

EV FACT SHEET

BMW iX

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Image: BMW Group

INTRODUCTION

The BMW iX is BMW's flagship full-electric vehicle.

Built in Germany on a purpose designed electric-only platform, it (like all electric BMWs) has a model name beginning with a lowercase 'i' to differentiate it from fossil fuelled BMWs.

Classed in Australia as a large size SUV, it is offered in two main variants – the iX xDrive40 with a 77kWh battery and the iX xDrive50 with 112kWh.

Direct competitors to the iX in Australia would include the Audi e-tron, Jaguar I-Pace, Tesla Model X and the upcoming Porsche Taycan Cross Turissmo.

Both iX variants can charge at up to 11kW AC charging. On DC fast-chargers, the iX xDrive40 can charge at up to 150kW, whilst the iX xDrive50 can charge at up to 200 kW. A 10 minute charge on a high power DC charger will add around 90km of range to the xDrive40 and 120km of range to the xDrive50.

DRIVING RANGE

Australian test standards are currently in a state of flux, with the Green Vehicle Guide² showing some vehicle driving ranges using either the old (and highly over optimistic) European NEDC test cycle figure or an equivalent to the newer European WLTP test cycle figure. Worse still, for recent additions to the Australian market the GVG often gives no data is given at all! Around town, the WLTP figure is the best guide to range or, if doing outer suburban to regional driving – use the US EPA figure.

DRIVING RANGE (CONTINUED)

Testing system range estimates:						
Variant	NEDC	WLTP	US EPA			
iX Drive40	Not rated	425	Not rated			
iX Drive40 sport	Not rated	425	Not rated			
iX Drive50 sport	Not rated	630	521			
Table 1. Driving range estimates for DNAM iV verients						

Table 1: Driving range estimates for BMW iX variants

Using the US EPA range – an iX xDrive50 should be comfortably capable of a return trip from the Melbourne GPO to Warrnambool on the Victorian south coast, provided the heating or air conditioning were not heavily used. Note: on this route, DC charging is unavailable beyond Geelong. However, if staying overnight in Warrnambool, an overnight top-up at a caravan park will give approximately 50% at 15A (3.6kW). For further charging options, see <u>PlugShare</u>.



Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

Notes:

The BMW iX is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers² as well as CCS2 DC fast-chargers.



CCS2 charging plug and socket

- 1. https://www.greenvehicleguide.gov.au
- The BMW iX can be charged at any AC charger, however an adaptor will be needed to use the (few) remaining older ones fitted with Type 1 (J1772) plugs.

AC charging:

Like all new EVs sold in Australia, the BMW iX is fitted with a type 2 AC socket.

Charging rates:

Single phase: maximum of 7.4kW (32A) Three phase: 11kW (16A per phase)

Charging speeds and times vary on the capacity of the EVSE (Electric Vehicle Supply Equipment – otherwise known as a car charger) the EV is connected to and the chosen battery size. Approximate charging times for the BMW iX are shown in table 2 below.

AC: 0 – 100% time			DC: 0 – 80% time			
10 A (power point)	15 A 1 phase (Caravan outlet)	32 A (1 phase Home EVSE)	16 or 32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (350kW)	
Times for xDrive40:						
39.5*	19.75h	9.66h	8h	1h 10m	45m	
Times for xDrive50:						
58.5*	29	14.3h	11h	1h 40m	45m	

Table 2: Approximate charging times for the BMW iX

* Using BMW supplied 1.8kW max portable charging cable

DC fast charging:

Like all new BEVs sold in Australia (except the Nissan Leaf), the iX3 uses the CCS2 DC fast-charge connector and can charge at up to 150kW DC for the xDrive40 and 200kW for the xDrive50.

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for a BMW iX, an 11kW three phase AC charger would be needed. However, depending on your existing power supply and/or charging needs, a lower rated charger may only be practicable, or needed. (See **important notes** below). Lower capacity chargers will increase charging times, as shown in table 2 above.

The iX also comes with a Mode 2 portable charger for plugging into a 10A power point. For a 0 - 100% charge, the xDrive40 will take around 40hrs and the xDrive50 59hrs. Note: this extended time is due to BMW supplying a maximum 1.8kW portable charger.

Important notes for any home EVSE installation:

- 1. High charging rates are generally not needed for overnight charging.
- 2. Homes do not normally have three phase AC connected;
- 3. Switchboard and/or electrical supply upgrades may be needed if your home is more than 20 years old. (For more information on this item read articles in:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Boot volumes in litres (1 litre = 10 x 10 x 10 cm)

- Seats up: 500 L
- Seats down: 1750 L

Dimensions:

- Overall length: 4953 mm
- Overall width:
 - o 1967 mm (mirrors in)
 - (mirrors-out: not specified)
- Overall height: 1695 mm

Battery:

- xDrive 40: 77 kWh (Approximately 71 useable)
- xDrive 50: 112 kWh (Approximately 105 useable)

Charging:

- 1 phase AC: 7.4 kW max.
- 3 phase AC: 11 kW max.
- DC charge rates:
 - o xDrive40: 150 kW max.
 - o xDrive50: 200 kW max.

Charge port location:

• Right-hand rear.

Energy consumption: (WLTP)

- xDrive40: 225 wh/km
- xDrive50: 230 Wh/km

Kerb weight:

- xDrive40: 2365 kg
- xDrive50: 2510 kg

Drive configuration:

• All-wheel drive (AWD).

Towing:

• 750 kg braked/2500 kg unbraked.

Performance:

	Max. power	0 - 100 km/h
Variant	(kW)	(sec)
iX Drive40	240	6.1
iX Drive40 sport	240	6.1
iX Drive50 sport	385	4.6

IMPORTANT NOTES:

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