

# The new BMW 3 Series Sedan. Contents.



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# The new BMW 3 Series Sedan. Model variants at launch.



## **BMW 320i:**

Four-cylinder in-line petrol engine, eight-speed Steptronic transmission.  
Capacity: 1,998 cc, output: 135 kW/184 hp at 5,000 – 6,500 rpm,  
max. torque: 300 Nm (221 lb-ft) at 1,350 – 4,000 rpm.  
Acceleration [0 – 100 km/h (62 mph)]: 7.2 seconds,  
top speed: 238 km/h (148 mph).  
Fuel consumption combined\*: 6.0 – 5.7 l/100 km (47.1 – 49.6 mpg imp),  
CO<sub>2</sub> emissions combined\*: 137 – 129 g/km, exhaust standard: EU6d-TEMP.

## **BMW 330i:**

Four-cylinder in-line petrol engine, eight-speed Steptronic transmission.  
Capacity: 1,998 cc, 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)]: 5.8 seconds,  
top speed: 250 km/h (155 mph).  
Fuel consumption combined\*: 6.1 – 5.8 l/100 km (46.3 – 48.7 mpg imp),  
CO<sub>2</sub> emissions combined\*: 139 – 132 g/km, exhaust standard: EU6d-TEMP.

## **BMW 318d:**

Four-cylinder in-line diesel engine, six-speed manual gearbox (optional: eight-speed Steptronic transmission).  
Capacity: 1,995 cc, output: 110 kW/150 hp at 4,000 rpm,  
max. torque: 320 Nm (236 lb-ft) at 1,500 – 3,000 rpm.  
Acceleration [0 – 100 km/h (62 mph)]: 8.5 seconds (8.4 seconds),  
top speed: 226 km/h / 140 mph (222 km/h / 138 mph).  
Fuel consumption combined\*: 4.5 – 4.2 l/100 km / 62.8 – 67.3 mpg imp (4.4 – 4.1 l/100 km / 64.2 – 68.9 mpg imp),  
CO<sub>2</sub> emissions combined\*: 120 – 112 g/km (116 – 108 g/km), exhaust standard: EU6d-TEMP.

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

### **BMW 320d:**

Four-cylinder in-line diesel engine, six-speed manual gearbox (optional: eight-speed Steptronic transmission).

Capacity: 1,995 cc, output: 140 kW/190 hp at 4,000 rpm,  
max. torque: 400 Nm (295 lb-ft) at 1,750 – 2,500 rpm.

Acceleration [0 – 100 km/h (62 mph)]: 7.1 seconds (6.8 seconds),  
top speed: 240 km/h / 149 mph (240 km/h / 149 mph).

Fuel consumption combined\*: 4.7 – 4.4 l/100 km / 60.1 – 64.2 mpg imp (4.5 – 4.2 l/100 km / 62.8 – 67.3 mpg imp),

CO<sub>2</sub> emissions combined\*: 122 – 115 g/km (117 – 110 g/km), exhaust standard: EU6d-TEMP.

### **BMW 320d xDrive:**

Four-cylinder in-line diesel engine, eight-speed Steptronic transmission, BMW xDrive.

Capacity: 1,995 cc, output: 140 kW/190 hp at 4,000 rpm,  
max. torque: 400 Nm (295 lb-ft) at 1,750 – 2,500 rpm.

Acceleration [0 – 100 km/h (62 mph)]: 6.9 seconds,  
top speed: 233 km/h (145 mph).

Fuel consumption combined\*: 4.8 – 4.5 l/100 km (58.9 – 62.8 mpg imp),

CO<sub>2</sub> emissions combined\*: 125 – 118 g/km, exhaust standard: EU6d-TEMP.

### **BMW 330d:**

Six-cylinder in-line diesel engine, eight-speed Steptronic transmission.

Capacity: 2,993 cc, output: 195 kW/265 hp at 4,000 rpm,  
max. torque: 580 Nm (428 lb-ft) at 1,600 – 3,000 rpm.

Acceleration [0 – 100 km/h (62 mph)]: 5.5 seconds,  
top speed: 250 km/h (155 mph).

Fuel consumption combined\*: 5.2 – 4.8 l/100 km (54.3 – 58.9 mpg imp),

CO<sub>2</sub> emissions combined\*: 136 – 128 g/km, exhaust standard: EU6d-TEMP.

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

The fuel consumption, CO<sub>2</sub> emissions and electric power consumption figures were determined according to the European Regulation (EC) 715/2007 in the version applicable. The figures refer to a vehicle with basic configuration in Germany. The range shown considers the different sizes of the selected wheels/tyres and the selected items of optional equipment, and may vary during configuration.

The values are already based on the new WLTP test cycle and are translated back into NEDC-equivalent values in order to ensure comparability between the vehicles. With respect to these vehicles, for vehicle-related taxes or other duties based (at least inter alia) on CO<sub>2</sub> emissions, the CO<sub>2</sub> values may differ from the values stated here (depending on national legislation).

Further information on official fuel consumption figures and specific CO<sub>2</sub> emission values of new passenger cars is included in the following guideline: 'Leitfaden über den Kraftstoffverbrauch, die CO<sub>2</sub>-Emissionen und den Stromverbrauch neuer Personenkraftwagen' (Guide to the fuel economy, CO<sub>2</sub> emissions and electric power consumption of new passenger cars), which can be obtained free of charge from all dealerships, from Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen and at <https://www.dat.de/co2/>.

# Vehicle concept and design.

## The sports sedan, redefined.



The BMW 3 Series Sedan has epitomised the concept of sporty driving pleasure in the global premium midsize class for more than 40 years. Exuding dynamic design, agile handling, exceptional efficiency and innovative equipment features, it takes the signature characteristics of a BMW and turns the volume up several notches. The sedan represents not only the core of the BMW 3 Series range (of which over 15 million units have now been sold worldwide) but also the heartbeat of the BMW brand. When the first BMW 3 Series was launched in 1975, it simultaneously brought to life a new breed of car; the sports sedan concept underpinned the rise of the 3 Series to become BMW's most successful model – a status it retains to this day. Over the course of its six model generations to date, the BMW 3 Series has been ranked the world's biggest-selling premium car, led the way for high-performance powertrain and chassis technology and earned a reputation as a pioneer of technological innovations in the midsize segment. This latest edition of the car sees BMW building on the sporting tradition of the 3 Series, whose exploits in race competition have earned it so much extra kudos. The seventh generation of the sports sedan moves the game on once again in terms of driving dynamics, not to mention premium quality and innovation, in the midsize segment.

The world premiere of the new BMW 3 Series Sedan will be hosted by the Mondial de l'Automobile show in Paris in October 2018. This first public presentation of the new 3 Series will be followed by the global market launch of the car from 9 March 2019. The BMW 3 Series Sedan has been produced at BMW Plant Munich from its first generation. The company's "home" factory is also the birthplace for the new edition of the model. But in keeping with the strategic guideline dictating that production follows the market, another two facilities have been added to the line-up. All of which means production of the new BMW 3 Series Sedan for the Chinese market will take place at the Tiexi plant in Shenyang run by the joint venture BMW Brilliance Automotive (BBA), where the outgoing 3 Series Sedan has been made. And in 2019 the newly constructed BMW Plant San Luis Potosí in Mexico will also join the fray.

**Exterior design: a clear, precise expression of sporting prowess.**

The exterior design of the new BMW 3 Series Sedan uses a combination of precisely drawn lines and strikingly contoured surfaces to create a modern interpretation of the sporting aesthetic. Its new design language provides a clear and unadulterated showcase for the dynamic character of the car. The new 3 Series Sedan is 85 millimetres longer than its predecessor (at 4,709 mm), 16 millimetres wider (1,827 mm) and just 1 mm taller (1,442 millimetres). These dimensions lend the latest-generation model dynamically stretched proportions and a muscular stature. The car's 41-millimetre longer wheelbase (2,851 mm) and increased track widths (front: + 43 mm, rear: 21 mm), meanwhile, have a direct and positive influence on its poise and agility.

