

The new BMW M5 and BMW M5 Competition. Contents.



The new BMW M5 and BMW M5 Competition.

Sharper and more compelling than ever. 2

Design.

Punchier looks with new BMW kidney grille. 3

Interior appointments.

Larger display and new operating concept. 5

Engine.

A high-revving unit with BMW M TwinPower Turbo technology. 8

Driving dynamics.

High performance meets everyday usability. 10

The new BMW M5 and BMW M5 Competition. Sharper and more compelling than ever.



The arrival of the new BMW M5 (fuel consumption combined: 10.6 – 10.5 l/100 km [26.6 – 26.9 mpg imp]; CO₂ emissions combined: 242 – 239 g/km*) and BMW M5 Competition (fuel consumption combined: 10.6 – 10.5 l/100 km [26.6 – 26.9 mpg imp]; CO₂ emissions combined: 242 – 239 g/km*) sees the high-performance sedans from BMW M GmbH returning to the stage in even sharper form. With its stylistic fine-tuning, an operating concept honed to good effect and a central display enlarged to 12.3 inches, the new BMW M5 is a more compelling proposition than ever. Featuring new shock absorbers from the BMW M8 Gran Coupé and a retuned chassis, the immensely powerful and dynamic BMW M5 Competition offers even better driveability and handling at the limit, combined with superior comfort levels. As a result, the BMW M5 and BMW M5 Competition blend a business sedan's unruffled everyday usability with unbeatable high-performance sports car dynamics to alluring effect.

Like the other models in the BMW 5 Series line-up, the new BMW M5 and BMW M5 Competition both sport an updated, new-look BMW kidney grille. The LED headlights and LED rear lights also have a sharper appearance, while the front apron – with its large air intakes – and the rear apron have been sculpted to even more dramatic effect. Inside the cabin, the larger central touchscreen display immediately catches the eye. The straightforward method of individually configuring and selecting various driving modes via two buttons in the centre console has been adopted from the BMW M8.

In the BMW M5, the 4.4-litre V8 engine with BMW M TwinPower Turbo technology generates 441 kW/600 hp, while in the BMW M5 Competition the high-revving unit produces 460 kW/625 hp. Credit for negotiating the dynamic tightrope between full everyday usability on the one hand and driving pleasure and exceptional track performance on the other goes to the M xDrive system and its centralised intelligent control approach for the Active M Differential. As an alternative to variable all-wheel-drive mode (4WD) with its rear-biased baseline setup, handling characteristics can be altered by varying degrees up to 2WD mode. This pure rear-wheel drive setting without DSC (Dynamic Stability Control) treats accomplished drivers to completely unadulterated driving pleasure.

* The fuel consumption, CO₂ emissions, electric power consumption and operating range figures were determined based on the new WLTP test cycle and have been translated back into NEDC-equivalent values in order to ensure comparability between the vehicles. With respect to these vehicles, for vehicle-related taxes or other data based (at least inter alia) on CO₂ emissions, the CO₂ values may differ from the values stated here (depending on national legislation).

Design. Punchier looks with new BMW kidney grille.



A number of judicious styling tweaks give the new BMW M5 and BMW M5 Competition an even more arresting appearance. The newly designed, larger BMW kidney grille and modified aprons at the front and rear add to the powerful, sporty aura surrounding the two high-performance sedans. A host of BMW M-specific design features clearly distinguish the highly dynamic duo from other BMW 5 Series models. The bonnet hewn from aluminium, the front side panels with the signature M gills and the roof made from carbon fibre-reinforced plastic (CFRP) create a striking, sculptural look while also producing substantial weight savings.

The BMW M insignia: double bars, gills and twin tailpipes.

