

# The all-new BMW M5. Short version.



The BMW M5 is powering into a new era. With 40 years of history under its belt, the legendary high-performance sedan is entering its seventh model generation. And the executive model from BMW M GmbH now has an electrified drive system for the first time. A model-specific version of the M HYBRID system gives the new BMW M5 (energy consumption, weighted, combined: 1,7 – 1,6 l/100 km [166.2 – 176.6 mpg imp] and 25,5 – 25,0 kWh/100 km according to WLTP; CO<sub>2</sub> emissions, weighted, combined: 39 – 37 g/km according to WLTP; fuel consumption with discharged battery: 10,3 – 10,2 l/100 km [27.4 – 27.7 mpg imp] according to WLTP; CO<sub>2</sub> classes: weighted, combined B, with discharged battery G) maximum output of 535 kW/727 hp and peak system torque of 1,000 Nm (737 lb-ft). The combination of a high-revving V8 engine with M TwinPower Turbo technology and an electric motor, plus power transfer courtesy of an eight-speed M Steptronic transmission and M xDrive all-wheel drive, enables acceleration of 0 to 100 km/h (62 mph) in 3.5 seconds.

The imposing power delivery and emotionally engaging performance experience served up by the new BMW M5 are accompanied by a new interpretation of the high-performance car design for which M is renowned. Prominent wheel arch and side skirt extensions, the sculptural front apron and model-specific surfacing around the C-pillar – including an embossed “M5” logo for the Hofmeister kink – give the car an athletic appearance that helps to differentiate it more clearly than ever from the BMW 5 Series Sedan. At the same time, an unusually high proportion of surfaces painted in body colour create a puristic appearance with stylish references to its superior dynamic talents.

As such, the exterior design – like the ambience of the luxurious interior, which is enhanced with M-specific features – accentuates the multi-layered character of the new BMW M5. Its sense of poise and assurance is fuelled by vast reserves of power that can be summoned at any time. Kept discreetly in reserve during relaxed, electric-only cruises, this performance comes vividly to the fore as the BMW M5 reveals the “sporty sedan” side to its personality over longer distances – and is unleashed in full during sessions on the track.

The M HYBRID system, plus power transmission and chassis technology tuned to its specific performance characteristics, give the new BMW M5 transverse and longitudinal dynamics unparalleled in this market segment. Together with its similarly outstanding elasticity, the new BMW M5 takes M performance into a new dimension.

The world premiere of the new BMW M5 will take place at the Goodwood Festival of Speed in England in July 2024, with production at BMW Group Plant Dingolfing beginning the same month. The worldwide market launch of the new BMW M5 will start in November 2024 and be accompanied by the introduction of the new BMW M5 Touring at the same time. The most important sales regions for the high-performance sedan are North America and Europe. The USA is the single biggest individual market by some distance, followed by Great Britain, Germany, South Korea, China, Japan and Canada.

**M HYBRID drive system in the new BMW M5: intoxicating performance, impressive electric range.**

The M HYBRID drive system in the new BMW M5 brings a 4.4-litre V8 engine with classical high-revving character together with an electric motor, whose performance characteristics are tuned specifically for the BMW M5 and which is integrated into the eight-speed M Steptronic transmission. The combustion engine benefits from cutting-edge M TwinPower Turbo technology, a cross-bank exhaust manifold and optimised oil separation. It develops maximum output of 430 kW/585 hp and peak torque of 750 Nm (553 lb-ft). The maximum output of the electric motor is 145 kW/197 hp. It has nominal torque of 280 Nm (206 lb-ft), but a pre-gearing stage allows effective torque at the transmission input to be increased to 450 Nm (332 lb-ft).

The combination of combustion engine and electric motor adheres to the same principle as the drive system in the BMW M Hybrid V8 endurance racing machine. The ability of the electric motor to generate its power instantly and the intelligently controlled interplay of the combustion engine and motor ensure the M HYBRID system responds without delay to every movement of the accelerator. The linear power delivery typical of BMW M models is found here in particularly compelling form. The eight-cylinder engine can spin to a maximum 7,200 rpm as the new BMW M5 treats its driver to the sensation of relentless power development into the upper reaches of the load and speed ranges. Top speed is limited to 250 km/h (155 mph) as standard, but the limiter can be raised to 305 km/h (189 mph) if the optional M Driver's Package is specified.