In keeping with the sporting theme, the front end of the BMW 3 Series Sedan cuts a wide, low-slung figure. The large BMW kidney grille elements are framed by a single surround and split up by wide bars and link to the headlight units. A technically sophisticated and visually smaller interpretation of the customary BMW twin headlights gives them a road-focussed stare. Their familiar two-way split is further emphasised by an eye-catching notch in the front apron that rises up into the headlight contour. Full-LED headlights come as standard, while the LED headlights with extended features and U-shaped daytime driving lights are available as an option. Likewise optional, the Adaptive LED headlights with BMW Laserlight stand apart with their hexagonal daytime driving light rings and blue, L-shaped elements in the inner and outer light sources. The bonnet is shaped by four contour lines searing towards the BMW kidney grille. At its leading edge, it sits flush with the upper edge of the headlights and kidney grille. Below it, the front apron has large surfacing and a modern look. Both the optional front foglamps and the Air Curtains are integrated into the outer air intakes, which are inserted into the front apron in a horizontal T shape on cars with standard specification and Sport Line / Luxury Line models. This design was originally developed by the National Advisory Committee for Aeronautics (NACA) for the intake air in jet engines and later became a feature of classical racing cars.

The car's rangy bonnet, long wheelbase, short overhangs and elegantly flowing roofline accentuate its dynamic profile when viewed from the side. A pair of character lines, which rise up to the rear of the car at door-handle level, strengthen the visual impact made by the forward-surgng body. And a dynamic contour line near the side skirts guides the eye to the powerfully sculpted rear wheel arches. Another feature treated to a striking new look is the Hofmeister kink – the familiar counter-swing at the trailing edge of the side window graphic. A BMW hallmark, this element of the window frame is now integrated into the C-pillar, giving the rear doors a “freestanding” glass edge.

The new design language majors on clear forms and precise lines, and this approach is also visible in the transition of the flanks into the car's rear end. Surface contours transposed stylistically into the rear apron from the side skirts extend in an upwards movement via the rear lights up to the spoiler lip on the boot lid, framing the sedan's tail with muscular élan. Added to which, horizontal lines and the slim, stylishly darkened light units housing L-shaped taillights give the rear a wide and robust stance. All of the light functions use LEDs as standard. The T-shaped trim elements in the outer edges of the rear apron – which also include a light function in the form of reflectors – mimic the design of the front air intakes on cars with standard specification and on Sport Line and Luxury Line models. The exhaust system's 80 or 90-millimetre (depending on the model variant) twin tailpipes also play a role in the car's arrestingly sporty appearance.

From launch, customers can choose from two non-metallic colours and ten metallic shades for the exterior of their new BMW 3 Series Sedan, including the new Portimao Blue metallic and Vermont Bronze metallic. Also available is the BMW Individual paint finish Dravit Grey metallic, another new addition to the colour charts.

### **Interior: a classy route to sporting flair.**

The brand's new design language also brings a clear arrangement of surfaces to the interior of the new BMW 3 Series Sedan. This accentuates the spaciousness of the cabin and, together with the cockpit's focus on the driver, enhances their concentration on the road. The instrument panel has a modern, light look, and its horizontal lines, high-quality electroplated trim strips and contours extending into the doors also lend it a feeling of width and elegance. The coordinated design of the door trim and instrument panel, plus the tall centre console, create an all-round feeling of space and a sporting aura. With their dynamic lines and clasp-style door openers, the front and rear door trim panels create a neatly coherent impression.

The newly designed instrument cluster and Control Display form a large-surfaced screen grouping, while the controls not included in these units are clustered into clearly structured function panels. In the centre of the instrument panel, the displays and buttons for the air conditioning and the central air vents form a sharply designed unit, while the light functions are operated from a panel of buttons next to the steering wheel. The start/stop button for the engine is now positioned in a classy control panel in the centre console, where the gearshift lever or newly designed selector lever is joined by the iDrive Controller and the buttons for the Driving Experience Control switch unit and electromechanical parking brake.

The range of standard and optional interior trim elements available for the instrument panel and centre console has been replaced almost in full. As well as elegant open-pore fine wood options, customers can choose from finishes including Aluminium Mesh Effect.

**Distinctive style from the factory: Advantage, Sport Line, Luxury Line and M Sport models.**

The equipment lines offered as an alternative to standard specification for the new BMW 3 Series Sedan enable precise individualisation of the car's appearance. The Advantage model includes a storage package, an automatically dimming rear-view mirror, three-zone automatic climate control and Park Distance Control with front and rear sensors. Carefully coordinated design and equipment features for the exterior and interior allow the Sport Line model, Luxury Line model and M Sport model to shine an even more vivid spotlight on either the dynamic driving experience or luxuriant elegance of the four-door car. As well as a line-specific front- and rear bumper design, they also come with exclusive light-alloy wheels in 17-inch or 18-inch formats, bespoke door sill strips and LED front foglamps.

The Sport Line model underlines the agile character of the new BMW 3 Series Sedan with features including BMW Individual high-gloss Shadow Line trim for the side window surrounds, plus kidney grille bars and trim elements for the air intakes and rear apron in High-gloss Black. The Sport Line's interior, including trim strips in High-gloss Black and sports seats for the driver and front passenger, gives particularly strong billing to driving pleasure. And the Luxury Line uses chrome applications for the BMW kidney grille, front air intakes and rear apron to bring out the car's elegant side even more prominently. Vernasca leather trim, Sensatec instrument panel and door trim, and fine wood interior trim strips in high-gloss Ash grey brown enhance the interior's premium ambience.

The M Sport model variant of the new BMW 3 Series Sedan is all about the dynamism of the car's handling and appearance. In keeping with its model-specific chassis systems, this variant features particularly large air intakes in the front end and an equally distinctive design for the side skirts and rear apron. These elements are joined by BMW Individual high-gloss Shadow Line trim, kidney grille bars in High-gloss Black, air intake trim in High-gloss Black and a rear diffuser in Dark Shadow. The design of the interior is also focussed one-hundred per cent on the car's sporty driving experience, thanks – among other things – to sports seats with M-specific upholstery, an M leather steering wheel, an anthracite-coloured BMW Individual headliner and interior trim strips in Aluminium Tetragon.

# Engines, transmissions and BMW xDrive. A powerful and efficient route to maximising driving pleasure.



Responsive power delivery, the free-revving exuberance characteristic of BMW, supreme refinement and exemplary efficiency: these are the hallmarks of the petrol and diesel engines with BMW TwinPower Turbo technology available from market launch for the new BMW 3 Series Sedan. The upgraded four-cylinder engines from the BMW Group's Efficient Dynamics family form the basis for the sporty driving experience offered by the BMW 330i, BMW 320i, BMW 320d and BMW 318d. A latest-generation six-cylinder in-line diesel engine powers the new BMW 330d Sedan. And the addition of units with four cylinders, six cylinders and BMW eDrive technology bring further variety to the range. Over the course of the year, the line-up will expand further to include a BMW M Performance version with extremely sporty characteristics and a BMW iPerformance model with the latest plug-in hybrid drive technology.

The power units join forces with a new-generation six-speed manual gearbox and the eight-speed Steptronic transmission. As an alternative to classical rear-wheel drive, the intelligent BMW xDrive all-wheel-drive system will also be available for the new BMW 320d Sedan at launch. As well as providing fully variable distribution of drive torque between the front and rear wheels, the latest version of the all-wheel-drive system has been optimised to enhance its efficiency.

