

# The new BMW 6 Series Gran Turismo. Contents.



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# Model variants from launch.



## **BMW 630i Gran Turismo:**

Four-cylinder petrol engine, eight-speed Steptronic transmission.  
Capacity: 1,998cc, output: 190 kW/258 hp at 5,000 – 6,500 rpm,  
max. torque: 400 Nm (295 lb-ft) at 1,550 – 4,400 rpm.  
Acceleration [0 – 100 km/h (62 mph)]: 6.3 seconds,  
top speed: 250 km/h (155 mph).  
Fuel consumption, combined\*: 6.6 – 6.2 l/100 km (42.8 – 45.6 mpg imp),  
CO<sub>2</sub> emissions, combined\*: 152 – 142 g/km.

## **BMW 640i Gran Turismo / BMW 640i xDrive Gran Turismo:**

Six-cylinder in-line petrol engine, eight-speed Steptronic transmission.  
Capacity: 2,998cc, output: 250 kW/340 hp at 5,500 – 6,500 rpm,  
max. torque: 450 Nm (332 lb-ft) at 1,380 – 5,200 rpm.  
Acceleration [0 – 100 km/h (62 mph)]: 5.4 seconds / 5.3 seconds,  
top speed: 250 km/h (155 mph) / 250 km/h (155 mph).  
Fuel consumption, combined\*: 7.4 – 7.0 l/100 km (38.2 – 40.4 mpg imp) /  
8.2 – 7.7 l/100 km (34.5 – 36.7 mpg imp),  
CO<sub>2</sub> emissions, combined\*: 169 – 159 g/km / 187 – 177 g/km.

## **BMW 630d Gran Turismo / BMW 630d xDrive Gran Turismo:**

Six-cylinder in-line diesel engine, eight-speed Steptronic transmission.  
Capacity: 2,993cc, output: 195 kW/265 hp at 4,000 rpm, max. torque:  
620 Nm (457 lb-ft) at 2,000 – 2,500 rpm.  
Acceleration [0 – 100 km/h (62 mph)]: 6.1 seconds / 6.0 seconds,  
top speed: 250 km/h (155 mph) / 250 km/h (155 mph).  
Fuel consumption, combined\*: 5.3 – 4.9 l/100 km (53.3 – 57.7 mpg imp) /  
5.9 – 5.5 l/100 km (47.9 – 51.4 mpg imp),  
CO<sub>2</sub> emissions, combined\*: 139 – 129 g/km / 155 – 144 g/km.

\* Figures according to EU test cycle, may vary depending on the tyre format specified.  
All performance, fuel consumption and emissions figures are provisional.

Further information on official fuel consumption figures, specific CO<sub>2</sub> emission values and the electric power consumption of new passenger cars is included in the following guideline: "Leitfaden über Kraftstoffverbrauch, die CO<sub>2</sub>-Emissionen und den Stromverbrauch neuer Personenkraftwagen" (Guideline for fuel consumption, CO<sub>2</sub> emissions and electric power consumption of new passenger cars), which can be obtained from all dealerships, from Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen and at <http://www.dat.de/en/offers/publications/guideline-for-fuel-consumption.html>. LeitfadenCO<sub>2</sub> (GuidelineCO<sub>2</sub>) (PDF – 2.7 MB)



# Vehicle concept and design.

## Unparalleled aesthetic appeal and practicality.

The new BMW 6 Series Gran Turismo combines the long-distance comfort of a luxury sedan with the aesthetic appeal of a coupe. Its design embodies a rigorous process of development which has elevated both the functional strengths of this body concept and the car's sense of sporting elegance to new heights. A generously-sized, flexible-use interior, striking looks, supreme ride comfort and a luxurious feeling of space are among the features that made the BMW 5 Series Gran Turismo – the new car's predecessor and the first of its kind – unique. These attributes have been honed to a new level for the new BMW 6 Series Gran Turismo and are complemented by stretched proportions, significantly more dynamic lines and a muscular surface treatment. The car's new model designation reflects this progress.

"The new BMW 6 Series Gran Turismo is geared towards discerning customers who place great importance on individuality. It is an eye-catching statement, packaged into a flowing, sculptural design language which gives the car a modern and sporty feel. The raised seating position ensures an imperious brand of driving pleasure, and the luxurious levels of space provide everything you need for a relaxing journey," says Adrian van Hooydonk, Senior Vice President BMW Group Design.

