

The new BMW 5 Series (G30 LCI). Product Press Kit.



AK-44-IN2
10 June 2021

**BMW
GROUP**



The new BMW 5 Series.



Model variants at launch	2
Vehicle concept and design.	
Increased presence and exquisite sporting style.....	3
Interior and equipment.	
Shining a brighter spotlight on driving pleasure and comfort.....	6
Drive systems, transmissions.	
Efficient technology bring greater efficiency.....	7
Chassis technology.	
The finely judged balance of agility and ride comfort.	9
Driver assistance systems.	
The next steps on the road to automated driving.....	11
Display and operating system.	
The intelligent car with total connectivity.....	12
Lightweight engineering and safety.	
Lower weight, better protection.	15
The model and the market.	
The generation of a highly successful family.....	16
Dimensions.	18



The new BMW 5 Series.

Model variants at launch.

BMW 530i: Four-cylinder petrol engine, eight-speed Steptronic transmission.

Capacity: 1,998cc.

Output: 185 kW/252 hp at 5,200 – 6,500 rpm.

Maximum torque: 350 Nm at 1,450 – 4,800 rpm.

Acceleration (0–100 km/h): 6.2 sec.

Fuel consumption, combined: 15.56 kmpl

CO2 emissions, combined: 152.92 g/km

BMW 520d: Four-cylinder diesel engine, eight-speed Steptronic transmission

Capacity: 1,995cc.

Output: 140 kW/190 hp at 4,000 rpm.

Maximum torque: 400 Nm at 1,750 – 2,500 rpm.

Acceleration (0–100 km/h): 7.5 sec.

Fuel consumption, combined: 22.48 kmpl

CO2 emissions, combined: 117.34g/km

BMW 530d: Six-cylinder diesel engine, eight-speed Steptronic transmission.

Capacity: 2,993cc.

Output: 195 kW/265 hp at 4,000 rpm.

Maximum torque: 620 Nm at 2,000 – 2,500 rpm.

Acceleration (0–100 km/h): 5.7sec.

Fuel consumption, combined: 18.59 kmpl

CO2 emissions, combined: 141.6 g/km



The new BMW 5 Series.

Vehicle concept and design.

Increased presence and exquisite sporting style.

The new BMW 5 Series delivers elegance with an assured sense of style and sporting appeal. A heightened sense of outward authority, an interior brimming with detail refinements, the efficiency-enhancing influence of electrification and cutting-edge innovations in the areas of driver assistance, control/operation and connectivity help the new BMW 5 Series to cement its leading position at the premium end of the executive class.

Their eye-catching design aesthetic, hallmark BMW driving pleasure, trailblazing driver assistance technologies and ground-breaking innovations in the cockpit imbue the car with standout appeal. And now, with a new wave of carefully judged optimisations carried out in these key areas, all the necessary pieces are in place to extend the illustrious history of the sporty business sedan.

A success story dating back to 1972.

The BMW 5 Series has the richest tradition of any model produced by the Munich-based premium carmaker. Presented for the first time in 1972, the BMW 5 Series Sedan is now in its seventh model generation and enjoys global popularity as an executive model for discerning customers. A long list of accolades, including Car of the Year, class winner in the Best Cars Award, Executive Car of the Year, and winner of the Connected Car Awards, reflects the outstanding qualities of the current model generation.

From BMW Plant Dingolfing to the world.

The new BMW 5 Series, like every one of its predecessors since 1973, has been produced primarily at BMW Plant Dingolfing in Bavaria – the Group's centre of excellence to produce large BMW models. Among the other cars manufactured here are the BMW 7 Series and BMW 8 Series luxury sports car. The new BMW 5 Series Sedan will also be built by production partner Magna Steyr in Graz, Austria.

Stepping up the road presence: the new exterior.

The exterior design of the BMW 5 Series is headlined by sporting grace and clean surfaces. Precise modifications showcase the Sedan's presence and exquisite sporting style even more vividly. Large, tautly drawn surfaces at the front and rear, the bold BMW kidney grille and new headlights and rear lights ensure the 5 Series exudes considerable visual impact.

Slight increase in vehicle length, but proportions otherwise unchanged.

With their long bonnet, set-back passenger compartment, short overhangs, a long wheelbase and wide tracks, the familiar BMW proportions of the new BMW 5 Series Sedan make no secret of the cars' dynamic character. Their width, height and wheelbase are unchanged, but the extra 27 millimeters underscore the sweeping elegance on display.

Leading the way once again for aerodynamic drag.

With a drag coefficient as low as $C_d = 0.23$ in the case of the Sedan, the new BMW 5 Series continues to set the standard for aerodynamics in its segment. Among the key contributors here are the sophisticated design of the cars' trim moldings and the active air flap control system for the radiator.



The new BMW 5 Series.

Newly designed front end: taut surfaces, bold kidney grille, focused look.

