

# The first ever BMW i4. Short version.



**This Media Information describes the equipment and specification of vehicles for the German market. These may vary for other markets. All data is provisional. Homologation and type testing values are not yet available.**

The launch of the BMW i4 brings electric mobility to the heart of the BMW brand. Locally emission-free driving pleasure will come to the traditional core of the midsize segment for the first time from November 2021. The BMW i4 is a four-door gran coupé that combines this vehicle concept's hallmark spaciousness and practicality with the sporting ability for which BMW is renowned and a range that also convinces over long journeys. A premium character beyond that of market rivals is reflected in the high level of development of its drive system and chassis technology, its elegant design, uncompromising standards when it comes to quality of materials and workmanship and the wide variety of individualisation options available. Added to which, the new generation of the BMW iDrive control/operation system and cutting-edge innovations in the area of automated driving and parking systems further enhance the emotional richness of the driving experience.

The BMW i4 is the BMW brand's first purely electric model focused squarely on driving dynamics from the outset. Two model variants will be available from launch, including the first BMW M car with a locally emission-free drive system. The BMW i4 M50 (electric power consumption combined: 24 – 19 kWh/100 km in the WLTP test cycle, CO<sub>2</sub> emissions: 0 g/km) performance model from BMW M GmbH uses one electric motor at the front axle and another at the rear to deliver system output of 400 kW/544 hp and high-intensity driving pleasure – and has a range of up to 510 kilometres (317 miles) in the WLTP cycle. The BMW i4 eDrive40 (electric power consumption combined: 20 – 16 kWh/100 km in the WLTP cycle, CO<sub>2</sub> emissions: 0 g/km) combines a 250 kW/340 hp electric motor with classical rear-wheel drive. Its maximum range as per the WLTP cycle is 590 kilometres (367 miles).

### **Flexible vehicle architecture, higher level of overall coherence.**

In line with the BMW Group's ongoing second phase of transformation towards electric mobility, the development of the BMW i4 was based

on a flexible vehicle architecture devised – from the outset, for the first time – for an all-electric drive system. The compact drive units have an elastic bearing in their respective axle subframes. The extremely slim high-voltage battery has a cell height of just 110 millimetres, is positioned low down in the vehicle floor and has a fixed connection with an aluminium shear panel and the front axle subframe. A centre of gravity up to 53 millimetres lower than that of the BMW 3 Series Sedan, even weight distribution, a torsionally stiff and weight-minimised body and optimised aerodynamics ( $C_d$ : 0.24), plus a long wheelbase and wide tracks, provide the perfect recipe for BMW's familiar sporting ability and superb long-distance comfort.

Added to which, the vehicle concept offers a very BMW solution to the traditional clash between sportiness and long-distance ability: Efficient drive system technology and intelligent lightweight design enable smile-inducing dynamics and a long range without the need for disproportionately large and heavy batteries.

The integrated application of all powertrain and chassis components also helps give the BMW i4 a degree of design coherence its rivals cannot match. The BMW Group's technological expertise and long experience in the development of extremely sporty premium cars imbue the BMW i4 with dynamic driving abilities extending far beyond the rapid straight-line acceleration typical of a powerful electric car. The result is effortless progress, even in challenging driving conditions, as well as precisely controllable handling.

### **Model-specific chassis technology and electric all-wheel drive deliver dynamic thrills.**

The standard chassis technology of the BMW i4 comprises a double-joint spring strut front axle and five-link rear axle with bespoke tuning, lift-related dampers, electromechanical Servotronic steering, an integrated braking system and rear air suspension. Near-actuator wheel slip limitation optimises traction and directional stability in all road and weather conditions. This extremely fast-acting and precise system is fitted as standard on the BMW i4 and also teams up with electric all-wheel drive for the first time.

This combination gives the BMW i4 M50 exceptional dynamic poise during bursts of speed and under intense lateral acceleration. The drive torque control for both motors reacts notably faster and with far greater accuracy than would be possible with a transfer case positioned between the axles. The BMW i4 M50 is also equipped with adaptive

M suspension with bespoke tuning, variable sport steering, M Sport brakes and (optionally) up to 20-inch M light-alloy wheels with mixed-size tyres.