### **Dynamically stretched proportions are a passport to sporting elegance.**

An exterior length of 5,091 millimetres (an increase of 87 millimetres on its predecessor), an unchanged width of 1,902 millimetres and a reduction in height of 21 millimetres (to 1,538 millimetres) give the new BMW 6 Series Gran Turismo dynamically stretched proportions. In combination with a roofline that flows deep into the rear end, they ensure an elegantly sporty appearance. Thanks to exhaustive optimisation of the cabin's packaging, the interior actually offers greater headroom despite the lower vehicle height. Among the other characteristic features of the new BMW 6 Series Gran Turismo are its long bonnet, the set-back positioning of the cabin, a wheelbase of 3,070 millimetres, doors with frameless windows, and a slim window graphic extending well into the rear end.

### **The front end: distinctive, eye-catching and powerful.**

The large BMW kidney grille underlines the muscular presence of the front end. The headlight units extend all the way up to the kidneys, creating a continuous band that accentuates the car's width.

The standard LED headlights for dipped and main beam and joined by LED daytime driving lights. Their light rings – flattened at the bottom and “cut off” at the top – display the focused look familiar from other BMW models. This styling characteristic takes on an even more expressive status if the optional Adaptive LED Headlights are specified. Horizontal bars provide a stylistic link between the inner daytime driving light rings and the kidneys, reinforcing the broad and dynamic presence of the front end. Also included in the Adaptive LED Headlights’ range of functionality are variable light distribution, adaptive and cornering lights, and BMW Selective Beam anti-dazzle high beam with a range of up to 500 metres.

### **The flanks: flowing lines, precise surfaces.**

When the BMW 6 Series Gran Turismo is viewed from the side, its elongated proportions and precise surface design catch the eye. A single crease in the upper section of the side surfaces sends light rushing to this section of the body. Above the powerfully flared wheel arches, a second horizontal line worked smoothly into the surfacing generates an effective interchange between light and shadow, which lends the car extra lightness and elegance. Its ground clearance is further emphasised by the shaded surfaces above the side skirts. The Air Breathers and side skirts form a single unit and team up with another crease in the surface work to enhance the stretched feel of the silhouette.

The A-pillars of the new BMW 6 Series Gran Turismo are much more heavily raked than on its predecessor. The roofline reaches its highest point at the top of the B-pillar and flows like a coupe’s into the rear, which is now 64 millimetres lower to the ground. The distinctive elegance of the silhouette is also accentuated by the sweeping side window graphic, which is no longer broken up by an extra guide strip through the large window in the rear door. At its trailing edge, the window graphic leads into a more vertical interpretation of the signature BMW “Hofmeister kink” counter-swing.

### **The rear end: width enhances sporting presence, sculptural light design.**

Horizontal lines, sharp edges and heavily tapering surfaces help to magnify the width of the rear and therefore the sporting stature of the new BMW 6 Series Gran Turismo. It is an impression strengthened by the slim rear window and rear lights positioned well to the outside. In addition to the customary BMW L-shape, the light units also display a unique three-dimensional surface design. The glass covers over the harmoniously illuminating LED units add a bold and classy accent with their attractively sculpted design.

**Aerodynamically optimised – from active air flap control to the automatically extending rear spoiler.**

The low-slung silhouette of the new BMW 6 Series Gran Turismo also benefits its aerodynamic efficiency, which has been further improved with a host of other measures. Active air flap control brings additional louvres for the BMW kidney grille, which only open when extra cooling is required. The underbody section is almost fully enclosed. Air Curtains in the lower air intake at the front of the car and Air Breathers aft of the front wheels reduce turbulence in and around the wheel arches. Added to which, the active rear spoiler, which automatically extends when the car exceeds 120 km/h (75 mph) and retracts again when it slows below 80 km/h (50 mph), helps to reduce lift and bring the drag coefficient (Cd) down from the predecessor car's figure of 0.29 to as low as 0.25.

**Individual style: large selection of exterior colours and light-alloy wheels, plus Sport Line, Luxury Line and M Sport package variants.**

Two non-metallic and ten metallic exterior paint finishes are available for the new BMW 6 Series Gran Turismo. 17-inch light-alloy wheels are fitted as standard, but other wheel variants can be ordered as an option in sizes up to 20 inches. The Original BMW Accessories range also includes 21-inch light-alloy rims.