The most distinctive features of the revised front end include the bold BMW kidney grille with modified contouring and the headlights with new light graphic. Generously sized, tightly sculpted surfaces in body color and vertical air intakes on either side of the front apron underscore the exterior's elegant interplay of lines and give the car an even more expressive appearance.

Modern evolution of the iconic BMW kidney grille.

The prominent kidney grille immediately catches the eye with a new, octagonal form. This modern interpretation of the BMW icon adds extra width and height, drops down further into the front apron and is framed by a single-piece surround. Also playing their part in the grille's arresting appearance are the vertical bars, the top sections of which jut further out. The larger dimensions of the BMW kidney grille provide an attractive contrast against the now slimmer headlights.

New headlights with L-shaped daytime driving lights create a focused look.

LED headlights with automatic headlight range control are again fitted as standard on the new 5 Series. The two daytime driving light sources – arranged next to one other – are U-shaped, the turn indicators are in special light modules at the outer edge of the headlights. The two new LED headlight elements create a totally new appearance. The two L-shaped light tubes arranged next to one another in each light unit have a precise and modern graphic. The new contouring of the headlights and the structure of the light sources at their heart bring a modern twist to the focused look familiar from BMW's past and present. With these units, the outer daytime driving lights also perform the role of turn indicators. All the light functions use LED technology as standard.

Adaptive LED Headlights standard on all variants, now with matrix function.

New full-LED headlights including adaptive cornering function, BMW Selective Beam non-dazzling high beam with matrix technology, and the High-beam Assistant are offered as an option. The matrix function of the BMW Selective Beam high beam system allows range to be increased while preventing other road users from being dazzled. Here, high beam is divided into four LED segments, which can be activated and deactivated independently of one another as the situation on the road demands. The instant the front-mounted camera detects an oncoming vehicle or a vehicle in front, low beam only will be used to illuminate the area around the vehicle, while the remaining high-beam segments continue to improve road visibility.

The cornering light and high beam are proactively adjusted using GPS.

The dynamic light distribution (city, motorway, and country road light) function generate different types of illumination, optimized to the driving situation at hand.

BMW Laserlight now available on M Sport Variants.

This system adds a dynamic Laserlight module to the Adaptive LED Headlights with matrix function. At speeds over 60 km/h (37 mph), this strengthens the non-dazzling high beam and follows the course of the road. The range of the high beam has been increased to reach up to 650 metres. Added to which, the extremely bright and strong BMW Laserlight achieves a significantly higher level of light intensity. As part of the dynamic light distribution and BMW



The new BMW 5 Series.

Selective Beam non-dazzling high beam systems, it also boosts the effectiveness of low beam on country roads and motorways. Blue inlays at the upper edges of the headlights and “BMW Laser” lettering in the headlight glass are the visual calling cards of this advanced technology.

New rear end accentuates car’s width to elegant effect.

The gracefully sporting, modern appearance of the new BMW 5 Series is enhanced at the rear of both the Sedan by clear surfacing with minimalist lines.

Trapezoidal tailpipe finishers now standard on all BMW 5 Series models.

Regardless of the equipment line and engine specified, all models of the new BMW 5 Series come with trapezoidal tailpipe finishers, which are now integrated to the left and right in the rear apron inlay.

Three-dimensional sculpted rear lights with new graphic.

A new L-shaped light graphic gives the BMW 5 Series its own clear identity. Black edging lends the rear lights a slimmer appearance. The rear lights and brake lights are integrated into a single light fixture. An overhang in the outer edge of the graphic’s upper section brings a fresh interpretation of the familiar BMW L shape. The prominently three-dimensional external lens now houses the light fixture directly, creating an iconographic showcase for the main light functions.

M Sport package with powerful new design.

The newly developed M Sport package stands out with its new, dynamically proportioned aerodynamic features. These include a new front apron, whose surfaces are split up by a U-shape structure pointing towards the road. The gratings of the significantly enlarged air intakes now have a modern mesh structure. The BMW kidney grille bars have Aluminium matt faces. And a new diffuser element in the rear apron uses more pronounced contours to optimise airflow.

New paint finishes for the BMW 5 Series range.

The exterior paintwork of the new BMW 5 Series Sedan is available in exciting metallic colour shades. New additions include the Phytonic Blue metallic and Bernina Grey Amber effect variants.



The new BMW 5 Series.

Interior and equipment.

Shining a brighter spotlight on driving pleasure and comfort.

Hallmark features of the BMW 5 Series include an interior which blends contemporary elegance with driver-focused cockpit design – and therefore provides the ideal environment for driving pleasure and comfortable progress over long distances. High-quality materials and precise workmanship bring a modern, premium ambience to the new 5 Series' cabin. The iDrive control and operation system comprises a freestanding Control Display, which now has a bigger 12.3-inch screen diagonal as standard.