## **BMW 330i: more power, minimised emissions.**

The engine in the new BMW 330i Sedan generates more spirited performance than ever. Boasting numerous detail upgrades, this two-litre, four-cylinder unit delivers maximum output of 190 kW/258 hp between 5,000 and 6,500 rpm, while peak torque of 400 Nm (295 lb-ft) is available from 1,550 to 4,400 rpm. The 5 kW/6 hp increase in output and the extra 50 Nm (37 lb-ft) of torque compared with the predecessor engine are the result of the focused optimisation of the BMW TwinPower Turbo system – which comprises twin-scroll turbochargers, High Precision Injection direct petrol injection, VALVETRONIC fully variable valve timing and Double-VANOS variable camshaft timing. The High Precision Injection system ensures precise fuel metering and particularly clean combustion, its new fuel pump generating maximum pressure of 350 bar compared with the 200 bar of the previous version. The further developed direct injection system enables optimal fuel flow through the combustion chambers with atomised fuel delivered by multi-



hole injectors. Other characteristics of this engine include a lighter crankshaft, reduced internal friction, optimised heat management and a new digital engine management system.

An impressive 0 to 100 km/h (62 mph) time of 5.8 seconds belies the enhanced efficiency of the new BMW 330i Sedan with its combined fuel consumption of 6.1 – 5.8 l/100 km (46.3 – 48.7 mpg imp)\* and CO<sub>2</sub> figures between 139 und 132 grams per kilometre\*. The engine's emissions have also been further improved. The exhaust treatment system includes a particulate filter to reduce emissions of particulate matter. As a result, the new BMW 330i Sedan complies with the particularly demanding Euro 6d-TEMP emissions standard.

### **The BMW 320i: free-revving four-cylinder engine optimises efficiency.**

Another model powered by a four-cylinder petrol engine benefitting from detailed refinements and featuring the very latest BMW TwinPower Turbo technology is the new BMW 320i Sedan. The version of the engine in this model variant develops 135 kW/184 hp at 5,000 – 6,500 rpm and generates maximum torque of 300 Nm (221 lb-ft), which is available between 1,350 and 4,000 rpm. Optimisation of the base power unit, the injection system and the engine control system increase both the engine's appetite for revs and its efficiency.

The new BMW 320i Sedan takes 7.2 seconds to accelerate from 0 to 100 km/h (62 mph). Its average fuel consumption is 6.0 – 5.7 litres per 100 kilometres (47.1 – 49.6 mpg imp)\* with corresponding CO<sub>2</sub> figures of 137 – 129 grams per kilometre\*. The BMW 320i Sedan is also equipped with a particulate filter and meets the requirements of the Euro 6d-TEMP emissions standard.

### **The BMW 330d: superior pulling power from six cylinders.**

Superior power delivery, impressive smoothness and exemplary efficiency are the defining characteristics of the 3-litre in-line diesel engine in the new BMW 330d Sedan, which develops maximum output of 195 kW/265 hp at 4,000 rpm and peak torque of 580 Nm (428 lb-ft) between 1,600 and 3,000 rpm. This latest version of the engine has a turbocharger with variable intake geometry and common-rail direct injection featuring piezo injectors, which operate at a maximum pressure of 2,500 bar for extremely precise fuel metering.

The new BMW 330d Sedan accelerates from 0 to 100 km/h (62 mph) in 5.5 seconds. Its combined fuel consumption and emissions figures are 5.2 – 4.8 litres per 100 kilometres (54.3 – 58.9 mpg imp)\* and 136 – 128 grams of CO<sub>2</sub> per kilometre\*.

**BMW 320d and BMW 318d: two-stage turbocharging, higher injection pressure.**

Systematic upgrades have also been made to the BMW TwinPower Turbo technology for the two-litre, four-cylinder diesel engines in the BMW 318d, BMW 320d and BMW 320d xDrive models. It now includes multi-stage turbocharging, which brings increased efficiency across all engine speeds. The small high-pressure turbocharger and the variable turbine geometry of the large low-pressure turbo give the system swift responses, enabling higher torque when driving flat out. Under partial loads, the multi-stage turbocharging enables significantly lower fuel consumption. And the solenoid-valve injectors of the common-rail direct injection system now deliver the fuel to the combustion chambers at a pressure of up to 2,500 bar (BMW 318d: up to 2,200 bar).

With maximum output of 140 kW/190 hp at 4,000 rpm and peak torque of 400 Nm (295 lb-ft) between 1,750 and 2,500 rpm, the new diesel unit accelerates the BMW 320d Sedan from 0 to 100 km/h (62 mph) in 7.1 seconds (automatic: 6.8 seconds) and the BMW 320d xDrive Sedan at a time of 6.9 seconds for the same sprint. This sporty performance is accompanied by average fuel consumption per 100 kilometres of 4.7 – 4.4 l/100 km / 60.1 – 64.2 mpg imp (automatic: 4.5 – 4.2 l/100 km / 62.8 – 67.3 mpg imp) for the 320d and 4.8 – 4.5 l/100 km / 58.9 – 62.8 mpg imp for the 320d xDrive\*, plus CO<sub>2</sub> emissions of 122 – 115 grams per kilometre (automatic: 117 – 110 g/km) and 125 – 118 grams per kilometre\* respectively.

The engine in the new BMW 318d Sedan develops its maximum output of 110 kW/150 hp at 4,000 rpm and delivers peak torque of 320 Nm (236 lb-ft) between 1,500 and 3,000 rpm. These figures translate into a 0 to 100 km/h (62 mph) time of 8.5 seconds (automatic: 8.4 seconds). Combined fuel consumption is 4.5 – 4.2 litres per 100 kilometres / 62.8 – 67.3 mpg imp (automatic: 4.4 – 4.1 l/100 km / 64.2 – 68.9 mpg imp)\*, while CO<sub>2</sub> emissions are between 120 – 112 grams per kilometre (automatic: 116 – 108 g/km)\*.

The BMW 330d, BMW 320d, BMW 320d xDrive and BMW 318d also meet the requirements of the Euro 6d-TEMP emissions standard. They are equipped with BMW BluePerformance technology, including a particulate filter, an oxidation catalyst and a NOx storage catalyst as well as an SCR catalyst with AdBlue injection for additional reduction of NOx emissions.

All variants of the new BMW 3 Series Sedan have dual-pipe exhaust systems culminating in tailpipes with a diameter of 80 mm for the BMW 318d Sedan and 90 mm for all other models.

### **Coming soon: the BMW 330e iPerformance with the latest plug-in hybrid drive technology.**

Summer 2019 will see a new addition to the drive system portfolio in the form of a BMW iPerformance model with plug-in hybrid drive. This new generation of the BMW 330e iPerformance Sedan combines the exceptional driving dynamics of the sports sedan, unrivalled by any other manufacturer, with the latest BMW eDrive technology. At a provisional figure of up to 60 kilometres (37 miles)\*, the electric range has increased by around a third compared with the predecessor model, while both the fuel consumption and CO<sub>2</sub> emissions of the new BMW 330e iPerformance Sedan are down by some 20 percent – to 1.7 litres per 100 kilometres (166.2 mpg imp) and 39 grams per kilometre\* (provisional figures).

In addition to these selling points, the intelligently controlled BMW eDrive technology imparts a hybrid-specific dimension to the driving enjoyment which is characteristic of the brand. The electric drive integrated into the eight-speed Steptronic transmission teams up with the combustion engine to deliver bursts of dynamic acceleration by making an additional 30 kW/41 hp available for short periods. The BMW 330e iPerformance Sedan can sprint from 0 to 100 km/h (62 mph) in 6.0 seconds (provisional figure). Adding to the unique driving experience provided by this model variant, the power unit's soundtrack reflects the plug-in hybrid mode engaged at the time to highlight either the characteristic sportiness of the BMW 3 Series Sedan or the almost silent gliding typical of all-electric driving. Due to the integration of the high-voltage lithium-ion battery under the rear seats and the positioning of the fuel tank above the rear axle, the introduction of BMW eDrive technology results in only a slight reduction in boot space. Almost the entire range of optional extras is available to encourage individualisation. Standard specification for the new BMW 330e iPerformance Sedan includes pre-conditioning of the heating and climate control system, and the optional seat heating can also be activated before the drive system is started up.

