

Technical specifications.

BMW 3 Series.

M350 xDrive.



BMW M350 xDrive		
Body		
Number of doors / seats		4 / 5
Length / width / height (unladen)	mm	4765 / 1850 / 1455
Wheelbase	mm	2860
Track width, front / rear	mm	1595 / 1599
Turning circle	m	12.1
Fuel tank capacity	approx. l	59
Unladen weight (DIN / EU)	kg	1860 / 1935
Payload according to DIN	kg	560
Permitted total weight	kg	2420
Permitted axle loads, front / rear	kg	1190 / 1290
Max. permissible trailer load (12%) braked / unbraked	kg	1800 / 750
Max. permissible roofload / towbar download	kg	75 / 75
Luggage compartment capacity	l	450
Air resistance	$c_x \times A$	$0.28 \times 2.29 \text{ m}^2$
Drive system		
Drive concept	BMW TwinPower Turbo technology: turbocharger, direct injection High Precision Injection, fully variable valve control VALVETRONIC, variable camshaft control Double-VANOS, 48-volt mild hybrid technology with an electric motor integrated in the transmission	
Power output, total	kW / hp	326 / 443
Torque, total	Nm	580
Combustion engine		
Config. / no. of cyls. / valves		R / 6 / 4
Effective capacity	cm ³	2998
Stroke / bore	mm	94.6 / 82.0
Compression ratio	:1	11.0
Fuel		Min RON 91
Nominal power	kW / hp	313 / 426
at	min ⁻¹	5600 – 6500
Nominal torque	Nm	540
at	min ⁻¹	1980 – 5400
Electric motor		
Nominal power	kW / hp	13 / 18
Nominal torque	Nm	200
Electrical system		
12-volt battery	Ah	60
48-volt battery	Ah	19,2
Driving dynamics and safety		
Front wheel suspension	Double-wishbone axle in lightweight aluminium-steel construction	
Rear wheel suspension	Five-link axle in lightweight aluminium-steel construction	
Brakes, front	Four-piston, fixed-caliper disc brakes, ventilated	
Brakes, rear	Single-piston, floating-caliper disc brakes, ventilated	
Driving stability systems	Standard: DSC incl. ABS, ASC and DTC (Dynamic Traction Control), Cornering Brake Control, Brake Assist, brake drying function, Fade Compensation, drive-off assistant, xDrive all-wheel-drive system networked with DSC, Performance Control, adaptive M suspension	
Safety equipment	Standard: Airbags for driver and passenger, side airbags for driver and passenger, interaction airbag between driver and passenger, front and rear head airbags, 3-point automatic-reel belt on all seats, at the front with belt stopper, belt tensioner and belt force limiter, crash sensors, tyre pressure display	
Steering	Electrically assisted rack-and-pinion steering (EPS), variable sport steering	
Tyres, front / rear	245/40 R19 98 Y XL / 255/40 R19 100 Y XL	
Wheel rims, front / rear	8,5J x 19 light alloy / 9J x 19 light alloy	

BMW M350 xDrive		
Transmission		
Type of transmission	Eight-speed Steptronic transmission	
Gear ratios	I	:1 5.250
	II	:1 3.360
	III	:1 2.172
	IV	:1 1.720
	V	:1 1.316
	VI	:1 1.000
	VII	:1 0.822
	VIII	:1 0.640
	R	:1 3.712
Rear axle ratio	:1	3.077
Driving performance figures		
Acceleration 0 – 100 km/h (62 mph)	s	4.1
Top speed	km/h	250 (155 mph) (electronically limited)
BMW EfficientDynamics		
BMW EfficientDynamics standard features	48-volt mild-hybrid technology, brake energy recuperation with recuperation indicator, Auto Start Stop function, Personal and Efficient modes with coasting function, Route-ahead Assistant, optimum shift indicator, electromechanical power steering, BMW EfficientLightweight, optimised aerodynamic properties, active air flap control, auxiliary units controlled according to demand, map-controlled oil pump, efficiency-optimised all-wheel drive, efficiency-optimised all-wheel drive, rear axle and transfer gearbox with optimised efficiency, tyres with reduced rolling resistance	
Fuel consumption (WLTP combined)¹		
Achievable in individual configuration	l/100 km	7.5 – 7.7
CO₂ emissions (WLTP combined)		
Achievable in individual configuration	g/km	171 – 175
Environmental features		
Pass-by noise	dB(A)	68