The sports exhaust system of the new BMW M5 underscores the performance experience with a multi-faceted and emotionally enthralling engine note. It features electrically controlled, continuously adjustable flaps and the two pairs of dual tailpipes familiar from other M models, each with 100-millimetre trims in Black Chrome.

Providing an acoustic accompaniment to the power delivery of the electric motor is BMW IconicSounds Electric. This M-specific electric drive sound provides authentic responses to movements of the accelerator when the car is operating in all-electric mode. With the relevant drive system configuration, it also generates an engaging track to highlight the arrival of extra electric power on top of the output from the V8 engine.

In all-electric operating mode, the new BMW M5 can hit speeds of up to 140 km/h (87 mph). The high-voltage battery located low in the car's underbody has 18.6 kWh of usable energy, enabling an electric range of 67 – 69 kilometres (42 – 43 miles) in the WLTP cycle, which is unmatched by any rival. The Combined Charging Unit of the new BMW M5 allows AC charging at up to 7.4 kW.

The power generated by the combustion engine and electric motor is channelled to the road via the all-wheel-drive system M xDrive, whose rear-biased setup is particularly pronounced in 4WD Sport mode. However, the driver can also select 2WD mode. This sends drive exclusively to the rear wheels with the DSC (Dynamic Stability Control) system switched off, which will appeal to experienced drivers who prefer a performance experience of the pure-bred variety. This further developed iteration of M xDrive – like the electronically controlled Active M Differential at the rear axle – is tailored specially to the performance characteristics of the M HYBRID drive system.

### **Sophisticated chassis technology with M-specific tuning.**

The chassis design of the new BMW M5 comprises a double-wishbone front axle and a five-link rear axle with bespoke kinematics and elastokinematics, plus a host of other specially tuned components. The electrically assisted rack-and-pinion steering with M Servotronic and variable steering ratio has a rigid connection to the front axle subframe to ensure optimal feedback from the road and a high degree of directional accuracy. In conjunction with the wide tracks and the excellent torsional rigidity of the body and chassis mountings, this combination produces the handling attributes for which BMW M models are renowned, shaped by agility, precision and the linear build-up of lateral forces when the driver is pushing on.

Also fitted as standard are adaptive M suspension with electronically controlled dampers and Integral Active Steering, which steers the rear wheels by up to 1.5 degrees. M-specific tuning, the individually selectable settings and the ability to adjust the dampers at each wheel individually optimise the body's connection to the road and maximise the car's spread of talents – from everyday driving comfort to race-ready dynamic prowess. Turning the rear wheels as required improves directional stability at high speed, as well as agility and comfort when manoeuvring.

Traction, agility and directional stability all benefit from near-actuator wheel slip limitation and the networking of all control systems within the integrated transverse dynamics management setup. Both the standard M Compound brakes and optional M Carbon ceramic brakes combine with an integrated braking system that presents the driver with two pedal feel settings. M light-alloy wheels (20-inch at the front axle, 21-inch at the rear) come as standard and are fitted with high-performance tyres.

#### **Assistance systems for assured and comfortable driving.**

A much wider selection of standard and optional systems for automated driving and parking than was offered for the predecessor model takes assurance and comfort in day-to-day driving to another new level. Standard specification for the new BMW M5 brings features such as front collision warning, Lane Departure Warning including lane return with steering assistance, the Evasion Assistant, the Attentiveness Assistant and the Speed Limit Info system. The optional Driving Assistant Professional adds Active Cruise Control with Stop & Go function together with tech including the Steering and Lane Control Assistant, traffic light detection, automatic Speed Limit Assist and Active Navigation.

The new BMW M5 is equipped as standard with the Parking Assistant including Reversing Assistant. Meanwhile, the optional Parking Assistant Professional allows automated parking and manoeuvring over a distance of up to 200 metres to be controlled from inside the car or by smartphone from outside the car.