**Highly integrated and efficient drive system technology.**

The fifth-generation BMW eDrive technology in the BMW i4 comprises drive units which bring together the electric motor, power electronics and transmission within a single housing. This highly integrated electric drive system topology gives a power density of up to 2.14 kW/kg and an exceptionally high efficiency factor.

The motors work according to the principle of an electrically excited synchronous motor. The excitation of the rotor in the BMW i4 motors is not induced by fixed permanent magnets, but the precisely controlled feed-in of electric energy. The performance characteristics of the motors are defined by their considerable torque – on tap from pull-away and sustained over an extremely wide rev band. Demanding a large amount of power for more than ten seconds in the BMW i4 M50 triggers Sport Boost, which unfurls not only the drive system's maximum output but also maximum system torque of 795 Nm (586 lb-ft). This enables the BMW M model to sprint from 0 – 100 km/h (62 mph) in 3.9 seconds. The drive system in the BMW i4 eDrive40 generates peak torque of 430 Nm (317 lb-ft), giving it a 0 – 100 km/h (62 mph) time of 5.7 seconds.

The sporty driving experience is accompanied by a model-specific drive sound delivering authentic feedback to movements of the accelerator. This gives the BMW i4 M50 an extremely energy-charged soundtrack. Plus, the optional BMW IconicSounds Electric enables integration of new sound variants created as part of a collaboration with film music composer Hans Zimmer.

**Adaptive and individually adjustable recuperation.**

Adaptive recuperation gives the efficiency and range of the BMW i4 an additional boost. Intelligently connected drive management means the intensity of the brake energy recuperation can be adapted to the road situation, as detected by data from the navigation system and the sensors used by the driver assistance systems. For example, when approaching a junction, recuperation power can be increased and energy fed into the high-voltage battery while harnessing the deceleration effect. On the open road, meanwhile, the coasting function can cut in, the i4 "freewheeling" with no drive power whenever the driver eases off the accelerator.

Alternatively, in driving position D, a high, medium or low Brake Energy Regeneration setting for all driving situations can be selected in the BMW iDrive menu. In driving position B, a high level of recuperation is activated automatically, generating the distinctive one-pedal feeling. Maximum recuperation power is 116 kW in the BMW i4 eDrive40 and 195 kW in the BMW i4 M50.

**High-voltage battery with the latest battery cell technology.**

Fifth-generation BMW eDrive technology also comprises a high-voltage battery with the latest battery cell technology. The gravimetric energy density of the lithium-ion battery has been increased by around 20 per cent once more in comparison with the battery in the current BMW i3. The gross energy content of the high-voltage battery is 83.9 kWh (net energy content: 80.7 kWh).

An integrated heating and cooling system for the interior, the high-voltage battery and the drive system – which operates using an exceptionally efficient heat pump function – comes as standard in the BMW i4. Anticipatory thermal management allows the operating temperature of the high-voltage battery to be optimised ahead of a stop at a fast-charging station, paving the way for rapid and efficient charging.

The Combined Charging Unit (CCU) of the BMW i4 has been designed to enable extremely flexible battery charging. DC charging is possible at up to 200 kW. For example, in a short mid-journey stop at a high-power charging station, the car's range can be increased by as much as 164 kilometres / 102 miles (BMW i4 eDrive40) and 140 kilometres / 87 miles (BMW i4 M50) within 10 minutes from a 10 per cent charge level. BMW i4 models in Europe are supplied complete with the BMW Charging Card, a Flexible Fast Charger for charging at up to 11 kW and a mode 3 charging cable. The special tariff system offered by BMW Charging allows customers to purchase power at very reasonable rates from public and high-power charging stations.

**Design: the visual expression of dynamism, elegance and sustainability.**

The BMW i4 blends the customary sporting elegance of the brand's coupés with the comfort of a four-door model and an injection of modern functionality. The stretched proportions and clear use of forms in its body design send out a message of exclusivity and the dynamic flair for which BMW is renowned. And accents in BMW i Blue for the largely blanked-off kidney grille, the battery technology in the floor area of the car and the

sporty diffuser elements – which optimise the car's aerodynamics – highlight their sustainability-friendly credentials.

Short overhangs, slim pillars, doors with frameless windows and a roofline that flows smoothly into the rear underscore a silhouette that very much fits the BMW coupé mould. Slim headlights, available as an option with BMW Laserlight, and the striking BMW kidney grille with its discreetly integrated camera, ultrasonic and radar sensors are the defining features of the front end. The BMW i4 eDrive40 in M Sport specification and the BMW i4 M50 employ their own distinctive design features to underscore their performance-focused character. An M Carbon exterior package can be ordered as an option, while model-specific M Performance Parts are included in the Genuine BMW Accessory range.