From the launch of the new BMW 6 Series Gran Turismo customers can choose from three equipment lines as an alternative to standard specification. Their precisely coordinated design and equipment features shine a particularly bright spotlight on either the car's sporting potential or its inherent elegance. The Sport Line, Luxury Line and M Sport package also include specific 19-inch light-alloy wheels, leather upholstery with exclusive stitching and piping in contrasting colours, plus illuminated aluminium door sill strips.

Sport Line brings extra visual prominence to the exterior with BMW Individual high-gloss Shadow Line trim for the side window surrounds and other details in Black at the front and rear. Additions such as sports seats help to raise levels of driving pleasure another notch. Luxury Line variants use styling cues such as chrome applications in the front air intakes, BMW kidney grille and rear apron to project class and elegance. Exclusive fine wood interior trim strips accentuate the exclusive ambience in the interior.

By specifying the M Sport package for their car, new BMW 6 Series Gran Turismo drivers are signalling their enthusiasm for the dynamic side of automotive life – be it the handling of their car or the way it looks. The M Aerodynamics package, which comprises items such as black fins for the Air Breathers, a special design for the side skirts and rear apron, and

particularly large air intakes at the front, is one feature of the M Sport package. Others include M Sport brakes with blue-painted brake callipers, exhaust tailpipe embellishers in light chrome and BMW Individual high-gloss Shadow Line trim. M sports seats, a newly designed M leather steering wheel, an anthracite-coloured BMW Individual headliner, interior trim strips in Aluminium Rhombicle with accent strips in Pearl Chrome and other special details imbue the interior with sporting flair. The M Sport package can be combined with all the optional suspension systems.



## **Interior and equipment.** **Bespoke solutions delivering supreme driving pleasure and a relaxed travelling experience.**

The versatility of the vehicle concept behind the new BMW 6 Series Gran Turismo, the dynamic character of the car and its luxurious levels of long-distance comfort are reflected in the design of the interior. A cockpit tailored to the driver, the extremely generous, variable-use space for occupants and luggage, high-quality design and carefully selected and precisely worked materials provide all the ingredients for superlative driving pleasure, a relaxed travelling experience and unbeatable practicality within a luxurious ambience.

The new BMW 6 Series Gran Turismo comes as standard with Dakota leather upholstery, which can be specified in a range of different colours and interpretations, depending on the equipment lines. The optional Exclusive Nappa leather is available in several different variants. And the likewise optional Sensatec trim for the instrument panel is offered in the colours Black and Coffee.

Precisely formed, seamlessly fitting surfaces and meticulously incorporated chrome trim elements highlight the exclusive character of the interior. The contour of the interior trim strips in the door panels traces the elegant flow of the roofline. The embossed "GT" lettering on the Pearl Chrome accent strip in the rear compartment lends the car a bespoke touch. And electrically operated sun blinds for the rear side windows can be added as an option.

### **Raised seating position and driver-focused cockpit design.**

Horizontal surfaces lend structure to the instrument panel and interior door trim and, in so doing, underscore the width, stylistic equilibrium and sweeping elegance of the interior. In the cockpit, the lines rise dynamically towards the driver and mark out their workplace with unmistakable clarity. The raised seating position enhances the driver's view out over the road and, together with the ergonomically optimal arrangement of the controls, sends out a statement of imperious driving pleasure. The iDrive operating system's Control Display now takes the form of a freestanding flatscreen.

The BMW 6 Series Gran Turismo is fitted as standard with a sports leather steering wheel including multifunction buttons for the infotainment, communication functions and cruise control. If the eight-speed Steptronic Sport transmission is specified, shift buttons on the steering wheel allow the driver to change gear manually.

### **Rear compartment offers luxurious comfort over long distances.**

The rear compartment of the new BMW 6 Series Gran Turismo has three full-size seats with maximised legroom and even more headroom than its predecessor. The width of the rear compartment enables up to three child seats to be fitted. ISOFIX attachment points in the outer seats make it easier to secure the child seats in place. The newly designed rear seat bench helps to further improve long-distance travelling comfort and optimise soundproofing. Indeed, acoustic comfort has been enhanced with the help of measures including soundproofing in the roof, doors and rear seat backrests.

Sports seats or comfort seats, active seat ventilation and a massage function can be ordered for the driver and front passenger as an alternative to standard specification. The likewise optional electrically adjustable comfort seats for the rear passengers feature powered adjustment of the backrest angle at the touch of a button.