¹ The figures given were determined in accordance with the prescribed WLTP measurement procedure. The actual values depend on various factors, such as load, driving style, route, weather, auxiliary consumers (including air conditioning) and tyres.

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Dimensions refer to a vehicle fitted with basic equipment in Germany, depending on the selected wheel and tyre size as well as selected optional equipment. These may change according to how the car is configured.

Official data on power consumption were determined in accordance with the prescribed WLTP measurement procedure and comply with the Passenger Car Energy Consumption Labelling Ordinance. Go to www.bmw.de for more information.

BMW 3 Series. 320.

BMW 320		
Body		
Number of doors / seats		4 / 5
Length / width / height (unladen)	mm	4765 / 1850 / 1455
Wheelbase	mm	2860
Track width, front / rear	mm	1597 / 1617
Turning circle	m	11.7
Fuel tank capacity	approx. l	59
Unladen weight (DIN / EU)	kg	1680 / 1755
Payload according to DIN	kg	550
Permitted total weight	kg	2230
Permitted axle loads, front / rear	kg	1050 / 1235
Max. permissible trailer load (12%) braked / unbraked	kg	1800 / 750
Max. permissible roofload / towbar download	kg	75 / 75
Luggage compartment capacity	l	450
Air resistance	$c_x \times A$	$0.26 \times 2.29 \text{ m}^2$
Drive system		
Drive concept	BMW TwinPower Turbo technology: turbocharger, direct injection High Precision Injection, fully variable valve control VALVETRONIC, variable camshaft control Double-VANOS, 48-volt mild hybrid technology with belt-driven starter generator	
Power output, total	kW / hp	155 / 211
Torque, total	Nm	330
Combustion engine		
Config. / no. of cyls. / valves		R / 4 / 4
Effective capacity	cm ³	1998
Stroke / bore	mm	94.6 / 82.0
Compression ratio	:1	11.0
Fuel		Min RON 91
Nominal power	kW / hp	155 / 211
at	min ⁻¹	4900 – 6500
Nominal torque	Nm	330
at	min ⁻¹	1500 – 4400
Electric motor		
Nominal power	kW / hp	8 / 11
Nominal torque	Nm	25
Electrical system		
12-volt battery	Ah	60
48-volt battery	Ah	19.2
Driving dynamics and safety		
Front wheel suspension	Double-wishbone axle in lightweight aluminium-steel construction	
Rear wheel suspension	Five-link axle in lightweight aluminium-steel construction	
Brakes, front	Single-piston, fixed-caliper disc brakes, ventilated	
Brakes, rear	Single-piston, floating-caliper disc brakes, ventilated	
Driving stability systems	Standard: DSC incl. ABS, ASC and DTC (Dynamic Traction Control), Cornering Brake Control, Brake Assist, brake drying function, Fade Compensation, drive-off assistant, Performance Control, optional: adaptive M suspension	
Safety equipment	Standard: Airbags for driver and passenger, side airbags for driver and passenger, interaction airbag between driver and passenger, front and rear head airbags, 3-point automatic-reel belt on all seats, at the front with belt stopper, belt tensioner and belt force limiter, crash sensors, tyre pressure display	
Steering	Electrically assisted rack-and-pinion steering (EPS), optional: variable sport steering	
Tyres, front / rear	245/45 R18 100 Y XL	
Wheel rims, front / rear	8J x 18 light alloy	

