EV FACT SHEET

BMW i3

Aust. Delivered: 2014 - 2022

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BMW i3. 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 official designations for each i3 model are:
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)
i3 120 (BEV: 42.2 kWh battery)
i3s 120Ah (BEV: 42.2 kWh battery, perf. version)

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.

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

DRIVING RANGE

The i3 had quoted ranges under the NEDC test cycle (now replaced in most jurisdictions … except Australia) of 190 km for the 60Ah BEV, 290 km for the 94Ah BEV and 335 for the 120Ah version. However real-world driving ranges were more in the vicinity of 130 km (60Ah), 182 km (94Ah) and 246km (120Ah).

However, unlike early Nissan Leafs (and, to a lesser degree, Mitsubishi iMiEVs), owners of BMW i3 EVs are reporting better than expected battery range decreases over time. It would appear the statements by BMW that the i3 battery is designed to last as long as the vehicle (quoting a lifespan of 15 years and beyond) appear to be holding up.
It is worth noting here that you must not expect a second-hand purchase to still have the new driving range unless the battery has been replaced recently.

BUYING SECOND-HAND

1. EVSE

When buying any second-hand EV, ensure the portable EVSE both comes with the car and is working.

2. Charging

Important Note:
When first introduced in 2014, the i3 was fitted with a Type 1 AC charging port and DC charging was an optional extra. If fitted, this optional DC charging port was a CCS1 layout - **which is not compatible with current Australian DC chargers.** BMW will change this port to a Type 2 AC and CCS2 port – at a cost of between $2600 and $4000 depending on version.
This issue was solved at the beginning of 2018 when the i3 was standard fitted with the Type 2 AC charging port and CCS2 DC charging, thus falling into line with other new EVs sold in Australia.

3. Battery data

As of writing this Fact Sheet, there is no readily available OBDII compatible App available to test the battery in an i3.

4. General assessment of a second-hand EV

For more information on how to assess the condition of a BMW i3 (or any other second-hand EV) see Jan – Mar 2022 Renew magazine (edition 158) for article on *'How to make a pre-purchase assessment of a second-hand EV'* or go to the Fact Sheets at EVchoice.com.au.

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 other new EVs sold in Australia. Depending on the version, the maximum AC charge rate may be single phase 7.4 kW or 3 phase 11 kW. (See table 1).

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.

Important note:
For AC charging, early i3 owners with Type 1 AC charge ports will need a Type 1 to Type 2 adaptor lead (at a cost of around $250) to use modern AC EV chargers.

	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	5h 40m	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
*** If fitted with optional 11kW charger. Otherwise 9h.**

DC fast charging

If fitted, pre-2018 models of the i3 used the CCS1 DC connector. Unless it has been changed, DC charging of these vehicles is not possible with the now standard CCS2 plug fitted to Australian DC chargers.
From the start of 2018 the i3 came standard with the CCS2 socket. (The CCS2 socket is a combination Type 2 AC socket with CCS DC pins).

HOME CHARGING CONSIDERATIONS

General:

To get the shortest home charging time for BMW i3, you could install the following:
i3 60Ah: 32A (7.2 kW) single phase EVSE.
Some i3 94Ah and all 120Ah: 16A (11 kW) 3 phase EVSE.

Lower capacity EVSEs will increase charging times, as shown in table 1 above. However, depending on your existing power supply and/or charging needs, a lower rated EVSE may only be practicable, or needed.
The i3 also comes with a Mode 2 portable EVSE for plugging into a 10A power point. Charging an i3 from 0 – 100% with this EVSE will take between 8 and 16 hours, depending on the model (see table 1).

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 EVchoice.com.au or read articles in:
   (a) Renew magazine edition 143. (home EVSE installation)
   (b) Renew magazine edition 156. (EVSE buyer's guide)

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: (NEDC test cycle)

- 137 Wh/km (120 Ah version)

Kerb weight:

- 1,345 kg (120 Ah version)

Charging:

Version:	AC (kW)	DC (kW)
60 Ah (22kWh)	7.4	47
94 Ah (33kWh)	7.4 or 11	49
120 Ah (42kWh)	11	49

Charge port location:

- Right-hand rear

Drive configuration:

- Rear wheel drive

Towing:

- Not rated for towing

Performance:

Version:	kW	0 – 100km/h (sec)
60 Ah	125	7.2
94 Ah	125	7.3
120 Ah	125	7.3
120 Ah i3s	135	6.9

IMPORTANT NOTE

Always check all specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gaton (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, during a model run manufacturers regularly make changes (often unannounced) to their model ranges and specifications.