Assist Safety Plan	S	S
Central locking system with selective unlocking; includes glove compartment	S	S
Enhanced Coded Driveaway Protection	S	S
Alarm system with operation from remote, interior motion detector	S	S

S – Standard
OPT – Optional
– – Not applicable

Technical specifications

2013 X5 M & X6 M

Bold within table indicates distinction of M model from X5 xDrive50i & X6 xDrive50i respectively.

General	X5 M	X6 M
Curb weight, lb.	5368	5324
Weight distribution, front/rear, %	50.7/48.3	52.4/47.6
Wheelbase, in.	115.5 ¹	
Track, front/rear, in.	65.4/65.8¹	
Length, in.	191.0	192.0
Width, in.	78.5	78.1
Height, in.	69.4	66.3
Sports Activity-specific	X5 M	X6 M
Gross Vehicle Weight Rating (GVWR), lb.	6471	6261
Onroad towing capacity, lb.: Maximum trailer gross weight, braked	6000 ¹	
Suggested max. tongue weight	600 ¹	
Payload, lb.	1102	937
Max. roof load, lb.	220	Roof rack not available
Ramp angle, deg.	16.7¹	
Front approach angle, deg.	19.8¹	
Rear departure angle, deg.	20.3¹	
Ground clearance, unloaded, in.	8.2	8.1
Body	X5 M	X6 M
Type	5-door Sports Activity Vehicle	5-door Sports Activity Coupe
Aerodynamic drag coefficient	0.38¹	
EPA size classification	SUV 4WD ¹	
Accommodations	X5 M	X6 M
Seating capacity, persons	5	4
Shoulder room, front/rear, in.	60.0/58.0	59.9/57.0
Head room, front/rear, in.	38.4/38.3	37.7/37.2
Leg room, front/rear, in.	39.9/36.6	40.4/35.9
EPA passenger volume, cu ft.	102.4	97.7
Cargo volume, cu ft.	21.9/61.8 ²	25.6/59.7 ²
Max. cargo volume, SAE/EPA measurement	75.2	59.7

Engine & electrical	X5 M	X6 M
Engine type	DOHC (4-cam) 32-valve V-8, aluminum construction with silicon-impregnated cylinders, direct fuel injection with piezo injectors, two twin-scroll turbochargers, Double VANOS ³ steplessly variable intake- & exhaust-valve timing ¹	
Bore x stroke, mm/in.	89.0 x 88.3/3.50 x 3.48 ¹	
Displacement, cc/cu in.	4395/268 ¹	
Compression ratio	9.3:1¹	
Power @ rpm, hp	555 @ 6000¹	
Torque @ rpm, lb.-ft.	500 @ 1500-5650¹	
Engine-management system	Motronic MSD 85.1 with knock control; variable valve timing, engine cooling, twin-turbo system, variable throttle response & other functions included in control strategy ¹	
Fuel requirement	Premium unleaded ¹	
Fuel capacity, U.S. gal.	22.5 ¹	
Battery capacity, amp-hr.	90 ¹	
Alternator output, amp./W	210/2940 ¹	
Drivetrain	X5 M	X6 M
Drive system	Front engine/all-wheel drive; xDrive system with electronically controlled multi-disc clutch for variable front/rear torque split; all-wheel electronic traction control ¹	
Automatic transmission	6-speed, 6 HP 26 S	
Ratios: 1st	4.17:1	
2nd	2.34:1	
3rd	1.52:1	
4th	1.14:1	
5th	0.87:1	
6th	0.69:1	
Reverse	3.40:1	
Final drive ratio	3.91:1	

1 – Specification applies to both models.
2 – DIN measurement; aft and to top of 2nd-row seats/aft of front seats, 2nd-row seating folded flush, cargo floor to ceiling.

3 – VANOS = **V**ariable **N**ockenwellen **S**teuerung = variable camshaft control, or variable valve timing.

Technical specifications

2013 X5 M & X6 M

Bold within table indicates distinction of M model from X5 xDrive50i & X6 xDrive50i respectively.