### **Flexible-use space and modern functionality.**

The door pockets for all the seats offer extra stowage room for travel items. For example, there is space here for one-litre drinks bottles to be accommodated upright. In the front cabin, there are another two cupholders, a roomy glove compartment and a large compartment under the armrest in the centre console. The folding centre armrest in the rear offers two further cupholders and if the comfort seats are fitted an additional stowage compartment is added to the list.

The large, variable-use interior and modern functionality of the new BMW 6 Series Gran Turismo highlights its qualities when it comes to accommodating luggage and carrying out other transportation jobs. The single-piece tailgate opens and closes electrically as standard, and if Comfort Access is specified, this process can be initiated hands-free with a movement of the foot under the rear apron. At 610 litres, the new car's load compartment capacity is 110 litres larger than its predecessor's. With all the seats occupied, the car can therefore still carry four 46-inch golfbags or ten crates of water bottles.

The load sill has been lowered by more than five centimetres and now sits flush with the load compartment floor. The 40:20:40 split rear seat backrest can be folded down not only from the passenger compartment, but also by means of electric remote release using a button in the boot. This expands the available stowage space to as much as 1,800 litres – which is 100 litres more than in the outgoing model. The maximum width and length of the load area have also been increased (by 25 / 185 millimetres). The rigid two-section luggage cover can be stowed away in a compartment underneath the boot floor.

Also integrated into the lining of the load compartment is the button used to pivot out the optional trailer coupling. The maximum permitted trailer load for all variants of the new BMW 6 Series Gran Turismo available from launch is 2,100 kilograms.

A panoramic glass roof can be ordered as an option. The two-section glass surface with an overall length of 1,065 millimetres and a width of 900 millimetres does its bit to create a pleasantly airy cabin ambience that is bathed in light. The two-layer roller-type cover, which is made from acoustically optimised material and runs along side-mounted rails, helps give the interior effective soundproofing.

The new BMW 6 Series Gran Turismo is equipped as standard with automatic climate control, which allows individual control of the temperature and ventilation intensity for the driver and front passenger. Automatic climate control with extended features and a four-zone automatic climate control system can be ordered as an option. Customers wishing to enhance air quality even further can select the Ambient Air package. This option features air ionisation and allows those on board to fragrance the interior with selected scents. The Ambient light option provides particularly harmonious interior illumination using LED units in the instrument panel and doors. The colour and brightness of the light can be configured as desired. In addition, a light carpet uses illumination sources integrated into the side skirts to generate a striking light graphic where the driver and passengers get in and out of the car.

One of the highlights of the entertainment systems on the options list is the Bowers & Wilkins Diamond Surround Sound System. A fully active 10-channel amplifier with an output of 1,400 watts, plus dynamic sound equalizing and 16 partially illuminated speakers produce an exceptionally precise and wonderfully rich sound, whose quality can be experienced equally in all seats on board the BMW 6 Series Gran Turismo.



# Powertrain, driving experience and BMW EfficientLightweight. A fine balance of sports performance and ride comfort.

The engines available for the new BMW 6 Series Gran Turismo have been selected from the latest generation of BMW Group power units. They channel their power to the driven wheels via an eight-speed Steptronic transmission. The BMW 640i Gran Turismo and BMW 640i xDrive Gran Turismo come as standard with the eight-speed Steptronic Sport transmission, which stands out with its particularly rapid gear changes and enables the driver to execute shifts manually using paddles on the steering wheel.

The remarkable effectiveness of the engine and transmission, optimised aerodynamics and its weight-saving construction make the new BMW 6 Series Gran Turismo a beguilingly sporting performer but also ensure it is more efficient than its predecessor. Depending on the model variant, the sprint from 0 to 100 km/h (62 mph) is as much as 0.7 seconds quicker (BMW 630i Gran Turismo) than was possible with the outgoing model. Fuel consumption and emissions in the NEDC test cycle are up to 15 per cent lower (BMW 640i Gran Turismo, BMW 630d Gran Turismo).

## **Petrol and diesel engines with more power and lower fuel consumption.**

All of the engines feature an aluminium construction, optimised thermodynamics and cutting-edge BMW TwinPower Turbo technology. One four-cylinder and one six-cylinder in-line petrol engine, plus a straight-six diesel unit will be available for the new BMW 6 Series Gran Turismo from launch. And as an alternative to classical rear-wheel drive, the two six-cylinder variants can also be specified straightaway with BMW xDrive intelligent all-wheel drive.