The new updated BMW kidney grille featured on the BMW 5 Series has a more upright appearance and drops down further into the front apron. Its chrome surround has a one-piece design framing both halves of the kidney grille. On the BMW M5, it is further embellished by M-specific double bars and an M badge. The front apron has bolder contouring and larger air intakes at the sides that reflect less light, making them appear even darker. The large centre air intake is hexagonal in shape and incorporates the oil cooler along with the radar sensor for the Active Cruise Control (ACC) system. The new L-shaped light tubes searing in narrow streaks towards the kidney grille add a dynamic flourish to the newly designed LED headlights, giving them an even more focused, modern and precise appearance without deviating from their characteristic outline. The new option of BMW Individual lights Shadowline adds a dark-tinted accent to the Adaptive LED Headlights and BMW Laserlight. M gills on the flanks and the streamlined M exterior mirrors join the BMW kidney grille's double fins as hallmark design features of the performance versions of the BMW 5 Series. The M-specific twin tailpipes, meanwhile, now come with thinner sidewalls that create a greater sense of high-tech precision. The muscular rear apron with its large diffuser has also been restyled, as have the LED rear lights, which provide a fresh take on the familiar BMW L shape with their precise light graphic and have a three-dimensional feel to them.

BMW M5 Competition with black details.

In addition to these features, the BMW M5 Competition also comes with black styling details underlining its elite status. The BMW kidney grille surround, the mesh on the M gills, the exterior mirror caps and the additional rear spoiler

on the boot lid all have a High-gloss Black finish, and the rear apron includes Black inserts. Black M5 Competition badges adorn the kidney grille, the gills and the boot lid, while the door sill plates have an illuminated version. The tailpipes of the standard M Sport exhaust system are finished in Black Chrome.

New colours and a new wheel design.

BMW M5 and BMW M5 Competition customers can choose from a total of five new paint finishes. The two high-performance sedans are now also available in the optional Brands Hatch Grey and Motegi Red metallic. And the BMW Individual selection of paint finishes adds Tanzanite Blue II metallic, Aventurine Red II metallic and the matt finish Frozen Bluestone metallic. Finally, the Champagne Quartz metallic finish has been renamed Alvit Grey metallic. Meanwhile, light-alloy wheel options now also include the 20-inch M double-spoke items in polished Orbit Grey familiar from the BMW M8.

Interior appointments. Larger display and new operating concept.



The introduction of a new operating concept and a larger central display with a diagonal of 12.3 inches mean the cabin of the new BMW M5 and BMW M5 Competition is more driver-centric than ever. This makes it even easier to keep a clear eye on the myriad functions associated with the driving dynamic systems and BMW M xDrive all-wheel drive. Two new buttons on the centre console – like those found in the BMW M8 – provide more direct access to system settings and the various readouts in the instrument cluster and Head-Up Display. At the press of the M Mode button, the driver can toggle swiftly between the ROAD and SPORT settings. And in the BMW M5 Competition, keeping the M Mode button pressed, then confirming the prompt in the central display, engages TRACK mode.

From ROAD to SPORT at the touch of a button.

In the default ROAD setting, all the standard and optional driver assistance systems are fully activated. With the SPORT setting engaged, the active driver assistance systems (in the configuration set by the driver) only transmit alerts on speed limits and overtaking restrictions, for example. This mode allows all interventions in the braking and steering systems to be disabled, aside from those made by the collision warning with braking function and the Evasion Assistant. SPORT mode also switches both the instrument cluster and the Head-Up Display to M View. Here, only relevant information for sporty driving – i.e. an M-specific rev dial, the shift lights, a digital speed readout and the gear currently engaged – is shown in the 12.3-inch instrument display. Drivers can also choose to view additional information on coolant temperature, charge pressure, tyre condition and longitudinal/lateral acceleration in the right- and left-hand areas of the instrument cluster.

Two viewing modes in the Head-Up Display.