BMW 320		
Transmission		
Type of transmission	Eight-speed Steptronic transmission	
Gear ratios	I	:1 5.250
	II	:1 3.360
	III	:1 2.172
	IV	:1 1.720
	V	:1 1.316
	VI	:1 1.000
	VII	:1 0.822
	VIII	:1 0.640
	R	:1 3.712
Rear axle ratio	:1	2.929
Driving performance figures		
Acceleration 0 – 100 km/h (62 mph)	s	7.4
Top speed	km/h	240
BMW EfficientDynamics		
BMW EfficientDynamics standard features	48-volt mild hybrid technology, brake energy recuperation with recuperation indicator, Auto Start Stop function, Personal and Efficient modes with coasting function, Route-ahead Assistant, optimum shift indicator, electromechanical power steering, BMW EfficientLightweight, optimised aerodynamic properties, active air flap control, auxiliary units controlled according to demand, map-controlled oil pump, rear axle and transfer gearbox with optimised efficiency, tyres with reduced rolling resistance	
Fuel consumption (WLTP combined)¹		
Achievable in individual configuration	l/100 km	6.5 – 6.8
CO₂ emissions (WLTP combined)		
Achievable in individual configuration	g/km	148 – 155
Environmental features		
Pass-by noise	dB(A)	66

¹ The figures given were determined in accordance with the prescribed WLTP measurement procedure. The actual values depend on various factors, such as load, driving style, route, weather, auxiliary consumers (including air conditioning) and tyres.

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BMW 3 Series. i3 50 xDrive.

BMW i3 50 xDrive		
Vehicle category		
Drive type / body variant		Battery Electric Vehicle – BEV / Sedan
Body		
Number of doors / seats		4 / 5
Length / width / height (unladen)		mm 4760 / 1865 / 1480
Wheelbase		mm 2897
Track width, front / rear		mm 1606 / 1613
Turning circle		m 12.2
Unladen weight (DIN / EU)		kg 2205 / 2280
Payload according to DIN		kg 505
Permitted total weight		kg 2710
Permitted axle loads, front / rear		kg 1260 / 1490
Max. permissible trailer load (12%) braked / unbraked		kg 1800 / 750
Max. permissible roofload / towbar download		kg 75 / 75
Luggage compartment capacity		l 420
Storage compartment under the bonnet		l 31
Air resistance		c _x × A 0.21 × 2.35 m²
Drive		
Drive concept		Electric all-wheel drive, coordinated transmission of the drive torque from two electric motors to the front and rear wheels respectively, as required
Maximum output		kW / hp 345 / 469
Maximum torque		Nm 645
Power-to-weight ratio		kg/kW 6.4
Type of transmission		Single-speed transmission with fixed ratio
Electric motors		
Motor technology		Sixth-generation BMW eDrive technology: electrically excited synchronous motor at the rear axle, asynchronous motor at the front axle, each sharing a housing with the power electronics and transmission; generator function for recuperating energy
Electric motor front		
Peak power according to ECE R 85		kW / hp 123 / 167
at		min ⁻¹ 4607
Max. torque		Nm 255
at		min ⁻¹ 0 – 4607
Overall ratio		:1 8.801
Electric motor rear		
Peak power according to ECE R 85		kW / hp 240 / 326
at		min ⁻¹ 5500
Max. torque		Nm 435
at		min ⁻¹ 0 – 5000
Overall ratio		:1 9.606
High-voltage battery		
Battery technology		Lithium-ion
Installation location		Underbody
Voltage		V 698.9
Net energy content		kWh 108.7
Charging time for 0 – 100% charge		11:00 h at 11 kW (16 A / 230 V, AC three-phase, Wallbox)
Charging time for 0 – 100% charge		5:30 h at 22 kW (32 A / 230 V, AC three-phase, Wallbox)
Charging time for 10 – 80% charge		21 min at 400 kW (800 V, DC, fast-charging station)
Additional range after 10 minutes of DC charging (max. charging rate) ¹		km 320 – 423
Charging unit		
Max. charging power alternating current (AC) three-phase		kW 11.0 (optional: 22.0)
Max. charging power direct current (DC)		kW 400

