



EV FACT SHEET

Tesla Model Y

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Image: Tesla

INTRODUCTION

Perhaps Tesla’s most anticipated EV release yet, the model Y has been suggested by the CEO of Tesla (Elon Musk) to potentially produce annual sales figures greater than the Tesla Models S, X and 3 combined.

Sharing some 75% of the parts with the Model 3, the Model Y is effectively its SUV equivalent. As such, it offers much the same interior and drive train as its sibling but differs in being marginally longer and higher with a more upright seating position. The Model Y also offers optional third-row seating for a seven-passenger layout and a large rear hatch – making it a more versatile vehicle than the sedan-styled Model 3.

Announced in March 2019, US sales began in early 2020. However the Model Y had a slow journey around the world’s markets before (finally) being released for sale here in June 2022.

Two versions are currently offered in Australia: rear-wheel drive with the ‘standard range’ battery and the ‘performance’ all-wheel drive with a longer range battery.

DRIVING RANGE

Australian fuel economy test standards are currently in a state of flux, with the Green Vehicle Guide¹ 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)

| National testing system range estimates | | | |
|---|-------------|-------------|--------|
| Version | NEDC (Aust) | WLTP (Euro) | US EPA |
| Rear Wheel Drive (Standard Range) | Not rated | 455 km | 393 km |
| Performance (AWD Long Range) | Not rated | 514 km | 488 km |

Table 1: Driving range estimates for the Tesla Model Y

Using the US EPA range – a typical Model Y Performance (AWD) with the currently offered ‘Long Range’ battery would do a return trip to Stawell from the Melbourne GPO - as shown on the map below. Top-up charging options for this trip include the DC chargers at Ballarat and Melton, or the Tesla specific Superchargers at Ballarat and Moonee Ponds (in Melbourne). Note: all of these require a slight detour off the Freeway. For more charging options: see www.Plugshare.com

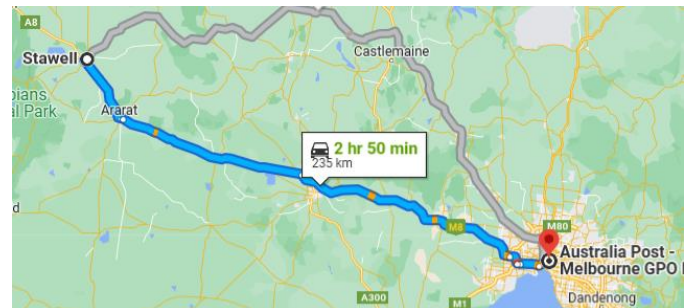


Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The Model Y is fitted with a CCS2 socket allowing it to charge via all Type 2 AC chargers², CCS2 DC fast-chargers AND the Tesla Supercharger network.



CCS2 charging plug and socket

Notes:

1. <https://www.greenvehicleguide.gov.au>

The Model Y 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 Y 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. Charging times for the Model Y 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 |
| Perf. | 32h | 21h | 10h | 16A: 7h 32A: 7h | 2h 30m | 30m |

Table 2: Charging times for the Tesla Model Y

DC fast charging:

The Model Y 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 Y, 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 Y 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 and 32 hrs for a Performance 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: 854 L
- Seats down: 2041 L

Front boot ('froot'):

- 117L

Dimensions:

- Overall length: 4,751 mm
- Overall width (mirrors folded/mirrors out):
 - 1,921 mm/2,129 mm
- Overall height: 1624 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)
- 141 Wh/km (Performance model)

Kerb weight:

- 2072 kg (Performance model)

Drive configuration:

- Rear wheel drive or All Wheel Drive (AWD)

Maximum power:

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

0-100 km/h time:

- 6.9 sec: 2WD model
- 3.7 sec: Performance model

Towing:

- Braked trailer: 1,600 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 Y.

IMPORTANT NOTE:

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