When M View is active, a prominently positioned rev counter with coloured warning zones appears in the Head-Up Display, while shift lights indicate the ideal time to change gear. Navigation instructions, distance warnings, the current gear, the vehicle speed, and any speed limits or overtaking restrictions detected by the Speed Limit Info system are also shown here. Pressing the M Mode button again returns the driver to the default ROAD mode. The Head-Up Display then reverts to the normal BMW 5 Series layout with M-specific typography, and the instrument display shows a new-look standard view. This comprises two large animated graphics – whose shape

resembles the BMW kidney grille – for road speed and engine speed, encircling a digital speed display and large readouts for the gear currently selected and Drivelogic setting. The shift lights appear in the centre when the Head-Up Display is switched off, and there is an oil temperature gauge on the right-hand edge. The settings for the driver assistance systems and M xDrive system can also be indicated with the help of separate widgets. Switching between the standard view and M View is accompanied by an animation.

Setup button takes drivers straight to the configuration menu.

Pressing the Setup button positioned above the M Mode button takes the driver straight to the central display's menu for programming an individual configuration for the powertrain and chassis options – and thereby tailoring the car's setup to the driving situation at hand and their personal preferences. Simplified operation using the touchscreen display or iDrive Controller makes it easy for the driver to choose different settings for the engine, suspension, steering and M xDrive system. The two red-painted M1 and M2 buttons next to the gearshift paddles on the M multifunction steering wheel make it possible to change quickly between setups. They allow drivers to configure two individual setups, comprising their choice of M xDrive, DSC, engine, transmission, damper and steering characteristics, as well as the appearance of M View in the Head-Up Display.

Undiluted M feeling in TRACK mode.

The BMW M5 Competition model's TRACK mode is designed exclusively for use on race circuits and deactivates all the comfort and safety functions of the driver assistance systems. To focus the driver's attention even more intently on the road ahead, the audio system is also muted and the central display switched off. The result is a racing-car-inspired, ultra-pure distillation of M feeling. The instrument cluster switches to M View, while the Head-Up Display dispenses with readouts from the driver assistance systems. Automatic activation of the hazard warning lights in response to emergency braking is suppressed and the collision warning system is also deactivated. Pressing the M Mode button again exits TRACK mode and returns to the ROAD setting.

M Sport seats in Merino leather upholstery.

Both the driver and front passenger in the BMW M5 and BMW M5 Competition are welcomed by standard M Sport seats with the M logo embossed into the head restraint. The seats are heated and offer electric adjustment of various settings, including the seat cushion depth, plus pneumatic backrest width adjustment to provide optimum lateral support under hard driving and a memory function for

the driver's seat. There is also the option of M multifunction seats with integral head restraints, an illuminated M5 logo and extended functions. With the thicker side bolsters of the seat surface and backrest, they offer even greater lateral support and yet more support in the shoulder area. The pair of high-performance sedans come with Merino leather trim as standard, with Merino full leather trim in Black/Midrand Beige now also available as an exclusive option for the BMW M5 Competition. A Harman Kardon sound system delivers superb listening pleasure as standard.

Wide choice of driver assistance systems.

All of the driver assistance systems and features familiar from the BMW 5 Series are also available for the BMW M5 and BMW M5 Competition. The Driving Assistant Professional, the Traffic jam assistant and, in selected markets, remote-control engine starting are just some of the items to be found on the options list. If the Comfort Access option is specified, the BMW Digital Key allows the car to be locked and unlocked from selected models of smartphone using Near Field Communication (NFC) technology. Holding the phone up to the door handle opens the car – even if the smartphone battery is dead. The driver can share the BMW Digital Key with up to five other people.

The engine.

A high-revving unit with BMW M TwinPower Turbo technology.