The package of technology for the petrol engines is made up of TwinScroll turbocharging, High Precision Direct Injection, VALVETRONIC fully variable valve control and Double-VANOS variable camshaft timing. New engine encapsulation reduces noise and accelerates warm-up for both units. The four-cylinder of the new BMW 630i Gran Turismo generates output of 190 kW/258 hp from its 2.0-litre displacement and peak torque of 400 Nm (295 lb-ft) between 1,550 and 4,400 rpm. It powers the car from 0 to 100 km/h (62 mph) in 6.3 seconds, and posts combined fuel consumption of 6.6 – 6.2 litres per 100 kilometres (42.8 – 45.6 mpg imp) and CO<sub>2</sub> emissions of 152 – 142 grams per kilometre (figures according to the NEDC test cycle, may vary depending on the tyre format specified).

The 3.0-litre six-cylinder in-line petrol engine under the bonnet of the new BMW 640i Gran Turismo and new BMW 640i xDrive Gran Turismo generates maximum output of 250 kW/340 hp and puts peak torque of 450 Nm (332 lb-ft) on tap between 1,380 and 5,200 rpm. The result is 0 to 100 km/h (62 mph) in 5.4 seconds, or 5.3 seconds for the xDrive variant. The combined fuel consumption of the two models is 7.4 – 7.0 litres per 100 kilometres (38.2 – 40.4 mpg imp) and 8.2 – 7.7 litres per 100 kilometres (34.5 – 36.7 mpg imp) respectively. CO<sub>2</sub> emissions come in at between 169 and 159 grams per kilometre / 187 and 177 grams per kilometre (figures according to the NEDC test cycle, may vary depending on the tyre format specified).

The 3.0-litre six-cylinder in-line diesel engine with 195 kW/265 hp and peak torque of 620 Nm (457 lb-ft) between 2,000 and 2,500 rpm can likewise be specified with all-wheel drive as an option. This power unit has turbocharging with variable inlet geometry and common-rail direct injection, whereby piezo injectors working with a maximum pressure of 2,500 bar ensure exceptionally precise fuel metering. The new BMW 630d Gran Turismo powers from 0 to 100 km/h (62 mph) in 6.1 seconds, the new BMW 630d xDrive Gran Turismo in 6.0 seconds. Combined fuel consumption and CO<sub>2</sub> emissions are 5.3 – 4.9 litres per 100 kilometres (53.3 – 57.7 mpg imp) and 139 – 129 grams per kilometre for the BMW 630d Gran Turismo and 5.9 – 5.5 litres per 100 kilometres (47.9 – 51.4 mpg imp) and 155 – 144 grams per kilometre for the BMW 630d xDrive Gran Turismo (figures according to the NEDC test cycle, may vary depending on the tyre format specified). Both model variants feature emission-lowering BMW BluePerformance technology, which comprises a particulate filter, an oxidation catalyst, a NOX storage catalyst and an SCR catalyst with AdBlue injection for additional NOx reductions.

### **Intelligent networking optimises dynamics and efficiency.**

With the help of intelligent networking, the eight-speed Steptronic transmission can adapt its shift strategy to the current driving situation. If the Navigation system Professional is specified, the intelligent transmission management takes its cues from the upcoming route. For example, on the basis of navigation data it can perform an early downshift when approaching an intersection, in order to take full advantage of the engine braking effect. It also allows unnecessary gear changes to be prevented when taking two bends in quick succession. If ECO PRO mode is selected using the Driving Experience Control switch, the coasting function decouples the powertrain whenever the driver lifts off the accelerator between 50 and 160 km/h (31 – 99 mph).

Intelligent networking also improves the efficiency-boosting effect of the Auto Start Stop function. The control unit uses data from the navigation system and the driver assistance systems' cameras and radar sensors to prevent the engine being switched off at moments where it would be counterproductive for efficiency – for example when pausing briefly at T-junctions or roundabouts.

### **Cutting-edge chassis technology, rear-axle air suspension as standard.**

Thanks to a rigorous round of chassis enhancements, the new BMW 6 Series Gran Turismo offers noticeably greater agility and, at the same time, an increase in ride quality. The double-wishbone front suspension and five-link rear suspension underpin a smooth balance between dynamic sharpness and comfort. The front suspension decouples the wheel location and damping functions to avoid compromising comfort under high lateral acceleration. And the steering remains as unaffected as possible by bumps in the road.