Two other factors in the customary long-distance driving qualities of the BMW 5 Series are the generous feeling of space in all five seats and the superbly engineered acoustics. As well as effective body sealing and the sound insulation integrated into the headliner, acoustics-related measures also include soundproofing for the load compartment of Touring models.

Sophisticated premium ambience, enhanced comfort.

An array of high-quality features is available to further enhance driving pleasure and comfort. The new BMW 5 Series has **four-zone automatic climate control** with extended features as standard, encompassing automatic climate control with extended functions, separate controls for the driver and front passenger as well as two separate zones for temperature control for rear passengers, and the SYNC function. And the buttons on the centre console now have surfacing in High-gloss Black.

Adding to the luxurious feel are features such as glass roof, new galvanic embellisher for controls, electrically adjustable roller sunblind's and soft-close function for doors. **Galvanic embellisher** for controls with electroplated finish provide nicer to look at and feel over the normal black plastic ones. **Ambient light** creates a relaxed lighting atmosphere, including ambient light accents and the welcome light. The new BMW 5 Series Sedan is now available for the first time with synthetic **Sensatec perforated trim** on the petrol variant. This high-quality material can be ordered in three colours, and its contrast stitching and quilting create an extremely stylish feel.

A wide selection of **Dakota leather and Nappa leather upholstery** variants are available on the diesel variants. The black surfaces of the instrument panel trimmed in Sensatec are now enriched by contrast stitching in a classy shade of brown. The selection of available interior trim strips is likewise more extensive than before. The **Aluminium Rhombicle Smoke Grey variant** with accent trim strip in **Pearl-effect Chrome** is new to the M Sport package for the BMW 5 Series.

The **Lumbar support** (newly added in 520d and 530i) for the driver and front passenger seats can be adjusted both vertically and laterally, allowing for an orthopedically optimized seating position. The circular dial on the seat controls can be used to adjust the level of support in these areas. The 530i M Sport adds **Sports Seats** with Perforated Sensatec covers in the front, sports leather steering wheel and specific trim strips. The **Comfort seats** (530d) for driver and front passenger can be electrically adjusted in a variety of ways and provide a perfect seating position for a relaxed arrival.



The new BMW 5 Series.

Drive systems, transmissions.

State-of-the-art technology brings maximum efficiency.

The new BMW 5 Series places the focus firmly on driving pleasure. This is in no small part down to its state-of-the-art engines, which form the basis for both sharper performance and lower fuel consumption figures. Not only does the new BMW 5 Series Sedan surpass its predecessors in both disciplines, it leads the way in the segment. A choice of one petrol and two diesel power units with four and six cylinders (only in diesel) will be available from launch.

New engine family with BMW TwinPower Turbo technology.

All members of the newly developed, modular BMW EfficientDynamics engine family feature an extremely lightweight, thermodynamically optimised all-aluminium construction. Thanks to their unrivalled BMW TwinPower Turbo technology, they meld maximum power with exemplary efficiency, and all comply with the BS-VI emission standard. The petrol units employ TwinScroll turbocharging, High Precision Injection, Double-VANOS variable camshaft control and Valvetronic fully variable valve timing. The diesel models, meanwhile, feature a turbocharger with variable turbine geometry and latest-generation common-rail direct injection, which generates injection pressure of up to 2,500 bar.

BMW 530i: the four-cylinder petrol engine.

The turbocharged direct injection engine delivers best-in-class output of 185 kW/252 hp between 5,200 and 6,500 rpm, and puts its maximum torque of 350 Nm on tap from 1,450 rpm all the way up to 4,800 rpm. Average fuel consumption works out at 15.56 kmpl, equating to CO₂ emissions of 152.92 g/km. The BMW 530i sprints from 0 to 100 km/h in 6.2 seconds and reaches a top speed of 250 km/h.

BMW 520d and BMW 530d: four and six-cylinder diesel engines.

The four-cylinder diesel unit powering the BMW 520d has an output of 140 kW/190 hp at 4,000 rpm and unleashes its maximum torque of 400 Nm between 1,750 and 2,500 rpm. Gearshifts are made with an eight-speed Steptronic transmission. Fuel consumption with the eight-speed Steptronic comes in at 22.49 kmpl, resulting in CO₂ emissions of 117.34 g/km. The sedan accelerates from 0 to 100 km/h in 7.5 seconds and clocks a top speed of 235 km/h (148 mph).

The ongoing development of BMW TwinPower Turbo technology has endowed the BMW 530d with added dynamism and efficiency. With output peaking at 195 kW/265 hp at 4,000 rpm and formidable maximum torque of 620 Nm from 2,000 – 2,500 rpm. Yet despite its impressive performance figures, the BMW 530d gives 18.59 kmpl on average, equating to CO₂ emissions of 141.62 g/km. The new BMW 530d completes the 0 to 100 km/h sprint in 5.7 seconds, making it the quickest car in its segment, and its top speed is electronically limited to 250 km/h.