Chassis	X5 M	X6 M
Body/frame construction	Unitized steel structure ¹	
Front suspension	BMW M-calibrated multi-link double-wishbone system; upper & lower lateral links with aluminum upper links, steel double-pivot lower links, coil springs, twin-tube gas-pressure shock absorbers with standard M Electronic Damping Control & Active Roll Stabilization (Adaptive Drive) , aluminum thrust plate ¹	
Rear suspension	BMW M-calibrated 4-link Integral suspension with aluminum upper & lower arms & wheel carriers; standard self-leveling air springs, M Electronic Damping Control, Active Roll Stabilization (Adaptive Drive) ¹	
Steering type:	Rack & pinion, Servotronic vehicle-speed-sensitive power assist ¹	
Overall ratio	Mechanically variable; mean ratio is 19.5:1 ¹	
Turns, lock-to-lock	3.1 ¹	
Turning circle, ft.	42.0 ¹	
Brakes	4-wheel ventilated discs; rear rotors composite cast-iron/aluminum construction	
Diameter x thickness, mm/in.:		
Front	395 x 36/15.6 x 1.42	
Rear	385 x 24/15.2 x 0.94	
Assist	Vacuum ¹	
Cast-alloy wheels	20 x 10.0 front/20 x 11.0 rear	
Run-flat performance tires	275/40R-20 front / 315/35R-20 rear ⁴	
Stability-control system	Dynamic Stability Control (DSC), including all-speed traction (ADB-X) & stability (ASC-X) control via engine &/or brake intervention; Dynamic Traction Control, electronic brake proportioning, antilock braking (ABS), Cornering Brake Control, cornering stability enhancement, Dynamic Performance Control ⁵ , Dynamic Brake Control, Hill Descent Control, Brake Fade Compensation, Brake Standby, Brake Drying, Automatic Hold ¹	

Performance data	X5 M	X6 M
Acceleration, 0-60 mph, sec. ⁶	4.5 ¹	
Top speed, mph ⁷	155 ¹	
Fuel economy, EPA est. MPG, city/highway/combined	12/17/14 ¹	

1 – Specification applies to both models.

4 – Due to low-profile tires, please note: wheels, tires and suspension parts are more susceptible to road hazard and consequential damages. These models are not standard-equipped with a spare tire and wheel. Performance tires are not recommended for driving in snow and ice conditions.

5 – Standard on X6 35i & 50i models, not available on regular X5 models.

6 – BMW AG test results. Actual acceleration results may vary depending on specification of vehicle; road and environmental conditions; testing procedures and driving style. These results should be used for comparison only, and verification should not be attempted on public roads. BMW urges you to obey all posted speed limits and to please wear your safety belt at all times.

7 – Electronically limited.

Warranty, Roadside Assistance & Included Maintenance

BMW vs. the competition

(Data as of February 1, 2013)

	Basic (yr./mi.)	Powertrain/ major component (yr./mi.)	Corrosion perforation (yr./mi.)	Roadside Assistance (yr./mi.)	Standard included Maintenance (yr./mi.)
BMW	4/50,000	4/50,000	12/unlimited	4/unlimited	4/50,000
Acura	4/50,000	6/70,000	5/unlimited	4/50,000	NO
Audi	4/50,000	4/50,000	12/unlimited	4/unlimited	NO ¹
Cadillac	4/50,000	6/70,000	6/unlimited ²	6/70,000	NO
Chevrolet/GMC	3/36,000	5/100,000 ³	6/100,000 ⁴	5/100,000	NO
Honda	3/36,000	5/60,000	5/unlimited	OPT ⁵	NO
Infiniti	4/60,000	6/70,000	7/unlimited	4/60,000	OPT
Jaguar	4/50,000	4/50,000	4/50,000	4/50,000	Note 6
Jeep	3/36,000 ⁷	5/100,000	5/100,000 ⁸	3/36,000	NO
Land Rover	4/50,000	4/50,000	6/unlimited	4/50,000	Note 9
Lexus	4/50,000	6/70,000 ¹⁰	6/unlimited	4/unlimited	NO
Lincoln	4/50,000	6/70,000 ¹¹	5/unlimited	6/70,000	NO ¹¹
Mercedes-Benz	4/50,000	4/50,000	4/50,000	4/50,000	NO
Nissan	3/36,000	5/60,000	5/unlimited	OPT	NO
Porsche	4/50,000	4/50,000	12/unlimited ¹¹	4/50,000	NO ¹¹
Toyota	3/36,000	5/60,000 ¹²	5/unlimited	3/36,000	2/25,000
Volkswagen	3/36,000	5/60,000 ¹²	12/unlimited	3/36,000	3/36,000 ¹³
Volvo	4/50,000 ¹³	4/50,000 ¹⁴	12/unlimited	4/50,000 ¹⁴	3/36,000 ¹⁵