The heartbeat of the BMW M5 and BMW M5 Competition is provided by a 4.4-litre V8 engine with M TwinPower Turbo technology. The eight-cylinder unit goes about its business in racing-car-derived, high-revving style, which means with imposing muscularity and supreme power delivery. In the BMW M5, the engine develops maximum output of 441 kW/600 hp at 6,000 rpm. Peak torque of 750 Nm (553 lb-ft) arrives as low down as 1,800 rpm and is sustained at this elevated level all the way to 5,600 rpm. Meanwhile, in the BMW M5 Competition, detail improvements raise maximum output to 460 kW/625 hp at 6,000 rpm. Peak torque (likewise 750 Nm [553 lb-ft]) is on tap between 1,800 and 5,860 rpm – 260 rpm higher than in the BMW M5. The characteristics of the V8 can be altered at the touch of a button from the basic EFFICIENT mode to SPORT and SPORT+, the latter two further quickening the engine's response to movements of the accelerator. The BMW M5 sprints from 0 – 100 km/h (62 mph) in 3.4 seconds, putting it firmly into super-sports car territory. And it only requires 11.1 seconds to power to 200 km/h (124 mph) from rest. The BMW M5 Competition completes both tasks a fraction more quickly: 100 km/h (62 mph) is up in 3.3 seconds, 200 km/h (124 mph) in 10.8 seconds. The top speed of the BMW M5 and BMW M5 Competition is 250 km/h (155 mph) – or 305 km/h (189 mph) with the optional M Driver's Package specified.

Oil supply system designed for track driving.

The V8 engine utilises optimised turbochargers and maximum injection pressure of 350 bar. This allows shorter injection times and improved atomisation of fuel, for faster engine response as well as more efficient mixture preparation. Improvements have also been made to lubrication and cooling, including an oil pan with a small front sump and an indirect charge air cooling system, which is extremely effective despite taking up little space. The oil supply system uses a fully variable, map-controlled pump and has been designed for outings on the race track, where it can handle very high levels of longitudinal and lateral acceleration.

Flap-controlled exhaust systems deliver a high-impact soundtrack.

The flap-controlled dual-branch exhaust system of the BMW M5 enables its soundtrack to be varied via the different engine modes, while the M Sound Control button allows drivers to soften their car's acoustic presence.

The BMW M5 Competition is fitted as standard with the likewise dual-branch and flap-controlled M Sport exhaust system, which develops an extremely distinctive and even sportier note. The soundtrack produced in SPORT+ mode is even more forceful, although a much more understated engine note can also be summoned at a touch of the M Sound Control button.

Eight-speed M Steptronic transmission with Drivelogic.

In both its setup and functionality, the eight-speed M Steptronic transmission is hardwired to give BMW M5 drivers a dynamically immersive experience at the wheel. It enables extraordinarily short shift times and fast, precise responses to every nudge of the accelerator. All of which means it translates the engine's power instantaneously into performance on the road. The Drivelogic rocker switch on the gear selector allows three modes for efficient, sporty or dynamically intense track driving with extremely rapid gearshifts. The driver can use both the selector lever and the shift paddles on the steering wheel to take control of gear changes manually. In manual mode, they can also execute sporty multiple downshifts to the lowest available gear, for instance when braking into tight corners. And there are no automatic upshifts when the engine is revved to the limit. A transmission oil cooler ensures the transmission works flawlessly and with moderate operating temperatures, even when the car is put through its paces on the track.

Bespoke engine mounting for the BMW M5 Competition.

One special feature of the BMW M5 Competition is its bespoke engine mounts, which are stiffer than in the BMW M5; its spring rate of 900 N/mm compares with 580 N/mm in the non-Competition car. The drive unit's firmer connection to the vehicle's structure is clearly perceptible, resulting in even more rapid engine response and immediate transmission of its power to the drivetrain. The experience is further enhanced by bringing the V8's unmistakable aural properties into the cabin to even more arresting effect. The car also turns into corners with noticeably greater directness and precision on account of the extra stiffness in the mounts.

Driving dynamics. High performance meets everyday usability.



Dynamic ability of the very highest order – up to and including a gift for fully committed track driving – combines with everyday usability and unshakable poise in all driving conditions to create the blueprint for the BMW M5. In the sixth generation of the high-performance sedan, BMW M GmbH has employed the rear-wheel-biased M xDrive intelligent all-wheel-drive system for the first time alongside extensive M-specific chassis modifications and special setup options for the Variable Damper Control (VDC) system and M Servotronic steering. All of these components can also be adjusted in their responses in a variety of ways, enabling drivers to tailor their BMW M5 to their personal preferences and the driving situation at hand. The BMW M5 Competition's setup benefits from further upgrades which take into account the car's extra power, and its talents are showcased most prominently on the race track. New shock absorbers from the BMW M8 Gran Coupé both improve on-the-limit handling and bring extra comfort to the driving experience.