Eight-speed Steptronic transmission as standard for all model variants, Sport Sport Automatic Transmission on M Sport Variants.

The proven formula of fitting an eight-speed Steptronic transmission as standard has been employed once again for all model variants of the new BMW 5 Series. The latest version of



The new BMW 5 Series.

the automatic transmission features a weight-reduced design, a newly developed control system and an increased gear ratio spread. As a result, it is possible to achieve significant efficiency gains with reduced engine speeds, particularly when driving in higher gears. At the same time, the eight-speed Steptronic transmission now switches gears even more crisply – credit here to the optimised hydraulics control. The eight speed steptronic sport automatic transmission performs smooth, almost imperceptible gearshifts. At any time, in any gear, the transmission collaborates perfectly with the engine, enabling it to develop its full power and efficiency. The eight-speed Steptronic Sport transmission also includes a Launch Control function for powering off the line with optimal traction and imperious dynamic flair.

Navigation-assisted shift strategy.

Besides the fuel-efficient power units, various other efficiency-enhancing details have been included to make sure that the new business sedan doesn't just stand out for its dynamic performance, but also leads the way in fuel economy and emissions.

This is exemplified by the ECO Pro mode, which can be activated with the Driving Experience Control switch. It is interlinked with the BMW Live Cockpit Professional, enabling it to detect braking situations in advance – such as when entering built-up areas, speed limit zones, corners, and filter lanes – and prepare the drive system accordingly. Such measures are accompanied by intelligently controlled energy and climate management, with the active air flap system in the new BMW 5 Series allowing even more variable control of the cooling air for the engine, brakes, and air conditioning to suit the situation. Aside from its aerodynamic benefits, the system also shortens the engine's warm-up phase and makes sure that heat is retained for longer after the engine has been switched off.

The Auto Start Stop function is a perfect example of the advanced degree of connectivity in the new BMW 5 Series, as it uses information from the navigation system, stereo camera to prevent the engine from being switched off in situations where that would be inefficient or unwarranted, such as at roundabouts or T-junctions. The result is a clearly noticeable increase in driving comfort in real-world use. The coasting function also does its bit to lower fuel consumption, particularly when travelling at higher speeds.

Ultimately, however, the Driving Experience Control switch always lets drivers decide whether they want to adopt a sportier driving style or focus more on fuel efficiency for the journey ahead.



The new BMW 5 Series.

Chassis technology.

The finely judged balance of agility and ride comfort.

The new BMW 5 Series models, like their predecessors, come with all the right qualities for offering supremely assured, sporty handling: a long wheelbase and wide tracks, minimised weight rooted in intelligent lightweight design, and perfect 50 : 50 weight distribution. The strong body structure and sophisticated, finely balanced chassis technology also contribute to the precise blend of agility and ride comfort that distinguishes the new BMW 5 Series Sedan. The chassis has likewise been tuned with the specific aim of blending well-resolved everyday driving characteristics, long-distance comfort and driving pleasure of high dynamic intensity.

Sophisticated chassis technology featuring Adaptive Suspension on all variants

Standard on all models, Adaptive suspension features electronically controlled dampers. By using continuously adjustable valves to meter the damping force at each wheel individually, it improves both the car's sporting abilities and its ride comfort. At the same time, the Driving Experience Control switch allows drivers to choose between a sportier or more relaxed basic suspension setting.

The suspension therefore delivers finely judged responses to bumps in the road. With small kinematic lever arms that minimise disturbance torque around the steering axis, the new BMW 5 Series Sedan offers the driver excellent steering feel with clear feedback. The rear suspension and double-wishbone front suspension work together to provide excellent anti-roll control when cornering, but never at the expense of ride comfort. The system adds extra hydraulic damping at the front axle and a compression limiting system at the rear. It is continuously variable and adjusts the damper firmness progressively according to the changing spring travel. This prevents excessive body dive when driving over large bumps and so avoids uncomfortable, nervous damping response.

Tailored dynamics and comfort for suspension and brakes.

The new BMW 5 Series is fitted with optimised lightweight brakes featuring single-piece four-piston fixed aluminium callipers at the front, with lightweight discs, and single-piston fixed callipers with an integrated electromechanical parking brake at the rear. All the key driving dynamics systems are standard specification. The business sedan rides on 18-inch light-alloy wheels as standard, with option for upgrade for bigger wheels. Specifying the optional M Sport braking system brings additional stylistic touches. The M Sport brake with multi-piston brake calipers in dark blue and M designation features exceptional braking performance. Adapted to the vehicle's extremely high dynamic potential, it also allows for a pronouncedly more athletic driving style and excellent braking on wet surfaces.

Choose between various modes and functions for Driving Experience Control.

The Driving Experience Control switch allows drivers to choose between sporty, comfortable, or extra-fuel-efficient vehicle settings, depending on the driving situation and personal preference. On the new BMW 5 Series, this system comes with a further expanded range of functions, offering an even wider spectrum of configurations and even greater differentiation of the driving experience.