- 1 – Free maintenance service at 5000 miles or 12 months, whichever comes first.
- 2 – Perforation only; otherwise 4 years/50,000 miles.
- 3 – 8-year/100,000-mile battery and hybrid-component warranty, Volt and Tahoe Hybrid models.
- 4 – Perforation only; otherwise 3 years/36,000 miles.
- 5 – Standard on electric models (Fit EV).
- 6 – First maintenance service only.
- 7 – Clutch discs or modular clutch assembly; brake rotors, pads, lining and drums; wheel alignment and balance; wiper blades; covered for 12 months/12,000 miles.
- 8 – Outer panels 5/100,000; other panels 3/unlimited.

- 9 – Free maintenance service at 15,000 miles or 12 months for Range Rover, Range Rover Sport or LR4; 7500 miles or 6 months for LR2 (whichever comes first).
- 10 – Hybrid models only: 8/100,000 on hybrid components.
- 11 – Various maintenance plans available at extra cost.
- 12 – Touareg only: 10/100,000 powertrain warranty.
- 13 – Scheduled maintenance only.
- 14 – Optional Safe+Secure Plan extends coverage to 5/60,000.
- 15 – Scheduled maintenance only, limited to three services at intervals of 10,000 miles. Upgrades available.

BMW Assist™ Safety & Convenience Services

The BMW Assist system is standard on all 5, 6 and 7 Series¹ models, all X5 and X6 models including M, and Z4 35is. On other models, it is optional as follows:

- 1 Series and X1 – Technology Package or stand-alone
- 3 Series Sedans – Technology Package, stand-alone or in combination with Navigation
- 3 Series Coupes and Convertibles, Z4 28i and 35i – stand-alone or, in combination with Navigation, at no extra cost
- M3 – in combination with Navigation (Premium Package or stand-alone).

Enrollment, activation and delivery. On 2007 and later BMW Assist-equipped models, the BMW Assist Safety Plan is included as part of Ultimate Service at no additional cost for unlimited mileage and 4 years from the vehicle's in-service date. When the BMW-paid service term expires, your customer may purchase additional years of the Safety Plan for \$199 per year plus applicable taxes. The optional Convenience Plan costs \$199 per year and is available as an upgraded suite of services to Safety Plan subscribers. All subscribers must be enrolled at your center through DCSnet under Sales I BMW Assist, or services will be terminated approximately 60 days after the vehicle is delivered. Enrollment incentives may be available to BMW-center staff for selling customer-paid Safety Plan and/or Convenience Plan term extensions. If the customer declines to subscribe, your center must complete a waiver on DCSnet under Sales I BMW Assist. In all cases, the customer must sign both copies of the

printed document and be given one copy with the second copy placed in the deal jacket. During vehicle delivery, call the BMW Assist response center with the customer by pushing the SOS button to activate the service and confirm subscriber details. All services are subject to the terms of the subscriber agreement.

Availability of services by vehicle model and model year or service SOP (start of production) is summarized in the chart on the next page. On all vehicle lines where Assist is optional, the option includes Bluetooth® or Enhanced Bluetooth² hands-free calling capability via steering-wheel controls with dial-by-name or -number speech recognition and contact download; in models where the Bluetooth interface is Enhanced, the capabilities are expanded. Many popular handsets can be connected wirelessly to the system. For the current list of BMW-recommended mobile devices, visit www.bmwusa.com/bluetooth. Optional snap-in adapters are also available as BMW Accessories to allow many devices to connect physically to the vehicle's external antenna for better reception and to recharge the device's battery; recharging and wired connection to the vehicle audio system are also possible via the iPod/iUSB Adapter, which is now standard in all models.

