

EV FACT SHEET

BMW i4

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Image: BMW USA

INTRODUCTION

The BMW i4 is one of three new full-electric vehicles released by BMW in 2021. Classed in Australia as a medium size passenger car, it is marketed as a five door coupe and features a large liftback style rear boot opening and seating for five people. Like all electric BMWs, the model name begins with a lowercase 'i' to differentiate it from fossil fuelled BMWs.

Built in Germany, the i4 shares a platform used to build ICE (internal combustion engine), hybrid and plug-in hybrid models. The i4 is available in rear-wheel drive (eDrive 40) or all-wheel drive (M50) versions. Its direct competitors in Australia would include the Polestar 2 and Tesla Model 3.

The i4 offers up to 11kW AC charging and 200kW maximum DC fast-charge rate. At that DC rate, it can recharge 100km of range in just under 6 minutes.

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 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		EPA			
	(Aust)	(Euro)	(USA)			
2WD (eDrive 40)	TBC	TBC	484			
AWD (M50)	TBC	TBC	434			

Table 1: Driving range estimates for BMW i4

Using the US EPA range – an i4 2WD should be capable of a return trip from the Melbourne GPO to St Arnaud in Victoria's north-west, provided the heating or air conditioning were not heavily used. For this sort of trip, it would be recommended to do a top-up DC fast-charge at one of the DC charger sites along the Calder Highway, or take a slight detour to an AC charger and more relaxed one to two hour break at Malden or Bendigo. (Further charging options at PlugShare).

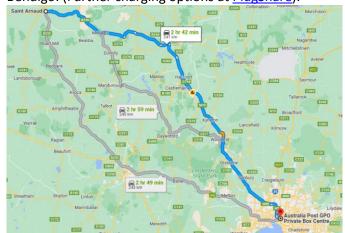


Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The i4 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

Notes:

- 1. https://www.greenvehicleguide.gov.au
- The i4 can be charged at any AC EVSE, however an adaptor will be needed to use the (few) remaining older EVSEs fitted with Type 1 (J1772) plugs.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Like all new EVs sold in Australia, the BMW i4 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) it is connected to and the chosen battery size. Approximate charging times for the i4 are shown in table 2 below.

(a) 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)
46¹	24.5h	11.5h	7.6h	1.5h	35m

Table 2: Approximate charging times for the BMW i4
* Using BMW supplied 1.8kW max portable charging cable

DC fast charging:

Like all new BEVs sold in Australia (except the Nissan Leaf), the i4 uses the CCS2 DC fast-charge connector and can charge at up to 200kW.

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for a BMW i4, an 11kW three phase AC EVSE would be needed. However, depending on your existing power supply and/or charging needs, a lower rated EVSE may only be practicable, or needed. (See **important notes** below). Lower capacity EVSEs will increase charging times, as shown in table 2 above.

The i4 also comes with a Mode 2 portable EVSE for plugging into a 10A power point. Charging with this will take around 46hrs for a 0-100% charge. Note: this extended time is due to BMW supplying a maximum 1.8kW portable charger.

Important notes for any home EVSE installation:

- High charging rates are generally not needed for overnight charging.
- 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:
 - (b) Renew magazine edition 143. (EVSE wiring)
 - (c) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Boot volumes in litres (1 litre = $10 \times 10 \times 10 \text{ cm}$)

Seats up: 470 LSeats down: 1290 L

Dimensions:

Overall length: 4783 mm

Overall width:

o 1852 mm (mirrors in)

Note: mirrors-out dimension not given.

Overall height: 1448 mm

Battery:

• 83.9 kWh (Approximately 80.7 useable)

Charging:

1 phase AC: 7.4 kW max.3 phase AC: 11 kW max.

DC: 200 kW max.

Charge port location:

• Right-hand rear.

Energy consumption: (WLTP)

• 160 Wh/km

Kerb weight:

2605 kg

Drive configuration:

- Rear wheel drive standard.
- All Wheel Drive (AWD) optional.

Towing:

• 1600 kg braked/750 kg unbraked.

Performance:

Variant	Max. Power (kW)	0 to 100km/h (Sec)
2WD (eDrive 40)	250	5.7
AWD (M50)	400	3.9

IMPORTANT NOTES:

Always check the specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gaton for errors factual or due to reproduction in this Fact Sheet. Whilst all efforts are made to ensure the accuracy of the material in this Fact Sheet, manufacturers regularly make changes (often unannounced) to their model ranges and specifications.

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