M xDrive with rear-wheel bias ensures exceptional agility.

The centrally controlled interaction between the M xDrive all-wheel-drive system and the Active M Differential is largely responsible for channelling the engine's output to the car's wheels without any loss of power en route – and for generating just enough extra traction to achieve acceleration times worthy of a super-sports car. The engine's torque is distributed between the front and rear wheels with creamy smoothness and fully variably by means of the transfer case's electronically controlled multi-plate clutch, before the Active M Differential splits it again between the two rear wheels, as appropriate. The rear-wheel-biased setup of M xDrive imbues the BMW M5 with standout agility. In addition, the driver can vary the distribution of power between front and rear wheels themselves, and also adjust the responses of the Dynamic Stability Control (DSC) system. M Dynamic Mode (MDM) holds the key to controlled drifts and particularly playful handling, and offers another three modes (with DSC deactivated) which have been optimised for track driving: as well as 4WD and 4WD Sport, drivers also have the choice of 2WD mode for pure rear-wheel drive. This allows experienced drivers to revel in the experience offered by past generations of the BMW M5 – i.e. handling in its purest form, with no control systems holding the car back. Underpinning the precisely controllable handling of the BMW M5 at all times, even in extremely dynamic driving situations, are the M-specific kinematics and

elastokinematics of the high-performance sedan's double-wishbone front suspension and five-link rear suspension. They deliver neutral steering behaviour and a linear build-up of lateral force up to the car's dynamic limits. The standard-specification tyres (front: 275/40 R 19, rear: 285/40 R 19) have been developed specifically for the BMW M5. They are fitted to five-double-spoke cast light-alloy wheels in polished Orbit Grey (front: 9.5 J x 19, rear: 10.5 J x 19). Available as an option are 20-inch wheels (front: 9.5 J x 20, rear: 10.5 J x 20) with 275/35 R 20 tyres at the front and 285/35 R 20 items for the rear.

Configurable dampers and steering.

Variable Damper Control (VDC) and M Servotronic steering also provide extensive scope for configuration. The electronically controlled VDC offers three driving modes – COMFORT, SPORT and SPORT+. COMFORT mode focuses on a recipe for broad-based everyday usability and familiar M comfort, combined with standout dynamics. SPORT mode, meanwhile, reduces wheel and body movements to create more direct contact with the road, but still has sufficient comfort dialled in. This setting is suited perfectly for sporty driving on country roads and offers the ideal handling profile for laps of the Nürburgring-Nordschleife. SPORT+ mode maximises dynamic performance on smooth asphalt, with wheel and body movements minimised. Here, the driver can sense the connection with the road surface acutely, which means it is the best setting for pushing the boundaries on permanent race tracks such as the Hockenheimring or Sachsenring. The M Servotronic steering gives drivers the choice of COMFORT mode for greater ease of use and lightness – in town driving and on short journeys, for example – and SPORT mode. Here, greater steering force is required and feedback through the wheel increases noticeably, making it the go-to option for sporty driving in everyday conditions or when exploring the car's dynamic limit is on the agenda.

New dampers for the BMW M5 Competition.

The BMW M5 Competition has a specially tuned and even stiffer chassis, and now also benefits from experience gained in the development of the new BMW M8 Gran Coupé, whose shock absorbers have been carried over. The damper control system was adapted accordingly and fully recalibrated, which has led to an increase in comfort in high-speed motorway driving, in particular. Bumps and ruts in the road surface are passed through the body – and therefore to the passengers – to a far lesser degree. And this is achieved without blunting the car's sporting edge and precision at high or low speeds. In fact, reduced fluctuations in wheel loads have resulted in significantly improved handling at the limit. And that means even more intuitive driveability in everyday use and better handling on the track.