## **Unbeatable dynamic ability: the BMW M340i xDrive BMW M Performance model with new straight-six petrol engine.**

Also in summer 2019, the 3 Series range will welcome a compelling new addition at the sharp end of its output spectrum – the BMW M340i xDrive Sedan. The new BMW M Performance model will showcase the full dynamic potential of the new BMW 3 Series Sedan. A new six-cylinder in-line petrol engine, bespoke chassis tuning, xDrive intelligent all-wheel drive and the standard M Sport differential ensure performance attributes that will both impress and challenge the driver.

The new version of the straight-six engine developed for the BMW M340i Drive Sedan produces maximum output of 275 kW/374 hp and peak torque of 500 Nm (369 lb-ft). A 0 – 100 km/h (62 mph) time of 4.4 seconds (provisional figure) takes the BMW M Performance model into the reaches of the performance stratosphere inhabited by high-calibre sports cars. The combined fuel consumption and CO<sub>2</sub> emission figures for the BMW M340i Drive Sedan come in at 7.5 litres per 100 kilometres (37.7 mpg imp)\* and 199 grams per kilometre\* (provisional figures).

## **Six-speed manual gearbox and eight-speed Steptronic transmission both benefit from rigorous optimisation.**

The six-speed manual gearbox fitted as standard in the BMW 318d and BMW 320d models has optimised acoustic characteristics and is also easier to use. All other model variants of the new BMW 3 Series Sedan are equipped with the eight-speed Steptronic transmission as standard. The latest upgrade of this automatic transmission sees a wider gear spread (from 7.8 to 8.2 or 8.6 (BMW 330d) – and also increases internal efficiency and improves vibration suppression. It also has a new control unit and further enhanced gearshift dynamics. In addition to the optimised hydraulic control system, the shorter gearing for the lower ratios does most to boost the acceleration capability of the new BMW 3 Series Sedan.

The optional eight-speed Steptronic Sport transmission delivers even shorter shift times and a Launch Control function for highly dynamic, traction-optimised acceleration off the line. Shift paddles on the steering wheel allow manual intervention in the gear selection process.

### **Enhanced dynamics and efficiency through intelligent connectivity.**

Intelligent connectivity enables both versions of the automatic transmission to adapt their shift strategy according to the route and driving situation. If the requisite systems are specified, the eight-speed Steptronic transmission factors in data from the navigation system and the Active Cruise Control system's radar sensor. This makes it possible to avoid unnecessary gear changes when negotiating a series of fast corners and, when approaching a vehicle ahead, for example, to shift down early in order to use the engine braking to scrub off speed.

Intelligent connectivity also focuses on optimising engine efficiency. The Auto Start Stop function and the coasting function available in conjunction with the eight-speed Steptronic transmission in the new BMW 3 Series Sedan use data supplied by the optional navigation system, the front camera and the sensors for the optional driving assistance systems. In this way, inefficient engine shutdown – for example when stopping briefly at junctions or roundabouts – can be prevented. Added to which, movement of vehicles ahead is registered in order to determine the ideal moment for the Auto Start Stop function to stop and start the engine. The coasting function is now available when either ECO Pro or COMFORT mode is selected using the Driving Experience Control switch between 15 and 160 km/h (9 and 99 mph). Similarly, the efficiency-enhancing decoupling of the powertrain only takes place in driving situations where performance and comfort are not compromised. If the driver suddenly lifts off the accelerator, the powertrain stays connected so that engine braking can be used to support the ensuing deceleration. For the same reason, powertrain disconnection is also prevented when approaching a junction or a vehicle ahead.

### **BMW xDrive: fully variable and even more efficient.**

In the new BMW 320d xDrive Sedan, the latest version of the intelligent all-wheel-drive system splits drive torque between the front and rear wheels extremely efficiently and as required. The fully variable power transfer ensures maximum traction and directional stability in all road and weather conditions. It also promotes sporty handling through dynamically taken corners. This functionality comes courtesy of the electronically controlled multi-plate clutch in the transfer case which links up with the Dynamic Stability Control (DSC) system and constantly adjusts power transmission – precisely and in a fraction of a second – in response to the driving situation. In this way, any tendency of the vehicle to oversteer or understeer is nipped in the bud.

The system's rear-biased set-up helps ensure the new BMW 3 Series Sedan retains the sporty driving experience drivers expect from a BMW. With the Driving Experience Control switch set to SPORT mode, it is even more pronounced. Strategically sending even more drive power to the rear wheels increases agility when turning into bends. In situations which do not require all-wheel drive, the efficiency of BMW xDrive is increased by directing all the engine's torque to the rear wheels. The weight of the system has been reduced, while optimised oil supply increases internal efficiency.

# Chassis technology and driving experience.

## A compelling blend of sportiness and comfort.



When developing the body structure and chassis technology of the new BMW 3 Series Sedan, a number of clear priorities were set: enhanced driving dynamics, agile handling characteristics, high-precision steering and superior braking performance. The foundations for these attributes are provided by weight optimisation, a low centre of gravity, 50 : 50 axle load distribution and, above all, by the increase in the front and rear track compared with the predecessor model, significantly increased camber values for the front wheels and the substantial increase in the stiffness of the body structure and suspension mountings. Overall body rigidity is up by some 25 percent, rising to as much as 50 percent in certain areas. The increased rigidity of the mountings enables the M Sport suspension and Adaptive M suspension to go about their work with even more of their natural flair, with an increase in the suspension spring rate of some 20 percent over the previous-generation BMW 3 Series Sedan.

In addition to these measures, new shock absorber technology has been developed for the new BMW 3 Series Sedan. Used for the first time in a BMW model, the lift-related dampers are part of the car's standard chassis and make a major contribution to the unique balance of sportiness and comfort – unrivalled by any other manufacturer – which defines the character of the new BMW 3 Series Sedan. The car's dynamics can be fine-tuned with a series of precisely matched chassis options. The functionally coordinated interplay of suspension, steering, tyres, brake system and differential lock makes sporty driving an effortlessly enjoyable experience.

### **Lightweight construction and increased rigidity deliver greater agility.**

The rigorous development of the chassis design enhances the agility of the new BMW 3 Series Sedan in a number of ways. Many details of the proven double-joint spring strut front axle and five-link rear axle have been upgraded. Along with the sporty handling, the car's ride comfort and acoustics have also been improved.

Aluminium swivel bearings and control arms for the front axle, aluminium wheel mounts and a new generation of wheel bearings for the rear axle significantly reduce unsprung mass. The front axle – with its high level of component rigidity, the shear panels used to connect it to the body and its

specially tuned kinematics – enhances steering precision and cornering dynamics. Factors contributing to the high level of comfort provided by the sedan include a hydraulically damped torque strut bearing, which eliminates vibration and oscillation. At the rear axle, too, extremely rigid control arms and axle subframes and the use of thrust arms for the body mounting ensure particularly precise wheel location. Added to which, its design principle includes precisely tuned elastokinematics, which help to optimise the car's driving dynamics.