The BMW Assist system includes GPS location capability to render safety and convenience services as detailed on following pages.

- 1 – Wherever reference is made to 2007 or later 7 Series, it also applies to ALPINA B7 models.
- 2 – Bluetooth if not standard, Enhanced Bluetooth if standard.

BMW Assist™ Safety & Convenience Services

ConnectedDrive Services	1 Series	3 Series	5 Series	6 Series	7 Series	X1	X3	X5	X6	Z4
Safety Plan										
Automatic Collision Warning (ACN)	2008	9/2003	2004	2004	1/2003	2013	2004	2004	2008	2004
Advanced Automatic Collision Notification (AACN)	3/2008	3/2008	3/2008	3/2008	3/2008	3/2008	2013	4/2008	3/2008	4/2008 2009
Flash lights/sound horn	N/A	2/2012	2/2010	7/2011	9/2008	2013	9/2010	NA	NA	NA
MyInfo	9/2008	9/2008	9/2008	9/2008	9/2008	9/2008	2013	2011	4/2008	4/2008 2009
Emergency request (SOS)	2008	9/2003	2004	2004	1/2003	2013	2004	2004	2008	2004
Enhanced Roadside Assistance	2008	9/2003	2004	2004	1/2003	2013	2004	2004	2008	2004
Door unlock	2008	9/2006	9/2006	9/2006	9/2006	9/2006	2013	2008	9/2006	2008 2008
Stolen Vehicle Recovery (SVR)	2008	10/2004	10/2004	10/2004	10/2005	2013	2011	10/2004	2008	2009
Customer Relations	2008	9/2003	2004	2004	1/2003	2013	2004	2004	2008	2004
TeleService (automatic/manual Service Request)	2008	2007	2004	2004	2006	2013	2011	2007	2008	2009
Convenience Plan										
Concierge	2008	2006	2006	2006	2006	2006	2013	2006	2006	2008 2006
Concierge POI download	2008	2007	2007	2007	2007	2007	2013	2011	2007	2008 2009
Traffic and weather	2008	9/2006	9/2006	9/2006	9/2006	9/2006	2013	9/2006	9/2006	9/2006 2009
Directions	2008	9/2006	9/2006	9/2006	9/2006	9/2006	2013	9/2006	9/2006	9/2006 2009
Critical Calling	2008	2006	2006	2006	2006	2006	2013	2006	2006	2006 2006
BMW Search (MY 2010 and earlier) or BMW Online (MY 2011 and later)	2009	2009	2010	2010	2009	2013	2011	2010	2010	2010
Remote Climate Control (RCC), ActiveHybrid Only	NA	2013	2012	NA	2013	NA	NA	NA	NA	NA
Real Time Traffic Information (RTTI); requires Navigation System option	2008	2007	9/2006	2007	2009	2013	2011	2007	2008	2009

Automatic Collision Notification.

In the event of a severe accident, the BMW Assist system automatically transmits the vehicle location and crash information to a response specialist, who will speak to the vehicle occupants to determine if they are all right, while a second specialist requests dispatch of emergency services to the vehicle location. All 2009 and later models (except 2010 and earlier X3) transmit additional vehicle data after an accident, which allows the response specialist to determine the risk of severe injury to the front-seat occupants.

Emergency Request (SOS).

By pushing the SOS button, occupants can request help in any emergency situation, major or minor. For example, the response specialist can notify emergency contacts upon request and give directions to the nearest hospital or police station.

Enhanced Roadside Assistance. In the event of a vehicle malfunction, occupants can request Roadside Assistance as follows:

- MY09 and later 1, 3 and 7 Series, M3, Z4 (all with Navigation); MY10 and later X5, X6, X5 M, X6 M, M5, M6, 5 and 6 Series; MY11 or later X3, MY13 X1 –

From main menu, select “BMW Assist” and then “Roadside Assistance” on the iDrive display.