The rear suspension uses its dual elastic bearings and optimised elastokinematics to ensure precise wheel location and excellent directional stability. The large rear axle subframe mounting and supporting system provides effective decoupling of the powertrain and suspension, with benefits for acoustics. Standard specification includes rear-axle air suspension with automatic self-levelling, which maintains a constant ride height regardless of driving situation or payload, while at the same time controlling vibrations.

The electromechanical steering system with standard Servotronic function (for speed-sensitive power assistance) offers unbeatable precision in dynamic cornering situations and high levels of comfort when manoeuvring. The optional Integral Active Steering is likewise electromechanical. Controlled steering of the rear wheels allows it to provide extra agility when cornering, sure-footed responses when changing lanes and easy manoeuvrability around town.

### **Adaptive suspension and Executive Drive deliver ride comfort and sports performance to order.**

Adaptive suspension with Dynamic Damper Control and two-axle air suspension can be ordered as an option to further enhance ride quality, in particular. But as well as improving ride and suspension comfort, the electronically controlled dampers also sharpen the car's dynamics. The suspension is supplied with air by an electrically powered compressor with pressure reservoir. And because the air supply is controlled individually for each wheel, it is even possible to compensate for an unevenly distributed load.

The two-axle air suspension enables owners to set the car's ride height manually. Ground clearance can be raised by 20 millimetres at the touch of a button for driving on rough ground or up steep ramps. Once the driver accelerates beyond 35 km/h (22 mph), the self-levelling system automatically reverts to the standard setting. A 10-millimetre drop in ride height can be initiated by pressing a button. This happens automatically at speeds over 120 km/h (75 mph) and when SPORT mode is selected using the Driving Experience Control switch.

The Executive Drive option offers an extra dose of sportiness. It complements Dynamic Damper Control and the two-axle air suspension with active roll stabilisation and is offered in combination with Integral Active Steering. Roll stabilisation works using electric swivel motors and takes fast, precise action to counteract body roll during dynamic cornering, while also improving comfort in straight-line driving by actively countering bump disturbances affecting only one side of the car. All of the optional suspension systems can be ordered in conjunction with BMW xDrive all-wheel drive.

### **Driving Experience Control switch with ADAPTIVE and COMFORT+ modes as an option.**

As well as ECO PRO mode, the standard-fitted Driving Experience Control switch is also used to activate the COMFORT and SPORT settings. These different modes, selected at the press of a button, modify the accelerator and steering mapping, the shift characteristics of the Steptronic transmission and the responses of the electronic dampers, if specified. Choosing the Adaptive suspension and Executive Drive options also adds the COMFORT+ and ADAPTIVE modes. These allow drivers to select a particularly comfort-biased set-up or one that responds automatically to their driving style. In ADAPTIVE mode, navigation data from the optional Navigation system Professional (if specified) is used to proactively adjust the car's responses when approaching intersections or bends.

### **BMW EfficientLightweight: reducing weight by around 150 kilograms.**

Intelligent lightweight construction and the increased use of aluminium and high-strength steels for body and chassis components has lowered the weight of the new BMW 6 Series Gran Turismo to around 150 kilograms below that of its predecessor. As well as the doors and bonnet, the car's tailgate is now also made from aluminium. The engine cross-member, spring struts and rear trailing arms are among the chassis components hewn from this lightweight metal. Reducing unsprung mass in the wheels and brakes has helped to give the new BMW 6 Series Gran Turismo even more agile handling.

A steel/aluminium compound construction, galvanised, hot-formed steels and now also cold-formed steel plates with a zinc/magnesium coating are all used to further improve stiffness and passive safety and minimise weight. Among the latest innovations in manufacturing technology registered under the BMW EfficientLightweight banner are a laser welding technique for the aluminium door shells and glass-fibre reinforced plastic acoustic shielding for the inner door panelling.

# Controls and driver assistance systems. Making comfortable, safe progress on the road to automated driving.



At the heart of the display and control concept in the new BMW 6 Series Gran Turismo is the iDrive system. In addition to the Touch Controller on the centre console and the direct menu control and favourites buttons, the system also comprises a new version of the Control Display. The high-resolution unit now takes the form of a freestanding 10.25-inch touchscreen, while intuitive touch control is facilitated by the tile-style menu layout with live content.