**Weight reduced by as much as 55 kg, drag coefficient now as low as 0.23.**

As with the chassis components, the weight of the new BMW 3 Series Sedan's body construction has also been reduced. The progress achieved through BMW EfficientLightweight measures is rooted in an intelligent material mix including increased use of high-strength steels and aluminium. The body-in-white is around 20 kilograms lighter than the outgoing model's, and the front spring struts and engine subframe of the BMW 3 Series Sedan are now also made of aluminium. This alone reduces the weight of the body structure by some 7.5 kilograms compared with the predecessor model. A further weight saving of almost 15 kilograms is down to the use of aluminium for the bonnet and front side panels. Overall, the new BMW 3 Series Sedan weighs up to 55 kilograms less than the corresponding predecessor model, depending on the model variant and equipment fitted.

The optimisation of its aerodynamic characteristics benefits not only the efficiency of the new BMW 3 Series Sedan, but also its performance. The drag coefficient (Cd) of the BMW 320d, for example, has been reduced from 0.26 to 0.23. Factors responsible for the new segment-leading figures include the almost completely sealed underbody, aerodynamically optimised wheels, the use of Air Curtains at the front of the car and the latest generation of active air flap control, which extends across the BMW kidney grille and lower air intake.

**Premiere for lift-related dampers.**

A newly developed suspension and damping system contributes to the beautifully balanced handling of the new BMW 3 Series Sedan. The introduction of lift-related damper control reduces body movement perceptibly when evening out vibrations caused by bumpy road surfaces and dynamic cornering, which paves the way for sporty, authoritative handling. 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.

At the front axle, the first line of defence against body vibrations is an additional element within the inner sleeve of the damper. Only when greater loads are encountered does the entire damper become active. The rear dampers also adapt continuously to the driving situation. Even when the vehicle is carrying heavier loads, they provide the ideal degree of hydraulic damping for the situation at hand. Lift-related damping is as an active element of the suspension set-up and is designed specifically to optimise the balance between sportiness and comfort. However, the positive effect of progressive suspension adjustment can also be felt in less demanding circumstances; even small bumps can trigger damper lift, which makes a noticeable difference.

The new BMW 3 Series Sedan benefits from lift-related damping both with the standard suspension and the optional M Sport suspension. With kinematics and elastokinematics clearly tuned for dynamic driving, the M Sport suspension features more rigid bearings and additional body struts, firmer springs and anti-roll bars, and an even higher degree of wheel camber. During fast compression and rebound, the damping forces are some 20 percent greater than the values with the standard suspension. This means that the difference between the two suspension options is about twice as great as on the predecessor model. Another element of the M Sport suspension – which now also applies to the all-wheel-drive model variants of the new BMW 3 Series Sedan – is a 10-millimetre lowering of the car's ride height.

### **Adaptive M suspension with electronically controlled dampers.**

As an alternative to the suspension variants with standard damper technology, customers can also specify Adaptive M suspension. This combines the characteristics of M Sport suspension with electronically controlled dampers. Able to deliver damping force to each wheel separately via continuously adjustable valves, it is both the sportiest and most comfortable suspension variant available for the new BMW 3 Series Sedan.

The latest version of this damping system operates with new valves and an optimised control algorithm, which now also enables load-dependent control of the damping forces. In addition, switching between the different modes selectable using the Driving Experience Control switch now results in a much more perceptible variation in the damping characteristics. In COMFORT mode, the electronically controlled dampers provide well-balanced long-distance comfort, whereas in SPORT mode they encourage a much more

dynamic driving style. As well as modifying the damper configuration, each setting also influences the steering, accelerator response and the shift dynamics of the Steptronic transmission. ADAPTIVE mode is now also available. With this setting selected, the car automatically adjusts its responses to the driving style and, depending on the equipment specified, to the route profile. The control system responds to accelerator and steering inputs and the position of the selector lever to make the powertrain and suspension characteristics sportier or more comfort-oriented. The map data supplied by the optional Navigation system Professional is also used to prepare the car for an upcoming junction or bend.

**Direct, precise, agile: variable sport steering.**

The Electric Power Steering of the new BMW 3 Series Sedan comes as standard with Servotronic speed-sensitive power assistance. Variable sport steering is part of the M Sport suspension and Adaptive M Sport suspension. With its variable ratio, which adjusts to changes in the steering angle, it is as adept at keeping the new BMW 3 Series Sedan effortlessly in a straight line as at maximising cornering agility or turning and manoeuvring comfort. In its latest form, the variable sport steering is particularly direct in its responses, even when only a slight steering input is applied. Cornering is precise and responsive, while the wheel angles required for parking manoeuvres are achieved with only a few twists of the steering wheel.

The BMW 320i, BMW 318d and BMW 320d are equipped as standard with 16-inch light-alloy wheels. All other model variants are supplied with 17-inch light-alloy wheels. 18-inch and 19-inch light-alloy wheels are optionally available, as are mixed-size tyres.

**M Sport brakes are specially designed to sharpen performance and feature blue-painted callipers.**

High-performance lightweight brakes also play their part in the sporty handling characteristics of the new BMW 3 Series Sedan. The model-specific brake discs consist of a grey cast iron friction ring with an aluminium brake disc chamber, and offer high performance combined with reduced weight.

The M Sport brakes provide excellent braking performance and intuitive feel, whether negotiating city streets or racing around a circuit on a track day. Combining an extremely sporty set-up – headlined by short pedal travel and a distinct pressure point – with outstanding thermal resistance, they provide lasting and effective stopping power. The M Sport brakes achieve this with a more direct ratio as well as a different hydraulic configuration including four-piston fixed callipers at the front and single-piston floating callipers at the rear. All the brake callipers are painted blue and display the M logo.



The functions provided by the Dynamic Stability Control (DSC) system include not only anti-lock braking (ABS) and Dynamic Traction Control (DTC), but also a variety of stabilising functions and the Start-Off Assistant. Also fitted as standard, Performance Control heightens the agility of the new BMW 3 Series Sedan by distributing the power to the rear wheels as the situation demands. In order to optimise directional stability during heavy braking on surfaces offering differing levels of grip for the right-hand and left-hand wheels, a steering impulse is applied to help the driver correct the car's line. The functioning of the electromechanical parking brake is integrated into the rear brake callipers by means of the DSC system.

**M Sport differential optimises traction, agility, stability and cornering dynamics.**

The M Sport differential for the rear axle is available as an option for the BMW 330i and BMW 330d models in combination with M Sport suspension or Adaptive M suspension. The electronically controlled, fully variable locking function in the rear differential helps to appreciably enhance traction and cornering. And the active differential lock also has a positive effect on directional stability and agility.

Using the DSC system to precisely limit rotational speed equalisation between the inside and outside rear wheel when cornering optimises the transfer of power to the road in all driving situations. The locking effect produced by an electric motor allows as much as 1,500 Nm (1,106 lb-ft) of torque to be redirected from the faster-turning wheel to the slower-turning one. This means that, during rapid cornering, for example, any tendency to understeer can be countered effectively. Here, the engine's power – which cannot be transferred to the road by the unloaded wheel on the inside of the bend, as it is liable to slip – is deliberately shifted to the wheel on the outside of the bend rather than applying the brakes to neutralise its effect. This draws the car into the bend with dynamic élan and all of the engine's power is harnessed to deliver a sporty drive. The increase in power finding its way onto the road allows the new BMW 3 Series Sedan to accelerate out of the bend with satisfyingly lavish levels of dynamism.

The effect of the M Sport differential is equally clear in a series of fast bends. The distribution of power to each individual wheel also prevents the tendency to oversteer in situations involving multiple changes of direction and load. Here, the strategic transfer of more power to whichever wheel is on the inside of the bend enables the driver to stick to the chosen course with stability and confidence. Similarly, when the driver changes lane and brakes at the same time, directional stability is optimised through the judicious transfer of power between the right and left-hand rear wheels. Another advantage of the active differential lock is improved traction when moving off on surfaces where the right-hand and left-hand driven wheels offer different levels of grip.