- MY09 and later 1 and 3 Series, Z4, M3; MY13 X1 (all without Navigation) – Push the “MENU” button and select ASSIST and then RDA SST on radio display.
- MY10 and earlier X3 – press the “Wrench” button on overhead console.

The BMW Assist system will transmit the vehicle’s location and information to the BMW Assist response center, which will transfer the data and establish a voice call to BMW Roadside

Assistance for a prompt, accurate dispatch of assistance to the vehicle location.

Stolen Vehicle Recovery. If the vehicle is stolen, the primary or secondary subscriber should immediately file a police report and then notify the BMW Assist response center by calling toll-free 1-888-333-6118 to provide his/her password and police report number. The response center may be able to activate the BMW Assist system remotely to locate the vehicle and help the police recover it. This feature may even reduce the lessee/owner’s comprehensive insurance premium. It also protects

your center's inventory, demos and service loaners (see Parts Bulletin 84 04 06).

Door Unlock. If the keys are accidentally locked in the vehicle, the primary or secondary subscriber may be able to gain access to the vehicle by calling toll-free 1-888-333-6118. Once the response specialist has confirmed the subscriber's name and password, a signal is sent to the vehicle to unlock it remotely.

TeleService (Service Request). Our unique TeleService feature automatically transmits the vehicle's Key Data to the subscriber's preferred BMW center when the Condition-Based Service (CBS) sensors detect the need for upcoming service. Your BMW center's service department then contacts the customer to set up a convenient appointment to perform the needed service. Vehicle occupants can also send a service request manually on:

- MY09 and later 1, 3 and 7 Series, M3, Z4; MY13 X1 (all with Navigation); MY10 and later 5 and 6 Series, M5, M6, X5, X6, X5 M, X6 M; MY11 or later X3 – From the main menu, select "BMW Assist" and then "Service Request" on the iDrive display.
- MY09 and later 1 and 3 Series, M3, Z4; MY09-10 X3, MY13 X1 (all without Navigation) – Push the MENU button and select ASSIST and then SERV on the radio display.

MyInfo. Search for a business or street address online at Google Maps™ and click "Send." Select "BMW" for car and enter the subscriber's e-mail address on file with BMW Assist (as entered into the Electronic Subscriber

Agreement/ESA on DCSnet under Sales I BMW Assist). Then press the "Send" button. In the vehicle, the subscriber can now call the phone number directly with his/her Bluetooth®-linked mobile phone and, if the vehicle is equipped with the Navigation system, the subscriber can immediately start route guidance. The received MyInfo messages are found as follows:

- MY09 and later 1, 3 and 7 Series, Z4, M3; MY13 X1 (all with Navigation) and MY10 and later 5 and 6 Series, M5, M6, X5, X6, X5 M, X6 M – From main menu, select "BMW Assist" and then "Messages" on the iDrive display.
- MY09 5 and 6 Series, M5 and M6, X5 and X6 as well as MY08 X6 from 4/08 production – From the main menu, select "Communication," "BMW Assist" and then "MyInfo" on the iDrive display.
- MY09 and later 1 and 3 Series, Z4, M3; MY13 X1 (all without Navigation) – Push the "MENU" button and select ASSIST and then MYINF on the radio to display the phone number and address.

Customer Relations. Drivers can speak with BMW Customer Relations at the push of a button:

- MY09 and later 1, 3 and 7 Series, Z4, M3; MY13 X1 (all with Navigation); MY10 and later 5 and 6 Series, M5, M6, X5, X6, X5 M, X6 M; MY11 or later X3 – from the main menu, select "BMW Assist" and then "Customer Relations" on the iDrive display.
- MY09 and later 1 and 3 Series, Z4, M3; MY13 X1 (all without Navigation) – push the MENU

button and select ASSIST and then BMW on the radio display.

- MY10 and earlier X3 – press "SOS" or "Wrench" button on the overhead console.