#### **Fresh scope for adjusting the driving experience to personal taste.**

The control panel on the centre console of the new BMW M5 houses a model-specific composition of buttons which can be used to tailor the driving experience to individual preferences in a variety of ways. The Setup button provides direct access to the configuration of the drive

system, Drivelogic, chassis, steering, braking system and M xDrive, as well as the intensity of brake energy recuperation. Two overall vehicle setups can be stored and selected using the M buttons on the steering wheel. The Launch Control function is available in all the M Setup menu settings with the exception of the M xDrive system's 2WD mode.

Pushing the DSC button activates M Dynamic Mode, which raises the DSC intervention thresholds when it comes to applying brake inputs and reducing engine output. It is also possible to switch DSC off completely. Another button allows the driver to select M Mode. When they switch from the default ROAD setting to SPORT, interventions from the driver assistance systems are restricted to just the essential functions required for sporty driving, as is the content shown in the information display. If the customer specifies the optional M Drive Professional, they can also make use of TRACK mode. Other features of M Drive Professional include the M Laptimer and the Boost Control function, which maximises longitudinal dynamics when executing mid-range sprints and overtaking manoeuvres.

The operating mode of the M HYBRID system can also be adjusted as desired. The new M Hybrid button allows the driver to choose between HYBRID mode – for intelligently controlled interplay between the combustion engine and electric motor to maximise either efficiency or performance, depending on the driving situation – and the ELECTRIC setting, in which the combustion engine is only brought into play by accelerator kickdown or using the gearshift paddles. eCONTROL mode is used for effective brake energy recuperation and maintaining battery charge at a constant level. And M Drive Professional adds DYNAMIC and DYNAMIC PLUS modes to the mix, which prime the drive system and cooling system to keep output at a constantly high level or generate short bursts of maximum output during committed track driving.

**Progressive sports car cockpit, M-specific displays on the BMW Curved Display, exclusive ambience.**

As well as the M-specific control panel on the centre console, the progressive sports car cockpit of the new BMW M5 also contains a newly designed, flat-bottomed M leather steering wheel with illuminated M buttons, M multifunction seats with a wide range of electric adjustment and the BMW Curved Display which, like the standard BMW Head-Up Display, includes M-specific content. The standard BMW Live Cockpit Professional also brings the BMW Maps navigation system and the Augmented View function on the control display.

An upgraded version of BMW iDrive features as standard in the new BMW M5. It is based on BMW Operating System 8.5 and designed squarely for use via touch control and natural speech. The digital tech now also covers the controls for the climate control functions. Temperature selection, airflow intensity, seat heating and – if specified – the steering wheel heating can now be controlled by touch via a menu item in the lower section of the control display or by voice command.

Also playing their part in the exclusive interior ambience are the standard Merino leather trim, the BMW Interaction Bar, four-zone air conditioning, heated front seats, ambient lighting with M-specific interior lighting including Welcome Animation, and the panoramic glass sunroof. And standard specification for the new BMW M5 also provides customers with the Bowers & Wilkins Surround Sound System, a wireless charging tray, Comfort Access, an alarm system, automatic tailgate operation and the charging cable Professional.

Among the items on the options list are the M Carbon exterior package, an Alcantara headliner, steering wheel heating, active seat ventilation and a trailer tow hitch. Model-specific BMW M Performance Parts will also be offered for the new BMW M5 from launch. The selection includes M Performance forged light-alloy wheels and exterior components made from carbon-fibre-reinforced plastic (CFRP).

All figures relating to performance, fuel/electric power consumption, emissions and range are provisional.

All of the stated model variants, equipment features, technical data and fuel/electric power consumption and emissions figures relate to the offering in the German market, if the respective vehicle is available there. These may vary for other markets. Dimensions and measurements refer to vehicles with basic configuration in Germany. These may vary depending on the wheel/tyre size and items of optional equipment selected.

Official fuel consumption, CO<sub>2</sub> emissions, electric power consumption and electric range figures were determined based on the prescribed measurement procedure in accordance with European Regulation (EC) 2007/715 in the version applicable. Where a range is shown, the WLTP figures take into account the impact of any optional extras.

Further information on the WLTP and measurement procedure can also be found at [www.bmw.de/wltp](http://www.bmw.de/wltp).