



EV FACT SHEET

Tesla Model 3

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Image: Tesla

INTRODUCTION

Revealed to the world in March 2016, upwards of half a million deposits of US\$1000 were placed **before** US deliveries began in July 2017.

It is worth noting here that whilst in the USA the Model 3 is called a 'small car' – at almost 4.7 metres long it is by no means a 'small car' by Australian standards.

Australian sales began in later 2019 with Tesla initially offering two variants – the rear-wheel drive (RWD) 'Standard Range Plus' with the smaller battery and the dual motor all-wheel drive (AWD) Performance version with the larger one.

As of the time of writing (Aug 2022), three variants are offered in Australia. RWD with the smaller battery, AWD and AWD Performance – both with the larger battery.

The battery packs have also evolved slightly in size and chemistry. Earlier packs were around 50 and 75kWh¹ NCA cells whilst the current packs for Australia (from China) are approximately 60 and 80kWh packs using LFP chemistry for the 60kWh SR models and NMC for the 80kWh pack.

For the non-technical minded, this difference in chemistry means that LFP packs can be regularly charged to 100%, whilst the earlier NCA and current NMC are recommended to be charged to 80-90% and only to 100% immediately prior to a long trip. **Note:** always check Tesla's battery use recommendations at time of buying, Tesla constantly update and make changes to their battery specifications.

DRIVING RANGE

Australian fuel economy 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

DRIVING RANGE (Continued)

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 mostly outer suburban to regional driving – use the US EPA figure.

Version	WLTP (Euro)	US EPA
RWD (standard range)	491	435
AWD (Long Range)	602	573
Performance (AWD Long Range)	547	504

Table 1: Driving range estimates for the Tesla Model 3

Using the US EPA range – a typical Model 3 AWD would do a return trip to Bairnsdale from the Melbourne GPO, provide neither the heating or air conditioning were heavily used. Top-up charging options for this trip include the public DC chargers at Moe and Sale (with one to come in Bairnsdale itself), or the Tesla specific Supercharger site at Moe. For more charging options: see www.Plugshare.com

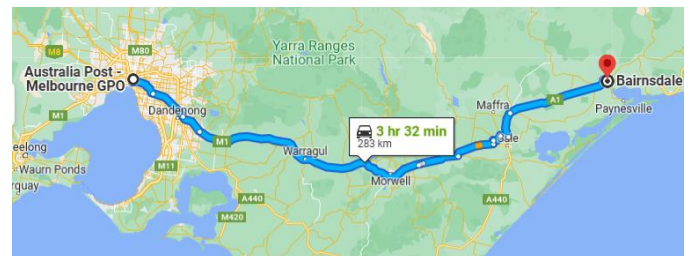


Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The Model 3 is fitted with a CCS2 socket allowing it to charge via all Type 2 AC chargers³, CCS2 DC fast-chargers AND the Tesla Supercharger network.



CCS2 charging plug and socket

Notes:

1. Tesla does not specify exact battery sizes, preferring to emphasise the driving range.
2. <https://www.greenvehicleguide.gov.au/>
3. The Model 3 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 Tesla Model 3 is fitted with a type 2 AC socket.

AC 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 Model 3 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)	
2WD	24h	16h	8h	16A: 5.25h 32A: 5.25h	1h 40m	30m
AWD	32h	21h	10h	16A: 7h 32A: 7h	2h 30m	30m

Table 2: Charging times for the Tesla Model 3

DC fast charging:

The Model 3 uses the CCS2 DC fast-charge connector and can charge at up to 220kW.

This connector is fast becoming the standard DC fast-charge connector type in both Australia and overseas.

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for a Tesla Model 3, 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 notes below). Lower capacity EVSEs will increase charging times, as shown in table 2 above.

The Model 3 also comes with a Mode 2 portable EVSE for plugging into a 10A power point. Charging with this EVSE will take around 24 hrs to do a 0 – 100% charge in a 2WD model, or 32 hrs for an AWD model.

Important notes for any 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 or business is more than 20 years old. For more information on this item - read EV Information articles at EVchoice.com.au or see:
(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: 561 L
- Seats down: not stated

Front boot ('froot'):

- 88L

Dimensions:

- Overall length: 4,694 mm
- Overall width (mirrors folded/mirrors out): 1,850/2,089 mm
- Overall height: 1,443 mm

Battery: two options

- 60 kWh (useable*)
- 80 kWh (useable*)

Charging:

- 1 phase AC: 7.4kW max.
- 3 phase AC: 11kW max.
- DC: 170kW* max. (Standard Range battery)
- DC: 250kW* max. (Long Range battery).

Charge port location:

- Left-hand rear.

Energy consumption: (WLTP)

- 117 Wh/km (RWD model)
- Unable to source data for LFP AWD models

Kerb weight:

- 1835kg for RWD with LFP battery.

Maximum power:

- 239 kW* (2WD model)
- 413 kW* (Performance model)

0-100 km/h time:

- 6.1 sec: 2WD model
- 4.4 sec: AWD model
- 3.3 sec: AWD Performance model

Towing:

- Braked trailer: 1000 kg
- Non-braked trailer: 750 kg

* Battery sizes, max. DC charge rates and motor kW are not specified directly by Tesla. These figures are estimates from other sources. Data for the Made in China (MIC) model 3.

IMPORTANT NOTE:

Always check all 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.