BMW Assist Convenience Plan (optional at \$199/year; requires Safety Plan enrollment) includes access to:

Concierge. Need a restaurant or hotel recommendation? Looking for today's fuel price at your favorite gas station? Picking someone up at the airport and need to know the gate and arrival time? Need to know the traffic and weather conditions on your commute? Whenever your customer is on the road, the BMW Assist Concierge is there to serve as a helpful travel companion; providing answers to these questions and more 24/7. Your customers contact the Concierge as follows:

- MY09 and later 1, 3 and 7 Series, Z4, M3; MY13 X1 (all with Navigation); MY10 and later 5 and 6 Series, M5, M6, X5, X6, X5 M, X6 M; MY11 or later X3 – From the main menu, select "BMW Assist," "Concierge" and then "Start service" on the iDrive display.
- MY09 and later 1 and 3 Series, M3, Z4; MY13 X1 (all without Navigation) – Push the MENU button and select ASSIST and then CONCIÉ on the radio display. Scroll to "<Concierge>" and push the knob on the right hand of the radio to establish the call.
- MY10 and earlier X3 – push "SOS" button on the overhead console.

Directions, Traffic and Weather. Subscribers can request verbal directions to a street address or a point of interest, with traffic information along the way as well as the weather forecast locally or at their destination. Your customer initiates these services as follows:

- MY09 and later 1, 3 and 7 Series, Z4, M3; MY13 X1 (all with Navigation); all MY10 and later 5 and 6 Series, M5, M6, X5, X6, X5 M, X6 M; MY11 or later X3 – from main menu, select "BMW Assist," "Concierge" and then "Start service" on the iDrive display.
- MY09 and later 1 and 3 Series, M3, Z4; MY13 X1 (all without Navigation) – Push MENU button and select ASSIST and then CONCIÉ on the radio display. Scroll to "<Concierge>" and push the knob on the right side of the radio to establish the call.
- MY10 and earlier X3 – push the "SOS" button on the overhead console.

On '07 and later BMW Assist-equipped models produced 9/06 and later, except 2007-08 Z4 and 2010 and earlier X3, the subscriber can request to have the destination and phone number sent to his vehicle to call the number with his Bluetooth®-linked mobile phone or if the vehicle is equipped with the BMW Navigation system to immediately start route guidance.

BMW Online: Allows online access to current fuel prices, latest weather forecast, major stock indices and the powerful reach of the Google Maps™ database – delivered right inside the vehicle.

To use BMW Online, select “BMW Assist” in the main menu, then select “BMW Online” or “BMW Search” and press the iDrive controller to establish an online connection. Select what and where you want to search and then, if for example, the subscriber looks up a restaurant via Google’s Business Search, select the desired result and then select the Flag or Phone symbol for route guidance or to establish a phone call. Review bulletin V-17-1209-8408 for additional information.

Critical Calling. If the subscriber forgets to bring along a mobile phone or its battery is discharged, but urgently needs to make a phone call, simply push the SOS button. Critical Calling allows the subscriber to request up to four operator-assisted calls per year from the vehicle. The BMW Assist response specialist will connect the subscriber to the requested party within the United States for up to five minutes per call.

Expanded Bluetooth® capabilities in Bluetooth-equipped vehicles produced 9/10 or later are described in **BMW features** under the heading **Enhanced Bluetooth and USB interfaces**. The ’11 X3 was the first vehicle line to roll out this new strategy of Bluetooth/USB connectivity and enhancement of these capabilities via the BMW Assist option; in most MY2013 models where BMW Assist is optional, the original Bluetooth interface is standard.

Enroll your customers in the Convenience Plan or extend their Safety Plan term when you complete the subscriber agreement on DCSnet and you may be eligible for financial incentives (see Parts Bulletin 84 07 06). For additional information on BMW Assist, go to CenterNet | BMW | BMW Assist, visit www.bmwusa.com/connecteddrive, or call 1-888-333-6118.

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For use within the BMW Organization only. Date of issue: February 2013		Source: BMW Group University Team		Order No.: FF2013	To order: Voice: 1-909-975-5680 Website: www.bmwcenter.net.com	
All Fast Facts PDF files are available on Product Knowledge on Demand (PKoD).						