BMW i3 50 xDrive		
Bidirectional charging		
Vehicle to Load, max. rate (AC)	kW	optional: 3.7
Vehicle to Home, max. rate (DC)	kW	11.0
Vehicle to Grid, max. rate (DC)	kW	11.0
Driving dynamics and safety		
Front wheel suspension	Two-joint spring strut axle in lightweight aluminium-steel construction with tension strut and anti-roll bar, trapezoidal shear panels forming connection between axle subframe, high-voltage battery and body	
Rear wheel suspension	Five-link axle in lightweight aluminium-steel construction with separately arranged springs and dampers	
Brakes, front	Single-piston, floating-caliper disc brakes, ventilated	
Brakes, rear	Single-piston, floating-caliper disc brakes, ventilated	
Driving stability systems	Standard: Heart of Joy integrated drivetrain and driving dynamics management, integrated braking system, DSC incl. ABS, ASC and DTC (Dynamic Traction Control), Cornering Brake Control, brake drying function, Fade Compensation, drive-off assistant, Hill Descent Control, Trailer Stability Control	
Safety equipment	Standard: Airbags for driver and passenger, side airbags for driver and passenger, interaction airbag between driver and passenger, front and rear head airbags, 3-point automatic-reel belt on all seats, at the front with belt tensioner and belt force limiter, crash sensors, tyre pressure display	
Steering	Electrically assisted rack-and-pinion steering (EPS) with Servotronic function	
Steering wheel turns (lock to lock)	2.7	
Tyres, front / rear	245/45 R19 102 W/Y XL	
Wheel rims, front / rear	8 J x 19 light-alloy	
Driving performance figures		
Acceleration 0 – 100 km/h (62 mph)	s	4.7
Top speed	km/h	200 (124 mph) (electronically limited)
Consumption / range (WLTP combined)²		
El. power cons. achievable in individual configuration	kWh/100 km	13.4 – 16.2
Range achievable in individual configuration	km	814 – 912

¹ The extra range added after ten minutes of high-power charging was determined in accordance with ISO 12906 based on the WLTP cycle and assumes that the charging station enables the maximum DC charging power. Both the range added and charging performance are dependent on vehicle equipment, the battery's charge level and age, the ambient temperature and the battery temperature, the individual driving profile, use of auxiliary consumers, vehicle-specific charging settings and the charging power provided at the charging station.

² The figures given were determined in accordance with the prescribed WLTP measurement procedure. The actual values depend on various factors, such as load, driving style, route, weather, auxiliary consumers (including air conditioning), tyres and the age of the battery.

³ Corresponds to WLTP Extra High.

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BMW 3 Series. i3 40 xDrive.