The new BMW 5 Series.

These modes – Comfort, Sport, ECO PRO and Adaptive – can be selected at the touch of a button. Each mode activates a predefined set-up for the relevant powertrain and chassis components. The Sport and ECO PRO modes can be further differentiated using the iDrive Controller, which now allows the powertrain and chassis settings to be configured separately. In the new Adaptive Mode, the steering, Adaptive Suspension and Steptronic transmission are automatically adjusted to the driving style and, depending on vehicle specification, also to the route. The control logic reacts to inputs such as accelerator and steering commands, or gear selector position, to vary the powertrain and chassis characteristics between sporty and more relaxed. Also, data supplied by the BMW Live Cockpit Professional is used to proactively adapt the settings to take account of upcoming bends and intersections, or different types of road, such as motorways or single-carriageway main roads. M Sport variants add the extra Sport+ mode, offering an even more sporty drive.



The new BMW 5 Series.

Driver assistance systems.

The next steps on the road to automated driving.

The new BMW 5 Series continues to set the benchmark for cutting-edge driver assistance systems in the business car segment.

The new BMW 5 Series is fitted as standard with driving and parking assistance features including Parking Assistant Plus, Remote Control Parking, Reversing Assistant, cruise control with brake function and the Attentiveness Assistant.

Cruise Control for all driving situations.

Dynamic Cruise Control (DCC), which is standard on the BMW 5 Series Sedan, maintains any selected speed between 30 and 250 km/h (19 - 155 mph). It also supports energy-saving coasting by decoupling the engine from the powertrain when the driver lifts off the accelerator at higher speeds.

Parking Assistant now with reversing assistant.

Further refinements have also been made to systems which make parking and maneuvering easier in the new BMW 5 Series Sedan. Parking Assistant helps the driver to select and make use of parallel and perpendicular parking spaces and takes over

control of the accelerator, brakes, steering and gearshifts (if required). The system can also be used to pull out from spaces parallel to the road and now includes the reversing assistant as well as a rear-view camera and Park Distance Control with front and rear sensors. It offers the extremely convenient option of automated reversing in confined spaces or situations where the driver does not have a clear view, such as multi-storey car parks or entrances to courtyards. To do this, it stores the steering movements for any section the car has just driven forward along at no more than 36 km/h (22 mph). The system is then able to reverse the vehicle for distances of up to 50 metres by steering it along the same line it took when moving forward. All the driver must do is operate the accelerator and brake pedals and monitor the vehicle's surroundings. The reversing assistant can back the car up automatically at a maximum 9 km/h (5.5 mph).

Parking Assistant Plus offers even greater comfort and precision when maneuvering.

This feature includes the functions of the Parking Assistant described above – and adds Park View, Panorama View, and 3D Top View to create a 360° image of the vehicle and its surroundings from different perspectives in the Control Display. Meanwhile, the Remote 3D View function also gives drivers the ability to call up a three-dimensional live image of their vehicle and its immediate vicinity on their smartphone.

Remote Control Parking: For parking with supreme ease. Also standard on all variants is Remote Control Parking. This function enables the driver to trigger the process of entering and exiting parking spaces from outside the car using the BMW Display Key. In this way, the new BMW 5 Series can be maneuvered forwards into tight parking spaces or garages and reversed out of them again. During these manoeuvres, the car's acceleration and braking are monitored by the sensors of the driver assistance systems and overseen by the driver.



The new BMW 5 Series.

Display and operating system. **The intelligent car with total connectivity.**

To strengthen the bond between driver and car, there is now a greater range of personalisation options with the new BMW Operating System 7. The driver is greeted by name, for instance, and can use their personal account to access a wide range of stored settings, such as the seat and exterior mirror positions or favourite navigating destinations.

Control of the vehicle, infotainment, communication and navigation functions is based on the proven approach of allowing customers to choose between the Control Display's touchscreen, the iDrive Touch Controller, the controls on the steering wheel, voice control using the BMW VirtualAssistant or BMW gesture control, depending on the situation. Intuitive, multimodal, and fully customisable interaction between the driver and vehicle has been extended and enhanced once again for the new BMW 5 Series.

BMW Live Cockpit Professional with new 12.3-inch touchscreen Control Display and extended functionality.

With the standard BMW Live Cockpit Professional, information is shown on a fully digital instrument display with a screen diagonal of 12.3 inches and a high-resolution Control Display with touchscreen functionality, now enlarged to 12.3 inches also.

With its 12.3-inch diagonal, the cockpit's instrument display provides enough room to accommodate an excerpt from the navigation map, status indicators for the driver assistance systems or 3D visualisation of the surrounding area. The display style for the remaining readouts varies according to either the mode selected with the Driving Experience Control switch. Drivers are also able to call up additional content, such as the sport displays for example, in the instrument cluster's right-hand section.