The voice control system has undergone further improvement and now also responds to freely formulated instructions. BMW gesture control can be used in the new BMW 6 Series Gran Turismo too, allowing certain functions to be operated with simple movements of the hand or fingers, which are registered by a 3D sensor in the centre console and translated into the relevant commands. Also available is the new-generation BMW Head-Up Display, whose projection area has been increased in size by 70 per cent. This system reflects driving-related information onto the windscreen in full colour and with a resolution of 400 x 800 pixels so that it appears directly in the driver's field of vision.

## **Assistance systems that smooth the way to automated driving.**

The driver assistance systems in the new BMW 6 Series Gran Turismo make use of the standard stereo camera – and can also link up with optional radar and ultrasonic sensors, if fitted – to monitor the vehicle's surroundings. Collision and Pedestrian Warning with City Collision Mitigation comes as standard, as does Cruise Control with braking function. The latter can be upgraded to the new, improved version of Active Cruise Control with Stop & Go function as an option. This system is operational in a speed range from 0 to 210 km/h (0 – 130 mph) and is capable of braking the vehicle to a standstill. The maximum length of time for starting off again automatically has been extended to as much as 30 seconds, relieving stress on the driver considerably, particularly when driving in stop-start traffic on motorway-type roads. The system's sensors now register not only the vehicle immediately ahead, but the one in front of that as well.

The driver is also able to import the speed restrictions detected by the Speed Limit Info system as the cruise control setting – either exactly or with a margin of up to 15 km/h (9 mph). And if the Navigation system Professional is

specified, the system can also take into account the speed limits further along the driver's route, resulting in an anticipatory and efficient style of driving.

The Steering and lane control assistant – also active at speeds between 0 and 210 km/h (0 – 130 mph) – represents another step along the road to automated driving. It uses road markings and vehicles driving ahead as a means of orientation and works together with the driver to help keep the vehicle in the detected lane. The system's hands-on-wheel detection is very sensitive and recognises contact even when only a few fingers briefly touch the wheel.

The Lane Departure Warning and Lane Change Warning systems operate at speeds between 70 and 210 km/h (44 – 130 mph). The Lane Departure Warning system alerts the driver if the vehicle is straying out of its lane unintentionally by activating a visual signal and causing the steering wheel to vibrate. Lane Change Warning monitors manoeuvres when pulling out into a different lane, and helps the driver to steer the vehicle back into its original lane if a risk of collision is detected. Side Collision Warning and the evasion aid likewise enhance convenience and safety by coming to the driver's assistance with corrective steering inputs. Between 30 and 210 km/h (19 – 130 mph), Side Collision Warning notifies drivers by means of a visual signal and steering wheel vibrations that another vehicle is drawing very close from the side. If the system detects sufficient room on the other side of the vehicle, it correctively steers the vehicle in this direction. The evasion aid assists the driver in situations where a swift lane change is required because an obstacle has suddenly appeared in the vehicle's path. At speeds up to 160 km/h (99 mph), it intervenes to assist the driver with the necessary evasive steering action.

### **Intelligent systems offer a clearer view and warn of dangers.**

Numerous other systems are designed to help drivers when manoeuvring and parking as well as in driving situations with an obstructed view. The new BMW 6 Series Gran Turismo is equipped as standard with Park Distance Control (PDC), which includes sensors at the front and rear. The options list features both a rear view camera and the Surround View system, which can display a 3D image of the vehicle and its immediate surroundings from multiple perspectives in the Control Display. When exiting from concealed junctions or driveways or when backing out of a parking space perpendicular to the road, the driver receives assistance from the Crossing traffic warning system, which monitors the surrounding area using radar sensors.

The Crossroads warning and Wrong-way warning systems also do their bit to avoid potentially hazardous situations when approaching a junction where traffic on the other road has right of way and when joining motorways or

entering a roundabout. The BMW Night Vision system offers greater driving pleasure and safety during the hours of darkness by providing a real-time video image in the Control Display that highlights any pedestrians, larger animals or other objects radiating heat, and supplements this with a marker light.

**Automatic parking: Parking Assistant, Remote Control Parking.**

The new BMW 6 Series Gran Turismo's Parking Assistant enables the automatic selection and use of parallel, perpendicular and angled parking spaces. Suitable spaces are detected with the help of ultrasonic sensors when driving past them. Once the driver has activated the Parking Assistant, the system takes care of all the acceleration, braking, steering and gear changes required to manoeuvre into the space.