BMW i3 40 xDrive		
Vehicle category		
Drive type / body variant		Battery Electric Vehicle – BEV / Sedan
Body		
Number of doors / seats		4 / 5
Length / width / height (unladen)	mm	4760 / 1865 / 1480
Wheelbase	mm	2897
Track width, front / rear	mm	1606 / 1613
Turning circle	m	12.2
Unladen weight (DIN / EU)	kg	2090 / 2165
Payload according to DIN	kg	505
Permitted total weight	kg	2595
Permitted axle loads, front / rear	kg	1190 / 1450
Max. permissible trailer load (12%) braked / unbraked	kg	1800 / 750
Max. permissible roofload / towbar download	kg	75 / 75
Luggage compartment capacity	l	420
Storage compartment under the bonnet	l	31
Air resistance	c _x × A	0.21 × 2.35 m ²
Drive		
Drive concept		Electric all-wheel drive, coordinated transmission of the drive torque from two electric motors to the front and rear wheels respectively, as required
Maximum output	kW / hp	275 / 374
Maximum torque	Nm	520
Power-to-weight ratio	kg/kW	7.6
Type of transmission		Single-speed transmission with fixed ratio
Electric motors		
Motor technology		Sixth-generation BMW eDrive technology: electrically excited synchronous motor at the rear axle, asynchronous motor at the front axle, each sharing a housing with the power electronics and transmission; generator function for recuperating energy
Electric motor front		
Peak power according to ECE R 85	kW / hp	123 / 167
at	min ⁻¹	4607
Max. torque	Nm	255
at	min ⁻¹	0 – 4607
Overall ratio	:1	8.801
Electric motor rear		
Peak power according to ECE R 85	kW / hp	195 / 265
at	min ⁻¹	6000
Max. torque	Nm	345
at	min ⁻¹	0 – 5000
Overall ratio	:1	10.485
High-voltage battery		
Battery technology		Lithium-ion
Installation location		Underbody
Voltage	V	671.6
Net energy content	kWh	82.8
Charging time for 0 – 100% charge		8:15 h at 11 kW (16 A / 230 V, AC three-phase, Wallbox)
Charging time for 0 – 100% charge		4:15 h at 22 kW (32 A / 230 V, AC three-phase, Wallbox)
Charging time for 10 – 80% charge		21 min at 300 kW (800 V, DC, fast-charging station)
Additional range after 10 minutes of DC charging (max. charging rate) ¹		251 – 337
Charging unit		
Max. charging power alternating current (AC) three-phase		kW
		11.0 (optional: 22.0)
Max. charging power direct current (DC)		kW
		300

BMW i3 40 xDrive		
Bidirectional charging		
Vehicle to Load, max. rate (AC)	kW	optional: 3.7
Vehicle to Home, max. rate (DC)	kW	11.0
Vehicle to Grid, max. rate (DC)	kW	11.0
Driving dynamics and safety		
Front wheel suspension	Two-joint spring strut axle in lightweight aluminium-steel construction with tension strut and anti-roll bar, trapezoidal shear panels forming connection between axle subframe, high-voltage battery and body	
Rear wheel suspension	Five-link axle in lightweight aluminium-steel construction with separately arranged springs and dampers	
Brakes, front	Single-piston, floating-caliper disc brakes, ventilated	
Brakes, rear	Single-piston, floating-caliper disc brakes	
Driving stability systems	Standard: Heart of Joy integrated drivetrain and driving dynamics management, integrated braking system, DSC incl. ABS, ASC and DTC (Dynamic Traction Control), Cornering Brake Control, brake drying function, Fade Compensation, drive-off assistant, Hill Descent Control, Trailer Stability Control	
Safety equipment	Standard: Airbags for driver and passenger, side airbags for driver and passenger, interaction airbag between driver and passenger, front and rear head airbags, 3-point automatic-reel belt on all seats, at the front with belt tensioner and belt force limiter, crash sensors, tyre pressure display	
Steering	Electrically assisted rack-and-pinion steering (EPS) with Servotronic function	
Steering wheel turns (lock to lock)	2.7	
Tyres, front / rear	245/45 R19 102 W/Y XL	
Wheel rims, front / rear	8 J x 19 light-alloy	
Driving performance figures		
Acceleration 0 – 100 km/h (62 mph)	s	5.4
Top speed	km/h	200 (124 mph) (electronically limited)
Consumption / range (WLTP combined)²		
El. power cons. achievable in individual configuration	kWh/100 km	14.3 – 16.1
Range achievable in individual configuration	Km	631 – 710

¹ The extra range added after ten minutes of high-power charging was determined in accordance with ISO 12906 based on the WLTP cycle and assumes that the charging station enables the maximum DC charging power. Both the range added and charging performance are dependent on vehicle equipment, the battery's charge level and age, the ambient temperature and the battery temperature, the individual driving profile, use of auxiliary consumers, vehicle-specific charging settings and the charging power provided at the charging station.