The interior brings a driver-focused cockpit and ambience of premium luxury together with a generously sized, variable-use space. Acoustic glazing, pre-heating and pre-conditioning come as standard, as do sport seats and a sports steering wheel. The transmission selector lever, BMW Controller and function keys are positioned on a control panel in the centre console that exudes modern design. The large tailgate has an automatic opening and closing mechanism as standard. Load compartment capacity is 470 – 1,290 litres. An electrically extendable and retractable trailer tow hitch is available as an option, and the maximum permissible trailer load is 1,600 kilograms.

The BMW i4 offers class-leading individualisation options which accentuate its premium character. Seat heating and ventilation, Vernasca leather and BMW Individual leather trim variants, Sensatec and leather coverings for the instrument panel, the M Sport package Pro, a glass slide/tilt sunroof, ambient lighting and the Harman Kardon Surround Sound System all play their part in enhancing driving pleasure and comfort.

### **Premiere for a new generation of the BMW iDrive control/operation system.**

The new generation of the iDrive display and control/operation system fitted for the first time in the BMW i4 extends the interaction between driver and vehicle into natural dialogue. It is based on the new BMW Operating System 8 and has been designed with a clear focus on the touchscreen functionality of the BMW Curved Display and spoken communication with the extensively upgraded BMW Intelligent Personal Assistant. The BMW Curved Display fully digital screen grouping brings

together a 12.3-inch information display and a 14.9-inch control display behind a glass surface angled towards the driver. The digital Intelligent Personal Assistant has gained additional skills and uses a new graphic to communicate with the vehicle's occupants.

The three-zone automatic climate control system fitted as standard in the BMW i4 uses nanofibre filter technology to purify the air inside the car and is now controlled via a touchscreen display. Temperature is adjusted using the intelligently coordinated activation of airflow, seat heating and steering wheel heating. Remote Software Upgrades keep the car's software up to date. The cloud-based navigation system BMW Maps ensures fast and precise route planning which also factors in mid-journey stops to charge the battery. And the BMW i4 also offers data transmission using 5G.

**Wide variety of driver assistance systems.**

Some 40 assistance functions are fitted as standard or available as options to provide safe and comfortable driving and parking. Highlights include Active Cruise Control with automatic Speed Limit Assist, route monitoring, the traffic light detection function (available in Germany), and the Steering and Lane Control Assistant.

Front-collision warning, Speed Limit Info, Lane Departure Warning, Park Distance Control and the Reversing Assist Camera are fitted as standard. Available as options are Parking Assistant with Reversing Assistant, and Parking Assistant Plus including Surround View and Remote 3D View.

**Flexible manufacturing at BMW Group Plant Munich, vehicle and battery cell production using 100 per cent green energy, controlled procurement of raw materials.**

The BMW i4 is produced as part of a flexible manufacturing set-up at BMW Group Plant Munich on an assembly line shared with models with combustion engines and plug-in hybrid drive systems. 100 per cent green energy is used for both vehicle production and the manufacture of battery cells.

The BMW Group procures the cobalt and lithium required for these high-voltage batteries from controlled sources and then delivers it to the battery cell suppliers. The design principle for the electric motors allows the use of rare earth metals to be avoided in the drive system rotors. A high proportion of secondary raw materials and recycled materials helps to reduce the quantities of resources used in production of the BMW i4.

All figures relating to output, charging capacity, performance, energy consumption, emissions and range are provisional.

The electric power consumption and operating range figures are determined according to the European Regulation (EC) 715/2007 in the version applicable and as per the WLTP procedure. They refer to vehicles in the German market. Where a range is shown, WLTP figures take into account the impact of any optional extras.

All values were calculated based on the new WLTP test cycle. WLTP values are taken as the basis for determining vehicle-related taxes or other duties based (at least inter alia) on CO<sub>2</sub> emissions as well as eligibility for any applicable vehicle-specific subsidies. Further information on the WLTP and NEDC measurement procedures can also be found at [www.bmw.de/wltp](http://www.bmw.de/wltp).

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/>.