## **Interior and equipment.** **Refined premium ambience, innovative options.**



With an interior design of rich sporting flair and a modern clarity of form, the cabin of the new BMW 3 Series Sedan offers an instant promise of unadulterated driving pleasure. The newly designed screen grouping of Control Display and instrument cluster combines with the sleekly styled control panel on the centre console to put a very modern slant on the customary BMW driver focus and lend the interior a progressive air. The driver, the front passenger and those travelling in the three rear seats will appreciate the extra space over the predecessor model, not just on long-distance journeys but in everyday driving too. Top-class materials, precise build quality and numerous meticulously crafted details set the tone for the refined premium character of the four-door sedan. The advances brought about by the change of model generation also manifest themselves in the improved acoustic comfort, the superior standard specification and the array of innovative options on offer.

The newly designed standard seats offer greater long-distance comfort for the driver and front passenger, while the optional sports seats provide particularly good lateral support and have an even greater range of adjustment. As well as the optional seat heating, both the standard seats and sports seats can also be specified with electric adjustment including memory function. The new Vernasca leather upholstery available as an option has an exceptionally high quality of finish. It comes in a choice of five colours and includes special decorative quilting and seam patterns, which vary according to the equipment line.

Shoulder room in the front of the cabin has increased particularly notably, passengers in the rear benefit from more legroom, and all occupants now enjoy more headroom than in the new BMW 3 Series Sedan's predecessor. Seating comfort in the rear has also improved substantially, and long journeys are now a more comfortable experience for the passenger in the middle of the three rear seats.

Getting in and out of the car is also easier for the rear passengers in the new car, as the modified roof edge and side skirt contouring has increased the height of the door aperture, while the distance between the front and rear seats has been extended by 11 millimetres, allowing more room in which to twist your feet. The rear compartment can accommodate a row of three child seats, two of which can be locked into place using ISOFIX anchor points. This is now an easier process, as the bars in question are positioned further to either side.

**Restyled steering wheels, exclusive options from BMW Individual.**

One of the items to be found on the standard equipment list for the new BMW 3 Series Sedan is a restyled leather sports steering wheel with multifunction buttons, thumb rests and electroplated applications. There is also the option of an M leather steering wheel and a BMW Individual leather item.

At the launch of the new BMW 3 Series Sedan, the choice of exquisite options from BMW Individual will also include a leather-covered BMW Individual instrument panel. And the passenger compartment can be given an extra touch of exclusiveness with door sill strips bearing the inscription “BMW Individual”.

**Optimised all-round visibility, electrically operated glass roof with far larger surface area.**

The slender A-pillar trim, the new location of the Control Display and the rear-view mirror’s ultra-slim frame all serve to optimise the view through the windscreen at the same time as adding to the interior’s spacious feel. The view to the rear has likewise been significantly improved. Customers wishing to have a view of the sky above can opt for the glass roof, whose transparent surface area has been increased in length by 100 millimetres, meaning that passengers in the rear can also now fully appreciate the effect of the extra daylight coming in. The interior liner has a motorised opening and closing action, just like the glass roof itself.

The stowage trays and storage compartments in the front and rear are now able to accommodate significantly more than in the outgoing model. Besides the traditional glove compartment and the storage space under the centre armrest, there is also a stowage tray in front of the gearshift / selector lever, roomy door pockets and an additional storage compartment underneath the control panel for the lighting functions on the driver's side. The cover at the front of the centre console opens at the push of a finger to reveal two cupholders, a 12V socket and a USB port. A second USB port can be found in the illuminated storage compartment under the centre armrest, and standard specification also includes a Bluetooth interface. The telephony with wireless charging option enables inductive charging of compatible smartphones.

The new BMW 3 Series Sedan's boot has a capacity of 480 litres, and its new partitioning into primary luggage compartment and separate storage compartments has created an additional 36 litres of space for loading items of luggage. The optional Storage package adds features such as extra storage areas, partition nets on both sides of the boot lining, bag hooks, and a 12V socket in the boot. The standard 40:20:40 split-folding rear backrest makes it easy to transport particularly large and bulky items. Also to be found on the list of optional extras are automatic boot lid operation and a trailer coupling that can be extended and retracted again electrically. If the Comfort Access option is specified, the car will automatically unlock when the radio remote control is detected in its immediate vicinity and lock again when it moves out of range. This feature's functionality also includes hands-free opening and closing of the boot lid. A new movement sensor in the key permanently monitors whether the key is being carried (and therefore is always transmitting) or has been put down on a table, for example, allowing it to switch into standby mode with the transmit function deactivated.

### **Ambient lighting generates an atmospheric mood in the interior.**

The standard lighting for the cabin of the new BMW 3 Series Sedan is composed entirely of LEDs. This includes the reading and interior lights in the front and rear, as well as the lighting for the glove compartment, the storage compartment under the centre armrest, the footwells, the mirrors in the sun visors and the boot, plus the courtesy lights in the doors. The optional ambient lighting results in atmospherically rich illumination of the cabin, which can also be adjusted as desired. The additional indirect lighting of the contour lines running along the instrument panel and the door panelling uses precisely positioned LED fibre-optic light guides to create a dynamic, exclusive mood.

A total of six light colours and eleven combinations of brightness, light distribution and colour scheme for all light sources in the interior can be selected from the iDrive menu. In addition, the Dynamic interior light function



emits pulsating light signals in specific situations. These signals appear on the inner panelling of an open door when the engine is running and on the instrument panel in response to an incoming phone call. Another of the optional ambient lighting's functions is the Welcome Light Carpet, which illuminates the approach to the doors when they are unlocked using the central locking or a door is opened.

### **For a commanding view: Adaptive LED headlights with BMW Laserlight.**

In standard guise, the task of illuminating the road ahead falls to full-LED headlights that use LED units not just for low beam and high beam, but also for the daytime driving lights and direction indicators. The optional LED headlights with extended features include a dynamic cornering light function, and employ U-shaped LED units in the inner and outer headlights as daytime driving lights. The High Beam Assistant is available as an additional option in conjunction with both headlight variants. The LED foglamps (also optionally available) are horizontal in form and integrated harmoniously into the outer air intakes.

For even better visibility when driving at night, customers can opt for the Adaptive LED headlights with BMW Laserlight, which offer variable illumination of the road ahead and a non-dazzling high beam. With this system, the high beam function is enhanced using a BMW Laserlight spotlight with Selective Beam. As a result, the high-beam range is extended to around 530 metres, almost double that of the full-LED headlights. The High Beam Assistant (also part of the package) helps to prevent dazzling of oncoming traffic or road users travelling ahead. Blue, L-shaped accents inside the signature twin headlights reveal the presence of this highly sophisticated lighting technology.

Innovative technology is employed for cleaning the windscreen too. The wiper arms with integral spray nozzles specially developed for the new BMW 3 Series Sedan allow the washer fluid to be distributed in a very even manner, ensuring it does not impair the view through the windscreen at whatever speed the car is travelling.

### **Optimised acoustic properties: climate control, A-pillars, windscreen and doors.**

The new BMW 3 Series Sedan comes as standard with a rain sensor, automatic headlight activation, a hands-free phone system and automatic climate control. There is also the option of three-zone automatic climate control with independent control of the temperature and ventilation settings both for the driver and front passenger side and the rear passenger

compartment. The acoustic properties of both systems have been improved, too. The air ducts and outlets have been redesigned and pressure losses reduced, leading to a clearly perceptible decrease in flow noise when the ventilation, heating or air conditioning are operating.

Body-related measures which divert wind noise to good effect give a further boost to acoustic comfort, while the structural foam used to fill the A-pillars lessens the amount of airborne sound that reaches the interior. Acoustic glass for the windscreen is also part of standard specification for the new BMW 3 Series Sedan. This type of glass is likewise available as an option for the side door windows. An auxiliary heating system can also be ordered ex-factory to make the interior even more welcoming in the depths of winter. The system can be activated using the iDrive operating system or the optional BMW Display Key or via BMW Connected using a smartphone.