Ride height lowered by seven millimetres; 20-inch wheels.

The BMW M5 Competition rides seven millimetres lower to the ground than the BMW M5 and includes other well-conceived tweaks to the suspension and springs. The increased camber at the front axle enhances the car's ability to absorb lateral forces through high-speed corners. Fitting the toe links with ball joints instead of rubber mounts has resulted in even more precise wheel guidance at the rear axle. And the rear anti-roll bar also has a firmer spring rate, causing the body roll that occurs through high-speed corners to be distributed with a pronounced rear bias. The modified mounting for the front-axle anti-roll bar combines with ten per cent stiffer springs at the front and rear axles to produce a firmer ride, which also has a positive impact on steering response. Plus, shorter auxiliary springs reduce fluctuation in wheel loads. The BMW M5 Competition is fitted with forged, bi-colour, 20-inch M light-alloy wheels in Y-spoke design (front: 9.5 J x 20, rear: 10.5 J x 20) and mixed-size tyres (front: 275/35 R 20, rear: 285/35 R 20).

M Compound brakes fitted as standard.

The BMW M5 and BMW M5 Competition are equipped as standard with M Compound brakes. Being significantly lighter than conventional cast iron items, these have the distinct benefit of reducing unsprung mass. At the front, the braking force is applied to perforated, inner-vented brake discs by six-piston fixed callipers featuring the M logo. Deceleration at the rear is provided by single-piston floating-calliper brakes with an integrated parking brake. Instead of the standard blue-painted finish, here the callipers can now be painted in High-gloss Black or High-gloss Red as an option. The optional M Carbon ceramic brakes are recognisable from the gold-coloured callipers with M logo (six-piston fixed callipers at the front, single-piston floating callipers at the rear). They are 23 kilograms lighter and are distinguished by a further reduction in unsprung and rotating masses. This brings many benefits, including enhanced driving dynamics and suspension comfort. The M carbon-ceramic brakes provide even better braking performance than the M Compound brakes, as well as further improved fade resistance and even higher thermal stability. What is more, they withstand wear exceptionally well.

M Performance Parts include coilover suspension and carbon-fibre components.

The M Performance chassis from the extensive M Performance Parts range brings the BMW M5 and BMW M5 Competition an even sportier and more individual setup. The drop in ride height of between 5 and 20 millimetres enabled by the coilover suspension results in a lower centre of gravity, which reduces body roll and unlocks the door to higher cornering speeds. Damper adjustment is independent for compression and rebound.

Among the other items available from the M Performance Parts range for the pair of high-performance sedans are 20-inch M Performance forged wheels with Y-spokes in Ferric Grey matt, and exclusive aerodynamic components made from high-quality carbon fibre. These include the M Performance Front attachment, M Performance Front splitter, M Performance Rear spoiler Pro and M Performance Rear diffuser.

Prices in Germany will start at €120,900 for the BMW M5 and €129,900 for the BMW M5 Competition.

The fuel consumption and CO₂ emissions figures are determined according to the European Regulation (EC) 715/2007 in the version applicable. The figures refer to a vehicle with basic configuration in Germany. The range shown considers the different sizes of the selected wheels/tyres and the selected items of optional equipment, and may vary during configuration.

The values are based on the new WLTP test cycle and are translated back into NEDC-equivalent values in order to ensure comparability between the vehicles. With respect to these vehicles, for vehicle-related taxes or other duties based (at least inter alia) on CO₂ emissions, the CO₂ values may differ from the values stated here (depending on national legislation).

Further information on official fuel consumption figures and specific CO₂ emission values of new passenger cars is included in the following guideline: 'Leitfaden über den Kraftstoffverbrauch, die CO₂ Emissionen und den Stromverbrauch neuer Personenkraftwagen' (Guide to the fuel economy, CO₂ emissions and electric power consumption of new passenger cars), which can be obtained free of charge from all dealerships, from Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1. 73760 Ostfildern-Scharnhausen and at <https://www.dat.de/co2/>.