² The figures given were determined in accordance with the prescribed WLTP measurement procedure. The actual values depend on various factors, such as load, driving style, route, weather, auxiliary consumers (including air conditioning), tyres and the age of the battery.

³ Corresponds to WLTP Extra High.

⁴ Figures not yet available.

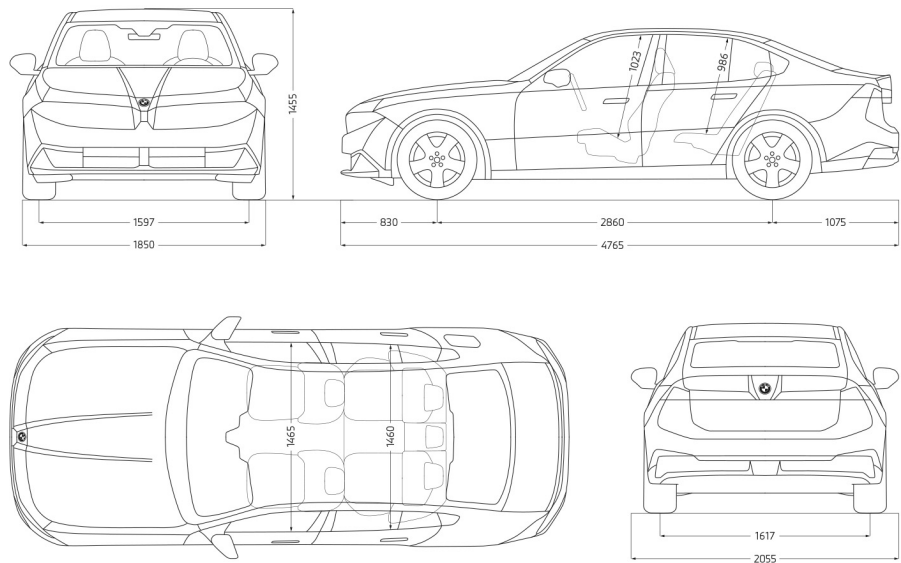
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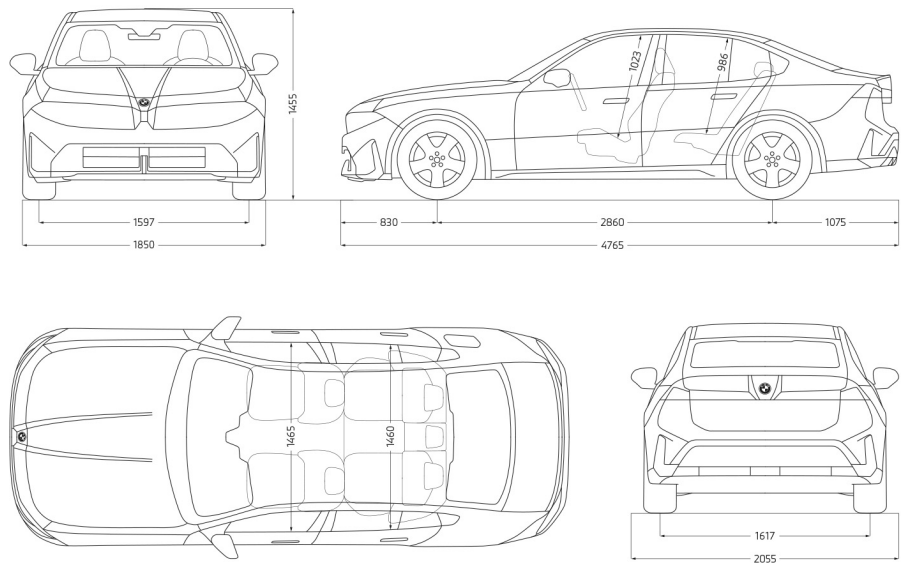
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Exterior and interior dimensions. BMW 3 Series.