### **Bespoke entertainment and sound.**

The BMW Live Cockpit with Professional radio fitted as standard in the new BMW 3 Series Sedan features six speakers with an output of 100 watts. Opting for the hi-fi speaker system increases the number of sound sources to ten and the amplifier's output to 205 watts. And for those looking to bring the ultimate in audio quality to the new BMW 3 Series Sedan, there is the Harman Kardon surround sound system included as part of the optional Entertainment package, complete with 16 speakers and a digital seven-channel amplifier generating output of 464 watts.

# Driver assistance systems. Leading the way towards automated driving.



The new BMW 3 Series Sedan takes sporty driving pleasure to new heights. But it also assumes a pioneering role when it comes to assistance systems designed to ease the driver's workload in monotonous driving conditions – such as traffic jams and heavy flowing traffic – and lend a helping hand in awkward manoeuvring situations. The new model generation offers a far wider choice of standard and optionally available systems which enhance specific aspects of comfort and safety. This array of advanced driver assistance systems takes the new BMW 3 Series Sedan further along the road to automated driving than any of its rivals.

Camera images and the data gathered by radar and ultrasonic sensors are used to monitor the vehicle's surrounding area and either alert the driver to hazards or minimise the risk of an accident by means of corrective braking and steering. The optional Cruise Control with braking function helps to make life easier on long-distance journeys by automatically accelerating or slowing down the car to maintain the desired speed set by the driver. The set speed can be imported directly from the optional traffic sign recognition system's display, with a tolerance of up to 15 km/h (9 mph). The Active Cruise Control system with Stop & Go function goes even further to help the driver by not just maintaining the chosen cruising speed but also keeping a safe distance from vehicles travelling ahead. The system is operational in a speed range from 0 to 210 km/h (0 – 130 mph) and is able to brake the vehicle to a standstill, if necessary. The maximum length of time that can pass before the car starts off again automatically has been extended to 30 seconds. In order to determine the ideal moment to pull away, the system's sensors now register not only the vehicle immediately ahead, but the one in front of that as well.

The new BMW 3 Series Sedan comes as standard with the Collision and Pedestrian Warning with City Braking function, the latest version of which also alerts the driver when a cyclist is detected. Depending on the situation, the system can bring the vehicle to a halt to either avoid a collision or minimise its consequences. The optional Driving Assistant additionally comprises the Lane Departure Warning and Lane Change Warning systems, which are operational from 70 to 210 km/h (44 – 130 mph) and from 20 km/h (12 mph) to the car's top speed respectively, and help the driver to guide the car back onto the correct path with a steering input. The Driving Assistant's remaining functions also include Rear Collision Prevention and Cross-Traffic Alert, thereby

reducing the risk of a collision when reversing into roads that are obstructed from the driver's view. To help it keep an eye on what's happening behind the car, Cross-Traffic Alert is able to employ both the radar sensors in the rear apron and the rear view camera.

**Driving Assistant Professional: the ultimate in comfort and safety.**

The optional Driving Assistant Professional offers the full complement of assistance systems for supremely comfortable and safe motoring. Underpinning it all is a trifocal camera co-developed with Mobileye, working in conjunction with a front range radar. This complete package makes its systems available in an exceptionally wide range of situations. In addition to all the components of the Driving Assistant and the Active Cruise Control with Stop & Go function, it also includes the Steering and lane control assistant, which takes its cues from road markings and vehicles driving ahead and works together with the driver to help keep the vehicle in the detected lane. It is therefore able to assist the driver effectively with guiding the car through narrow channels, such as in areas with roadworks. The system's hands-on-wheel detection is very sensitive and recognises contact even when only a few fingers briefly touch the wheel. A dedicated button on the steering wheel's left-hand spoke ensures the systems are easy to operate. Pushing it once activates both the Active Cruise Control and the Steering and lane control assistant.

The Driving Assistant Professional also features the Lane Keeping Assistant with active side collision protection. As well as emitting visual warning signals and causing the steering wheel to vibrate, active side collision protection also uses a steering input to help avoid collisions. Rounding off the Driving Assistant Professional's wealth of functions are the evasion aid, which now also reacts to pedestrians, the Priority warning and Wrong-way warning systems, and the Cross-Traffic Alert, which helps to monitor the traffic situation on concealed roads when manoeuvring forwards too.

**Larger projection area and optimised graphics: the latest generation of the BMW Head-Up Display.**

The optional BMW Head-Up Display helps the driver to enjoy focused and extremely safe driving pleasure in the new BMW 3 Series Sedan. It projects driving-related information (in the form of graphics) directly into the driver's field of vision on the windscreen, where it can be assimilated without the need to divert their eyes from the road. The latest generation of the system boasts a projection area 70 per cent larger than in the outgoing BMW 3 Series Sedan, plus enhanced graphics and additional display readings. The information projected by the BMW Head-Up Display includes the car's speed, speed limits and overtaking restrictions, Check Control messages, status

indicators and warnings from the assistance systems, detailed route guidance and turn instructions, and telephone and entertainment lists.

Another feature activated in conjunction with the BMW Head-Up Display is distance warning, which is part of the Active Cruise Control system's set of functions and flashes up a graphic icon to alert the driver when they get closer to the vehicle in front than the pre-set minimum distance.

**For parking and manoeuvring with supreme ease: Parking Assistant Plus including Reversing Assistant.**

Drivers of the new BMW 3 Series Sedan are also able to rely on the comprehensive support of various innovative assistance systems when parking and manoeuvring. The optional Park Distance Control (PDC) with sensors at both the front and rear provides visual and acoustic signals to prevent collisions with obstacles located to the side or rear of the vehicle. The optional Parking Assistant goes further still by automatically selecting spaces either parallel or perpendicular to the road, and manoeuvring into them. The latest version of the system takes care of steering the car, accelerating and braking, plus – on models fitted with the eight-speed Steptronic transmission – making the necessary gear selections, too. What's more, the Parking Assistant can now also be used for automatically manoeuvring out of parallel parking spaces. Here, the driver has to first specify the direction in which the parking space is to be exited by switching on the indicators on that side. The system then manoeuvres the vehicle – using reversing and steering inputs – into a position from which the driver can leave the parking space with the steering turned to the same angle.

Another of the Parking Assistant's features is the innovative Reversing Assistant, which helps the driver to exit parking spots or manoeuvre when space is limited. This system is the only one of its kind in the new BMW 3 Series Sedan's segment and represents another step towards automated driving. The Reversing Assistant offers the highly 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 exactly the same line it has just taken when moving forward, while all the driver has to do is operate the accelerator and brake pedals and monitor the area around the car. The Reversing Assistant can back the car up at a maximum 9 km/h (5.5 mph).

The optional rear view camera and the functions included with the Parking Assistant Plus (also optional) provide drivers with an excellent overview of the situation when manoeuvring, parking or exiting parking spaces. The Park View, Panorama View and 3D Top View features are used to create a 360° image of the vehicle and its surroundings – from different perspectives – in the Control Display. Meanwhile, the Remote 3D View function gives drivers the ability to call up a three-dimensional live image of their vehicle and its immediate vicinity on their smartphone.

# Display and operating system, BMW Connected and ConnectedDrive. Premiere for the BMW Intelligent Personal Assistant.



Making its debut in the new BMW 3 Series Sedan is the BMW Intelligent Personal Assistant, an intelligent, digital character that responds to the prompt “Hey BMW”. The BMW Group is set to revolutionise driving pleasure with the BMW Intelligent Personal Assistant and, in so doing, enter a new era in which drivers will increasingly be able to operate their car and access its functions and information simply by speaking. The range of functions and skills available will be constantly expanded as part of regular updates, which can be carried out seamlessly on a smartphone and in-car by Remote Software Upgrade.

