



EV FACT SHEET

BMW i5

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BMW i5 Image: BMW

INTRODUCTION

The BMW i5 fits into the Australian VFACTS 'Large Passenger' vehicle segment. Offered here in one petrol and two electric versions, the electric versions are not built on an EV dedicated platform: rather they share the same CLAR 'flexible drive' platform as the internal combustion versions of the BMW 520i. (Whilst internal combustion, PHEV and mild hybrid versions of the 5 series are available overseas, only the two full electric and one mild hybrid versions are sold in Australia¹).

Both the ICE and electric i5 are built at BMW's Dingolfing (Germany) production facility.

First offered for sale in Europe in early 2023, the mild hybrid 520i, i5 eDrive40 and i5 M60 XDrive versions arrived in Australia later that year.

DRIVING RANGE

Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle. However few manufacturers now give this figure for their new releases. Instead they generally quote the more achievable ranges found using the newer European WLTP test cycle.

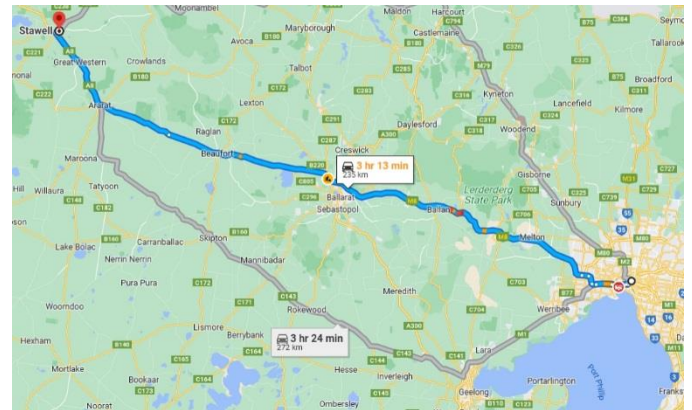
Therefore, to avoid disappointment always check which test cycle has been used when assessing an EV for your needs. As a rough guide, NEDC is generally 30% too high, WLTP a good estimate if doing mostly urban and outer suburban driving and US EPA the better guide if doing mostly outer suburban to regional driving.

DRIVING RANGE (continued)

National testing system range estimates (km)			
Version	NEDC (Aust)	WLTP (Euro)	US EPA
i5 eDrive40	Not rated	582	472
i5 M60 XDrive	Not rated	516	410

Table 1: Driving range estimates for the BMW i5 versions.

Using the US EPA rating, a BMW i5 eDrive40 would, at its limit, make a round-trip from the Melbourne CBD to Stawell (in the central west of Victoria) – provided the heating or air conditioning were not heavily used. For this sort of trip, a short DC top-up at one of the increasing number of DC charger sites between Stawell and Melbourne would be recommended. (For further charging options and availability, see: <https://www.plugshare.com/>).



Example BMW i5 eDrive 40 return trip range. Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The BMW i5 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. This fact sheet covers the full electric versions of the 5 series only.
2. The BMW i5 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 i5 is fitted with a type 2 AC charging socket.

Charging rates:

Single phase: maximum of 7.4 kW (32A)

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

Note: 22 kW AC is available as an additional cost extra.

Charging speeds vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) the car is connected to. Approximate AC charging times for the BMW i5 are shown in table 2.

AC: 0 – 100% time				DC: 0 – 80% time	
10 A (power point)	15 A 1 phase (Caravan outlet)	32 A 1 ph. (Home EVSE)	16 or 32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (200kW+)
25.5h	17h	8.5h	4.25h	1h 20m	34m

Table 2: Approx. charging times for the BMW i5

DC fast charging

The BMW i5 uses the CCS2 DC fast-charge connector and can charge at up to 205 kW DC.

V2X capability:

The BMW i5 currently does not include any V2X capability.

V2X is the generic term covering the options of getting 230V AC power from the battery and supplying it as:

- V2L: vehicle to load (230V power available from outlet in car)
- V2H: vehicle to home (supply home via special connection)
- V2G: vehicle to grid (supply home or grid via spec. connection)

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for the BMW i5, an 11kW three phase AC charger would be needed. However, depending on your existing power supply and/or charging needs, it may only be practicable to fit a lower rated EVSE. (See notes below). Lower capacity EVSEs will increase charging times, as shown in table 2.

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 – see information pages at EVchoice.com.au or read articles in:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Seating: 5

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

- Seats up: 490
- Rear seats folded: Not specified
- Froot (front boot): NA

Dimensions:

- Overall length: 5,060 mm
- Overall height: 1,900 mm
- Ground clearance:
 - 146 mm (eDrive 40)
 - 136 mm (M60 xDrive)
- Overall width (edge of doors): 1,900 mm
- Overall width (edge of mirrors): 2,156 mm

Battery:

- 84 kWh (81.2 usable)

Energy consumption: (WLTP)

- 15.9 kWh/100km (eDrive 40)
- 18.2 kWh/100km(M60 xDrive)

Kerb weight:

- 2,130 kg (eDrive 40)
- 2,305 kg (M60 xDrive)

Charging:

- 1 phase AC: 7.4 kW maximum
- 3 phase AC: 11 kW maximum (22 kW optional)
- DC: 205 kW maximum

Charge port location:

- Right side, rear (above rear wheel)

Drive configuration:

- All-wheel drive

Towing: unbraked/braked (kg)

- 750/1500 (eDrive 40)
- 750/2000 (M60 xDrive)

Performance:

Variant:	Max. Power (kW)	0 to 100km/h (Sec)
i5 eDrive40	250	6.0
i5 M60 XDrive	442	3.8

IMPORTANT NOTE

Always check all specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gatton (EVChoice) 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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