The Remote Control Parking feature offers the ultimate in convenience when it comes to parking the car. The driver is able to initiate the required manoeuvre to move forwards into narrow parking spots or back out of them again from outside the vehicle using the BMW Display Key. All acceleration and braking actions are monitored by the sensors of the driver assistance systems and supervised by the driver. The engine is likewise started and switched off by remote control with the BMW Display Key.

# BMW Connected and ConnectedDrive. Intelligently connected with the digital world.



BMW Connected uses intelligent connectivity to assist drivers of the new BMW 6 Series Gran Turismo. The digital personal mobility assistant helps them to reach their destination easily and with minimal stress – and not only when they are in their car. None of the new model's competitors are able to match either the choice of personalised services or the all-encompassing BMW Connected concept when it comes to connecting the vehicle and driver to the digital world.

## **BMW Connected becomes an integral part of a digital lifestyle.**

BMW Connected interfaces the vehicle with the touchpoints chosen by the customer via the flexible Open Mobility Cloud platform. Its personalised services can be used on the Apple iPhone or Apple Watch, for instance, or on smartphones and smartwatches running the Android operating system. This turns the personal mobility assistant into a seamlessly integrated component of the driver's digital life, available anytime and anywhere.

With BMW Connected, the mobility experience extends beyond the vehicle. Mobility-related information – such as the appointments and addresses contained in calendar entries – is detected and taken into account when computing the route for journeys. The personal mobility assistant then calculates the ideal departure time based on the latest traffic information and notifies the driver accordingly with a message on their smartphone. When the driver starts their car, which is likewise connected to the Open Mobility Cloud, its navigation system can access the route directly. BMW Connected is also an adaptive system that is capable of automatically storing both places that are driven to regularly and personal mobility patterns.

## **Infotainment, convenience and safety broaden their reach.**

The standard built-in SIM card also allows drivers of the new BMW 6 Series Gran Turismo to use Intelligent Emergency Call with automatic locating and accident severity detection. With the new BMW Teleservice Accident Assistance, the vehicle now also detects low-speed collisions below the threshold for airbag deployment. The driver receives a message in the iDrive display offering to contact the BMW Accident Assistance service directly. A push of a button is all it takes to obtain professional support from the BMW Accident Assistance team, who can also put the customer in touch with a BMW Service Partner if necessary. The Concierge Services personal

information facility, Online Entertainment and RTTI (Real Time Traffic Information) are all available, too, along with numerous apps.

**Navigation updates over the air, hazard warnings based on car-to-car communication, On-Street Parking Information.**

The latest generation of the Navigation system Professional boasts quicker start-up, even faster route calculation and optimised 3D rendering of urban map graphics. Thanks to the automatic map updates, which are free for the first three years, the navigation data is updated at regular intervals over the air using a mobile phone network connection. The vehicle also transmits data on the speed limits detected by the Speed Limit Info system to the BMW backend, from where the on-board navigation map can be updated at any time.

Car-to-car communication is now also employed within the inter-connected BMW fleet to provide advance warning of hazardous traffic situations. Information on any detected hazards presented by an accident, a broken-down vehicle, dense fog, heavy rain or black ice, for example, is also relayed to the BMW backend from where it is imported into the navigation system of both the driver's car and other vehicles in the vicinity.

The unique On-Street Parking Information service helps drivers to search for a parking space. It works in a similar way to RTTI, using intelligent connectivity to establish the availability of roadside parking spaces based on historical and current data.

**Microsoft Exchange and Apple CarPlay available in the car.**

BMW is the first carmaker to offer a secure server connection for exchanging and editing emails, calendar entries and contact details – thanks to the car's built-in Microsoft Exchange function. This means that addresses from appointment entries can be imported straight into the navigation system and telephone numbers can be dialled from an integrated mobile phone. Apple CarPlay can be used in the new BMW 6 Series Gran Turismo too, and BMW is again the first carmaker to integrate this service into the operating system without any cables.

**Permanently connected – with the Display Key and Remote 3D View.**

The BMW Display Key allows drivers to keep in contact with their BMW 6 Series Gran Turismo around the clock. Besides fuel level and service-related information, the colour display can also indicate whether the car's doors, windows and panoramic glass sunroof are closed. Meanwhile, the Remote 3D View function shows drivers a three-dimensional live image of their car and its immediate vicinity, as generated by the Surround View system, beamed to their smartphone with the help of BMW Connected.