The Control Display above the centre console also has a 12.3-inch screen and its main menu lets the driver configure up to ten pages, each showing two to four pads (tiles) with live content. Both the content and the graphics are now personalised to an even greater degree, as illustrated by the vehicle mock-up that matches the actual model colour and equipment line.

The BMW Head-Up Display projects all information relevant to the journey directly into the driver's field of vision.

Smartphone Integration with Apple CarPlay and now also with Android Auto.

One of the most notable advances as far as connectivity is concerned is the enhanced Smartphone Integration feature that comes as standard. In addition to Apple CarPlay, which has been available since 2017, the operating system for the new BMW 5 Series range will also host Android Auto.

This opens the benefits already enjoyed by Apple iPhone owners to Android users, too, making it easier to access many digital services from the car in the same way as on a smartphone. These include Google Assistant, Google Maps, music streaming services like Spotify and Amazon Music, and the WhatsApp messaging service. The wireless Wi-Fi



The new BMW 5 Series.

connection between the smartphone and vehicle enables the operating system in question to be integrated directly into the fully digital screen grouping in the new BMW 5 Series. All the key information from the apps made available there can be viewed both in the Control Display and – in a cleverly presented way – in the instrument cluster or optional Head-Up Display. And the new BMW 5 Series leads the way in showing the turn instructions from smartphone navigation apps in its instrument cluster and Head-Up Display.

BMW Virtual Assistant: even more natural voice commands plus additional functions.

The new BMW 5 Series comes as standard with the innovative voice- controlled BMW VirtualAssistant, the latest generation of which takes the connection between driver and car to a new level – with immediate effect. Activated by a spoken prompt (for example “Hey BMW”) or at the touch of a button, this digital companion acquires new capabilities all the time.

Naturally formulated spoken instructions can now also be used to open and close the car’s windows (partially or fully) or adjust the air conditioning.

The BMW Virtual Assistant is a bona fide expert, who is always on hand to answer the occupants’ questions about the car, its functions or even about how to improve driving style.

When the BMW Virtual Assistant is in use, new graphics appear in the Control Display to underline the system’s interactive character.

The graphic now “turns” towards the speaker, visualising how the assistant is listening attentively to what is being said. The system recognises whether the driver or front passenger is speaking to it and reacts accordingly by altering the climate control settings on one side of the interior, for example.

Display Key: door opener and information centre.

Besides the facility for directing the BMW 5 Series into a parking space by remote control, the optional Display Key offers a host of other functions as well. Remote operation of the auxiliary ventilation systems is just one example. The smart key includes a colour display with touch control, which provides information on the most important vehicle parameters. This means drivers can quickly check – even while they’re out and about – whether they closed the windows, sunroof, and doors when they parked their car. The car’s fuel level and remaining range are also shown on the key, along with any service information. It is charged by means of an inductive charger in the car or from a USB port.

Wireless charging

Mobile phones with inductive charging preparation can be supplied with power wirelessly in the BMW 5 Series Sedan. The inductive charging tray required for this is in the centre console in front of the cupholders. The charging tray furthermore establishes a wireless connection to the external aerial, which improves mobile phone reception substantially, particularly in areas with a weak signal.

The **Comfort access system** makes it possible to open all four vehicle doors without using the key. This equipment option includes contactless opening and closing of the tailgate with a

The new BMW 5 Series.



quick wave of the foot under the rear bumper. **Automatic tailgate operation** allows the convenient opening and closing of the tailgate by simply pressing the conveniently located button in the door panelling or on the car key. The tailgate can also be opened in the conventional manner, using the outside handle, and closed using a button on the inside of the tailgate.

The new **Tyre Pressure Monitoring System** is an intelligent system that uses sensors in each wheel to warn drivers when air pressure drops below acceptable levels. Accessible through iDrive, this system allows drivers to monitor their tyres individually. The standard Flat Tyre Indicator, usually implemented in BMW cars will only prompt a warning signal when a flat tyre is detected, without indicating how low the pressure could potentially be.



The new BMW 5 Series.

Lightweight engineering and safety. **Lower weight, better protection.**

The BMW EfficientLightweight concept has been rigorously applied throughout the new BMW 5 Series Sedan. Using an intelligent multi-material mix consisting of aluminium, high-tensile steels and magnesium, up to 100 kilograms had been shaved off the weight of the previous generation, while body strength and torsional stiffness have been increased. A low centre of gravity, a perfectly balanced axle load ratio and a further reduction in unsprung masses have benefits for both dynamics and comfort. The acoustics package too, with engine encapsulation and the use of superabsorbers, has been designed for reduced weight, while also setting new standards in interior noise reduction.

Intelligent multi-material mix reduces weight and increases strength.