## **BMWs acquire a digital personality.**

The BMW Intelligent Personal Assistant learns routines and habits, and is subsequently able to apply them in the appropriate context. He helps the driver, learns their preferences and is familiar with their favoured settings – e.g. for the seat heating or the places they drive to frequently using the navigation system (“Take me home”). One unique feature over other digital assistants is that drivers can give him a name (for example, “Charlie” or “Joy”) to give him even greater individuality and personality. Not only does the Intelligent Personal Assistant await the driver’s every command, he is always there to assist them and even provide casual conversation (“Hey BMW, what’s the meaning of life?”). He is familiar with the vehicle’s functions and is able to operate them as required. Saying “Hey BMW, I’m cold” will prompt the BMW Intelligent Personal Assistant to adjust the temperature inside the car accordingly. The assistant will benefit from constant technical upgrades and be able to learn more and more preferences and favoured settings. The assistant takes further strides forward with every command given, every question asked and every setting selected.

## **A constant on-board companion: the digital BMW expert.**

The arrival of the BMW Intelligent Personal Assistant ensures there is always a genuine BMW professional on board. He is able to explain all sorts of different functions (“How does the High Beam Assistant work?”), provide current status information (“Is the oil level okay?”) and help answer questions (“What warning messages do I have?”). He knows the driver’s favourite settings, and can even activate a combination of them to enhance well-being. For instance, “Hey BMW, I feel tired” triggers a vitality programme that adjusts the lighting mood, music and temperature, among other things, in order to make the driver feel more awake.

### **The perfect co-driver.**

The Intelligent Personal Assistant is, in short, the ideal co-driver and comes in particularly useful during everyday driving (“Hey BMW, look for the nearest fuel station on our route”). To make navigation particularly easy, drivers can give him access to their calendar and contacts, which will enable him to find parking spaces at the destination, provide information on traffic jams along the route and remind the driver when they need to set off. He also learns destinations the customer drives to frequently. The assistant’s integration with Microsoft Office 365 and Skype for Business transforms the BMW into a mobile office, and allows him to join teleconferences at the driver’s request and read out emails. But BMW’s Intelligent Personal Assistant is an entertainment expert, too. So he can instantly identify the song currently playing on the radio and search stations for the desired type of music (“Play classical music please”).

### **Turning passengers into co-drivers.**

The new BMW 3 Series Sedan also lets passengers in the front and rear mould the driving experience in ways they have never done before. With the driver’s consent, they are able to connect their smartphone to the car using the Connected Command function and then use it to control selected functions. This converts the passengers into co-drivers able to ease the driver’s workload by using the BMW Connected app to call up the route currently being followed, for example, or adjust the on-board entertainment programme and climate control settings.

The BMW Intelligent Personal Assistant will be available in the new BMW 3 Series Sedan from November 2018 as part of the new BMW Operating System 7.0 and in conjunction with the Live Cockpit Professional – and provides its services for a period of three years. The Connected Package Professional adds a spread of additional functions. It will be available in 23 languages and markets in a basic version with voice control. In the USA, Germany, the UK, Italy, France, Spain, Switzerland, Austria, Brazil and Japan – and from May 2019 in China – the BMW Intelligent Personal Assistant will enable the use of more natural voice commands and offer a range of other intelligent functions besides.



### **BMW Digital Key: turning the smartphone into a car key.**

The BMW Digital Key employs Near Field Communication (NFC) technology to allow the new BMW 3 Series Sedan to be locked and unlocked from a smartphone, removing the need for a conventional car key. Holding the smartphone up to the door handle opens the car. Once inside, the engine can be started as soon as the phone has been placed in the wireless charging or smartphone tray. Accessible via the BMW Connected app, the Digital Key offers unrivalled flexibility, as the driver can share it with up to five other people. The BMW Digital Key is available for all NFC-capable Samsung Galaxy smartphones running Android 8.0 and above.

### **Connected Navigation with new digital services.**

“Connected Navigation” encompasses a number of digital services that are designed to turn seamless and contextual route planning both inside and outside the BMW into an even more sophisticated experience. Drivers of the new BMW 3 Series Sedan will be able to send destinations from various apps straight to their car’s navigation system. The most important destinations will be stored in BMW Connected and synchronised with the car, so that the key addresses can be accessed from any device at any time. One particularly helpful new feature is the Parking Space Assistant, which proposes various parking options to the driver in good time before the destination is reached. This service includes providing information on the nearest multi-storey car park as well as proposing routes offering a particularly good chance of finding a parking spot close to the destination. The existing On-Street Parking Information and ParkNow services have been intelligently incorporated into the new assistant’s scope of functions.

### **Exactly the right information at just the right time: the BMW Operating System 7.0 display and control concept.**

The newly designed instrument cluster/Control Display screen grouping and extended functionality take intuitive operation to the next level in the new BMW 3 Series Sedan, while helping drivers to concentrate even more effectively on the road ahead. The BMW Live Cockpit fitted as standard is composed of the iDrive operating system, whose 8.8-inch Control Display has a touchscreen design, and a black panel instrument cluster with a 5.7-inch colour display. The optional BMW Live Cockpit Plus adds features such as a Touch Controller, a navigation system, two USB ports for data transfer, Apple CarPlay preparation and a WiFi interface.

The optional BMW Live Cockpit Professional brings together a fully digital display and operating system with maximum connectivity in a single package. It includes a high-resolution instrument cluster behind the steering wheel with a screen diagonal of 12.3 inches and a 10.25-inch Control Display. This equipment package also features an adaptive navigation system and a hard-drive-based multimedia system with 20 GB of memory.

Specifying the BMW Live Cockpit Professional also brings the benefits of the BMW Operating System 7.0 to the new BMW 3 Series Sedan. The latest-generation BMW operating system boasts fully digital displays and is geared even more closely to the driver's personal needs – with the aim of maximising their attention levels. The system's clear presentation and structuring are designed to provide drivers with the right information at the right time, aided further by the customisable and personalised displays. The redesigned information display in the middle of the instrument cluster now leaves enough room for an excerpt from the navigation map, for instance. In the main menu on the Control Display, the driver is able to configure up to ten pages, each showing two to four pads (tiles) with live content. Both the content and the graphics are personalised to an even greater degree, as illustrated by the vehicle mock-up that matches the actual model colour and equipment line. The intuitive multimodal interaction between driver and vehicle has undergone further improvement. The Control Display graphics adapt depending on the operating method, the voice control system (based on natural language understanding) is better than ever before and the optional BMW gesture control now works with two extra gestures, bringing the total to seven. Depending on the situation, the driver can now operate the various functions using the familiar iDrive Controller, the steering wheel controls, touch control, voice control or gesture control.

The BMW Operating System 7.0 allows digital services to be added with total flexibility. Three different Live Cockpit levels based on the new display and control concept can be specified when the customer purchases their car, each containing a useful basic package of services that suits the customer's individual needs. New or existing services can subsequently be added at any time, depending on the particular Live Cockpit level. BMW customers will be able to book additional digital services at a later date in the ConnectedDrive Store and install them in their car by Remote Software Upgrade. The three Live Cockpit packages allow services to be booked for periods of three months, one year or three years.

### **Always up to date: Remote Software Upgrade.**

The Remote Software Upgrade feature keeps the new BMW 3 Series Sedan right up to date with the latest software. All updates can be imported over the air, either via the BMW Connected app on a smartphone or directly into the car using its built-in SIM card. Installation is every bit as simple as a smartphone update. The contents of the upgrades can vary, from security and quality enhancements and new software services to improved vehicle functions. Customers can also select new functions or deselect ones which have been added since purchase. This maximises flexibility while also saving customers a great deal of time, as they no longer need to visit a BMW Service Partner for updates.