



EV FACT SHEET

Genesis electrified G80

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Genesis G80. Image: Genesis

INTRODUCTION

Based on the latest G80 that went on sale in 2021, the Genesis G80 is an electrified version of the ICE (internal combustion engine) G80. It is therefore not built on the EV-only platform that the Genesis GV60, (and Hyundai stablemates¹ the Ioniq 5 and Kia EV6) use. Australian sales of the G80 electric began mid-2022.

Classed in Australia as a 'Large Passenger' car, it currently has few direct EV competitors. Possible competition for buyer's attention in this segment would include the base model Porsche Taycan, Tesla Model S and, perhaps, the Jaguar I-Pace. (Note: at the time of writing – October 2022 – the Model S is unlikely be sold again here before late 2023).

DRIVING RANGE

Australian test standards are currently in a state of flux, with the Australian GVG (Green Vehicle Guide²) showing some vehicle driving ranges using either the old (and highly over-optimistic) figure derived using ADR 81/02 (based on the European NEDC test cycle) or the newer European WLTP test cycle figure. Unfortunately, it is also not easy to find out which test cycle was used to give a particular GVG figure! For around town, the WLTP figure is the best guide to driving range or, if doing outer suburban to regional driving – use the US EPA figure.

National testing system range estimates		
NEDC (Old Aust)	WLTP (Euro)	US EPA
Not rated	520	451

Table 1: Driving range estimates for the Genesis G80

DRIVING RANGE (continued)

Using the US EPA range – a Genesis G80 should manage a return day-trip from the Melbourne GPO to Tidal River on Wilsons Promontory, provided the heater or air conditioner are not heavily used. Few top-up charging options are yet available on this route though (hence the conservative choice of the US EPA range), apart from the community DC charger at Cape Paterson (if detouring along the coast) or near the start/end of the journey at the Ampol 350kW charger in Dandenong. For further charging options and locations, visit:

<https://www.plugshare.com/>

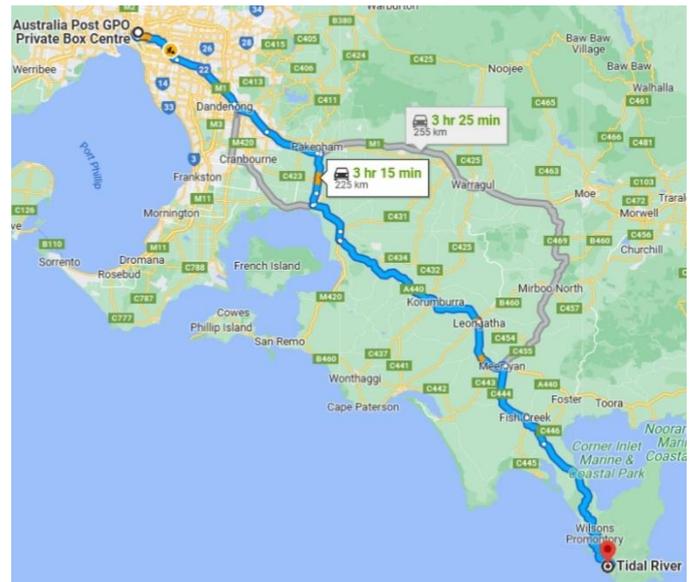


Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The G80 is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers³ as well as via CCS2 DC fast-chargers.



CCS2 charging plug and socket

Notes:

- Genesis is a luxury brand name owned by the Hyundai Motor Company.
- <https://www.greenvehicleguide.gov.au>
- The G80 can be charged at any AC EVSE, however an adaptor will be needed to use the (very few) remaining older EVSEs fitted with Type 1 (J1772) plugs.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Like all new EVs sold in Australia, the G80 is fitted with a type 2 AC socket as part of the CCS2 AC/DC charge plug system.

Charging rates:

Single phase: maximum of 7.4 kW (32A)

Three phase: 11 kW (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 G80 are shown in table 2 below.

(a) 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)
42h	27h	13.5h	9h	1.75h	25m

Table 2: Approximate charging times for the Genesis G80

DC fast charging:

The G80 uses the CCS2 DC fast-charge connector and can charge at up to 233 kW.

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

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for the G80, 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 G80 also comes with a Mode 2 portable EVSE for use with a 10A power point. Charging a G80 with this EVSE will take around 42 hrs for a 0 – 100% charge.

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

Seating capacity: 5

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

- Seats up: 354 L
- Seats down: Seats do not fold down

'Froot' (under bonnet 'front boot'):

- No froot

Dimensions:

- Overall length: 5005 mm
- Overall width: 1925 mm (mirrors within body line)
- Overall height: 1470 mm

Battery:

- 87.2 kWh (Approximately 82.5 useable)

Charging:

- 1 phase AC: 7.4 kW max.
- 3 phase AC: 11 kW max.
- DC: 233 kW max.

Charge port location:

- Front of car, left of centre line.

Energy consumption: (WLTP):

- 191 kW/km

Kerb weight:

- 2325 kg

Drive configuration:

- All Wheel Drive

Towing:

- Not rated for towing.

Performance:

- Maximum power: 272 kW (combined)
- 0 – 100km/hr: 4.9 sec.

IMPORTANT NOTES:

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