Large load-bearing members in the new BMW 5 Series, and strategic use of high- and ultra-high-strength steels in the roof, side members and rear, give the body high structural strength. The bonnet, boot lid, engine cross-member, rear side-members, roof, and doors are constructed from aluminium. The doors, with laser-cut outer paneling, have an aluminium shell construction, which maximises the weight-reducing benefits of this material when used in combination with state-of-the-art production technologies. At only around six kilograms (including the hinges and door brake), these doors are currently the lightest in this segment.

The use of hot-stamped steels, aluminium alloys and multi-phase steels in the safety passenger cell provides high rigidity, for the best possible passive safety and low weight. The cast magnesium instrument panel support is up to two kilograms lighter than the steel version used on the previous model. Big weight savings have also been achieved for the chassis components. To take just one of many examples, the integration of the electric parking brake into the rear brake callipers brings weight savings of approximately three kilograms. Altogether, the weight savings on the brakes, wheels and tyres add up to a reduction of more than nine kilograms in unsprung mass, with noticeable benefits for dynamics and ride comfort. For the first time, the boot lid of the BMW 5 Series Sedan is made entirely of aluminium, bringing a weight saving of 4.2 kilograms. And a further half kilogram has been shed thanks to use of the natural fibre kenaf in the inner lining of the boot lid. Kenaf's high recyclability means it is also having a high sustainability factor and is very eco-friendly.

Unique body structure provides unbeatable occupant protection.

The concept underpinning the body of the new BMW 5 Series Sedan is unique in its class as far as technology, structure and materials are concerned. The body structure offers optimised safety both for the vehicle's own occupants and occupants of other vehicles. It is also very light and was designed using state-of-the-art simulation techniques. Deformation spaces are optimally designed and utilised, courtesy of the latest technologies in body design. The aim was to split up the main load paths so that the impact forces are dispersed over as wide an area as possible by the time they reach the extremely rigid passenger cell. This ensures optimal deceleration of the passenger cell in an accident, allowing the front, rear and side impact restraint systems to provide the most effective protection possible. The airbag's integrated safety electronics ensure that they deploy in the right sequence and provide the right level of restraint at exactly the right time.



The new BMW 5 Series.

The model and the market.

The generation of a highly successful family.

The new BMW 5 Series turns the page on chapter seven in an enthralling story of success.

An overview of the six generations offered globally so far:

2010: The most successful business sedan (F10/F11/F18/F07).

The sixth generation of the BMW 5 Series wasted no time in becoming market leader in its class after it was launched in January 2010. It featured an even more rigid body than its predecessor and was fitted with more safety and driver assistance systems. The BMW 5 Series Gran Turismo added a third body variant with a large tailgate to the line-up. And there was a broader spread of engine outputs than ever before, ranging from 105 kW/143 hp in the BMW 518d to 423 kW/575 hp for the BMW M5. In November 2011 the first BMW 5 Series with hybrid technology came onto the market in the shape of the BMW Active Hybrid 5 (system output: 250 kW/340 hp). With sales of over 2.2 million units, the sixth generation of the BMW 5 Series has outstripped its predecessor by close to 60 per cent and is the most successful premium business model worldwide. The wealth of honours and awards it has garnered over the last six years is further evidence of the high regard in which it is held.

2003: Entering a new age (E60/E61).

The fifth generation of the BMW 5 Series impressed from day one with its progressive design and innovative technology. Available initially as a sedan and from 2004 also in Touring guise, it set new standards in the areas of active safety, driver assistance systems and efficiency. The engine line-up for this generation of the BMW 5 Series comprised six petrol units and four diesels, producing between 120 kW/163 hp (BMW 520d) and 373 kW/507 hp (BMW M5). From 2007 the BMW EfficientDynamics technology package was a standard feature. The BMW 5 Series was the highest-selling car in its segment for four years running (2005 – 2008), with a total of more than 1.4 million units handed over to their owners.

1995: Alloy chassis makes its 5 Series debut (E39).

The fourth generation of the BMW 5 Series celebrated its premiere at the International Motor Show (IAA) in Frankfurt in 1995. The BMW 5 Series was the world's first volume-produced car to feature a chassis made almost entirely from light metal. The newly developed all-aluminium engines added further to the weight savings. The output spectrum of the four diesel and six petrol engines ranged from the 100 kW/136 hp of the BMW 520d to 294 kW/400 hp in the BMW M5. The fourth generation of the BMW 5 Series also posted a new sales record; by the time production came to an end at the start of 2004 more than 1.47 million units had been sold.

1987: Premiere of the E34, BMW 5 Series Touring launched in 1991.