BMW 3 Series with internal-combustion engines, base models

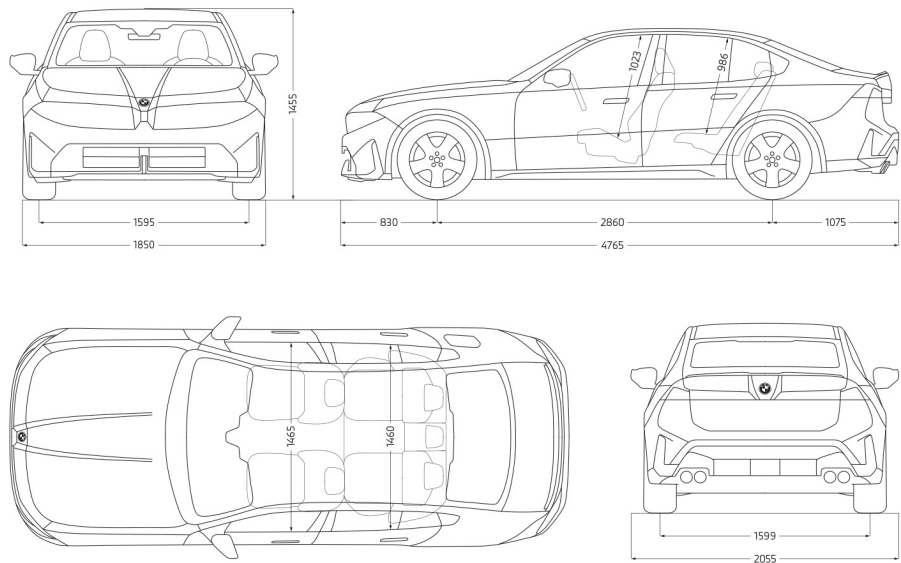


BMW 3 Series with internal combustion engines, M Sport package

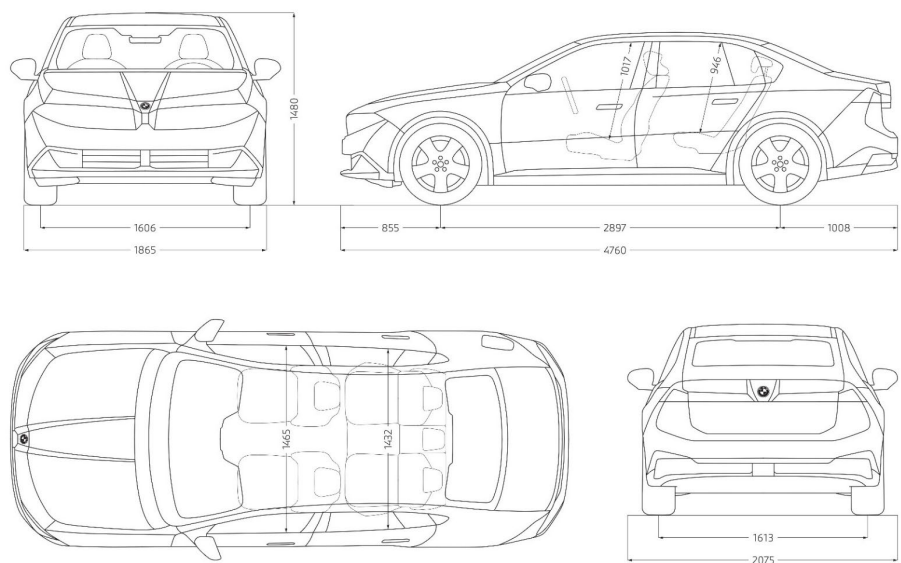


The dimensions of the technical drawing are in millimetres and may vary depending on the model and optional equipment specified.

BMW M Performance model BMW M350i xDrive



BMW i3



The dimensions of the technical drawing are in millimetres and may vary depending on the model and optional equipment specified.