EV FACT SHEET

BMW i3

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Image: BMW Australia

INTRODUCTION

The BMW i3 is a 5 door, 4 seat hatchback in the Australian 'small' car category. It offers an innovative design and quirky looks - which can polarise people's views of it!

It was first marketed in Europe in 2014, and was awarded Wheels Australia 'Car of the Year' that year. As such, it now has potential for second-hand purchasing.

Initially released with a 22 kWh battery, a 33kWh version was added to the range in 2016. In 2019 the battery size was increased to 42.2kWh.

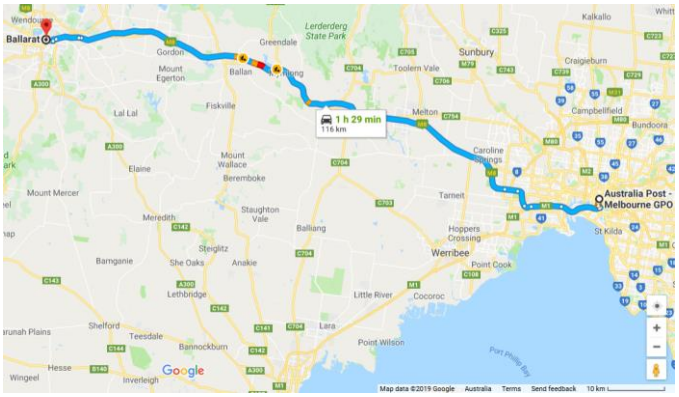
The 60Ah and 94Ah BEV (Battery Electric Vehicle) versions could also be ordered as a PHEV (Plug-in Hybrid Electric Vehicle) with a range extending 2 cylinder, 650cc petrol motor and 9 litre fuel tank. The REx version was dropped with the introduction of the 120Ah i3 in 2019.

As of late 2017, a performance i3s version was added to the line-up.

The official designations for each i3 model are:
Second-hand:
i3 60Ah (BEV: 22 kWh battery)
i3 60Ah REx (PHEV: 22 kWh battery & range extender)
i3 94Ah (BEV: 33 kWh battery)
i3 94Ah REx (PHEV: 33 kWh hr batt. & range extender)
i3s 94Ah (BEV: 33 kWh battery, performance version)
New:
i3 120 (BEV: 42.2 kWh battery)
i3s 120Ah (BEV: 42.2 kWh battery, perf. version)

DRIVING RANGE

The i3 has quoted ranges (according to the Australian Green Vehicle Guide website https://greenvehicleguide.gov.au) of 190 km for the 60Ah BEV, 290 km for the 94Ah BEV and 335 for the current 120Ah (42.2kWh) battery version. However real-world driving range is in the vicinity of 130 km (60Ah), 182 km (94Ah) and 246km (120Ah).
For instance the i3 120Ah (42.2kWh) would, at its limit, make a round-trip from the Melbourne CBD to Ballarat and back – provided neither the heating or air conditioning were used. For this sort of trip, a 30 min to 1hr top-up AC charge over lunch in Ballarat, or a 5 – 10 min DC fast charge there (when it becomes available) would be recommended.



Real world return trip range for 120Ah (42.2 kWh) from Melbourne GPO
Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

When first introduced, the i3 was fitted with a Type 1 AC charging port and DC charging was an optional extra. As of the beginning of 2018, the i3 was standard fitted with the Type 2 AC charging port and CCS2 DC charging, thus falling into line with most other new EVs sold in Australia. Depending on the version, it can charge on single phase 7kW AC, 3 phase 11kW AC and DC quick charge EVSEs.

CCS2 charging plug and socket

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Charging speeds vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) it is connected to and the chosen battery size. Charging times are shown in table 1 below.

	EVSE type:				
Battery size:	10 A outlet	16 A 1 phase (3.6 kW)	32 A 1 phase (7.2 kW)	16 A 3 phase (11 kW)	DC Fast charge To 80%
22kWh	7h 45m	5h 40m	2h 50m	N/A	25m
33kWh	13.5h	9h	4.5h	2h 45m	39m
42kWh	16h	9.5h	6h	3.2h	42m

Table 1: Approximate charging times for the i3

DC fast charging

Pre-2018 models of the i3 used the Type 1 connector. DC charging (using the CCS1 socket) was an optional extra before 2018.

The i3 now comes standard with the CCS2 socket. (The CCS2 socket is a combination Type 2 AC socket with CCS DC pins).

Note: The CCS2 connector is becoming the standard type of DC fast-charge connector in both Australia and overseas.

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging times, you could install the following:
i3 60Ah: 32A (7.2 kW) single phase EVSE.
i3 94Ah and 120Ah: 16A (11 kW) three phase EVSE.
Lower capacity EVSEs will increase charging times, as shown in table 1 above.

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. (See fact-sheet on '*Making your home EV ready*', or read articles in:
   (a) EV News, (AEVA newsletter) issue 231, or
   (b) ReNew, (ATA magazine) edition 143.

SPECIFICATIONS

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

- Boot: 260 L
- Rear seat folded, loading space to roof: 1,100 L

Dimensions:

- Overall length 3,999 mm
- Overall width (edge of doors): 1,775 mm
- Overall width (edge of mirrors): 2,039 mm
- Overall height: 1,578 mm

Battery:

- 60Ah: 22 kWh (18.8 usable) Lithium-ion
- 94Ah: 33 kWh, (27.2 usable) Lithium-ion
- 120Ah: 42.2 kWh, (37.9 usable) Lithium-ion

Energy consumption: (https://greenvehicleguide.gov.au)

- 137 Wh/km (120 Ah version)

Kerb weight:

- 1,345 kg (120 Ah version)

WHERE TO BUY

The BMW i3 is available from selected BMW dealers around Australia.