The BMW design team led by Claus Luthe clearly took their cues for the styling of the third-generation BMW 5 Series from the appearance of the new BMW 7 Series launched shortly before it. The output of the 11 engines in the line-up – which included three diesels – stretched from 83 kW/113 hp in the BMW 518i to 250 kW/340 hp in the case of the BMW M5. All the petrol engines were equipped as standard with a closed-loop catalytic converter and designed to run on standard unleaded petrol. And an all-wheel-drive variant was made available for the first time in the form of the BMW 525iX. The BMW 5 Series Touring



The new BMW 5 Series.

celebrated its premiere in 1991. It came with a tailgate with a separately opening rear window, which remains a distinctive feature of the car today. Production of the BMW 5 Series Sedan ended in September 1995, although the BMW 5 Series Touring continued to roll off the assembly line until June 1996. With total sales topping 1.3 million units, the third-generation model had elevated the success of the 5 Series into a new dimension.

1981: A modern update of a proven concept (E28).

The second generation of the BMW 5 Series sported a two-section split kidney grille element and circular headlights with different diameters for main and dipped beam. The engine portfolio largely reflected that of its predecessor, which at launch meant petrol variants with 66 kW/90 hp (BMW 518) to 135 kW/184 hp (BMW 528i). A diesel variant was added to the line-up for the first time in 1983, in the form of the BMW 524td. In 1985 BMW Motorsport GmbH – the forerunner to today's BMW M GmbH – presented the quintessential large sports sedan: the BMW M5. Its six-cylinder in-line engine, derived from the unit powering the legendary BMW M1, developed 210 kW/286 hp. The second generation of the BMW 5 Series ended production in June 1988 having set a new sales landmark of more than 722,000 units over its eight-year lifespan.

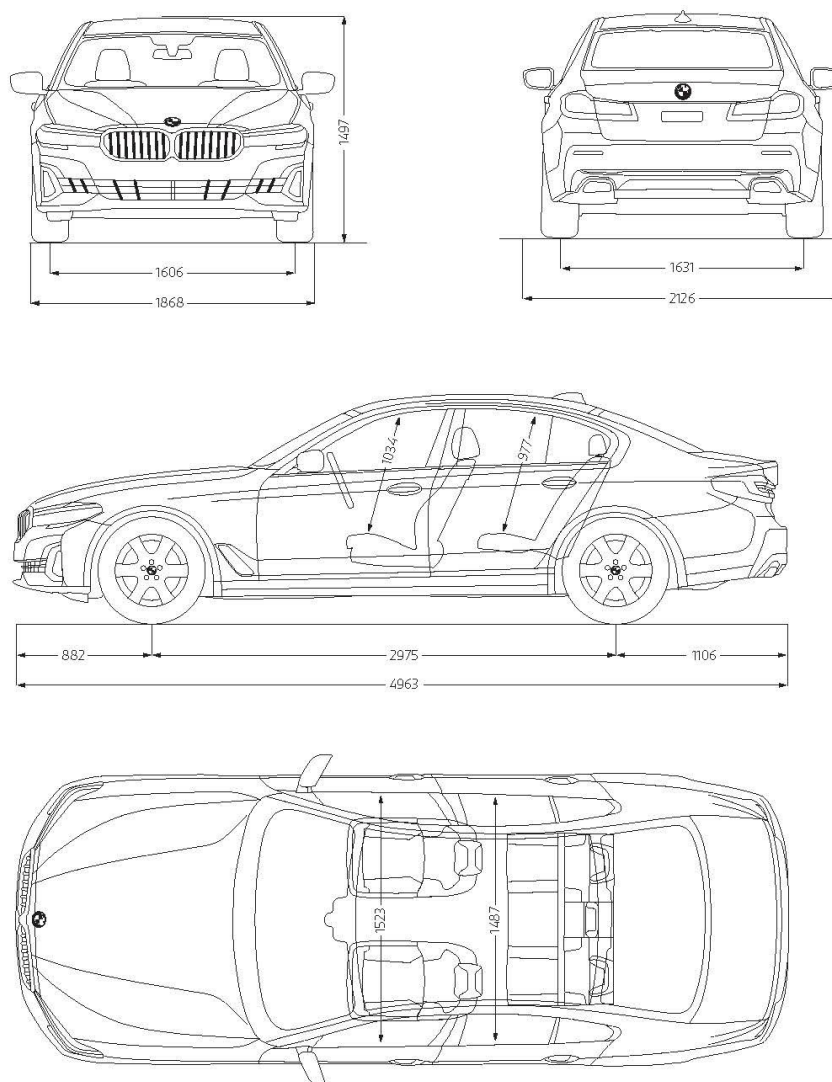
1972: the first ever BMW 5 Series (E12).

The successful history of the BMW 5 Series began more than 40 years ago with the first-generation sedan. It also heralded the introduction of a naming system for BMW model designations that is still in use today. The BMW 520 was the successor to the BMW 2000 "Neue Klasse" model and offered customers noticeably more space and comfort. The petrol engines developed from 66 kW/90 hp in the BMW 518 to 160 kW/218 hp in the BMW M535i. Production of the first BMW 5 Series came to an end in July 1981 with getting on for 700,000 sedans sold.

The new BMW 5 Series.



Dimensions.



All dimensions in the technical drawing are given in millimetres.

¹ Electronically limited.