

EV FACT SHEET

Mercedes EQS SUV

Created and written by:
Bryce Gaton
Contact:
Bryce@EVChoice.com.au



Mercedes EQS SUV. Image: Mercedes Benz

INTRODUCTION

The Mercedes EQS SUV is classified by VFACTS as an Ultra-Large SUV.

Built on Mercedes' dedicated EV-only EVA platform, the Mercedes EQS is offered in both sedan and SUV form. If interested in the sedan - see separate EQS sedan Fact Sheet.

The EQS SUV was first released for sale here late 2023 and in Australia, the EQS SUV range is currently restricted (as of December 2023) to one version only – the EQS 450 4MATIC.

As the Mercedes flagship nameplate, the EQS in both SUV and sedan forms offer a very high level of equipment and driving features not seen in cheaper models. Also, like all top-end vehicles, the EQS offers a glimpse into what the future holds as the technology introduced by these vehicles traditionally trickles down into mainstream cars over following years.

DRIVING RANGE

Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle. However few manufacturers now give this figure for their new releases. Instead they generally quote the more achievable ranges found using the newer European WLTP test cycle.

Therefore, to avoid disappointment always check which test cycle has been used when assessing an EV for your needs. As a rough guide, NEDC is generally 30% too high, WLTP a good estimate if doing mostly urban and outer suburban driving and US EPA the better guide if doing mostly outer suburban to regional driving.

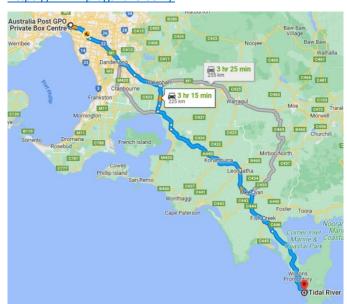
DRIVING RANGE (continued)

National testing system range estimates					
NEDC (Old Aust)	WLTP (Euro)	US EPA			
592	511	456			

Table 1: Driving range estimates for the Mercedes EQS SUV.

Using the US EPA rating a Mercedes EQS SUV would, at its limit, make a round-trip from the Melbourne CBD to Tidal River in Victoria's south-east – provided the heating or air conditioning were not heavily used. For this sort of trip, a short DC top-up charge at one of the now many DC charger sites along the way – including Leongatha, Fish Creek and Yanakie would be recommended.

For further charging options and availability, see: https://www.plugshare.com/



Example Mercedes EQS round trip range. Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The Mercedes EQS is fitted with the CCS2 socket allowing it to charge via Type 2 AC chargers² as well as CCS2 DC fast-chargers.



CCS2 charging plug and socket

Notes:

The Mercedes EQS 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 Mercedes EQE sedan is fitted with a type 2 AC socket.

Charging rates:

Single phase: maximum of 7.2 kW (32A)

Three phase: maximum of 11 kW (32A per phase)

Charging speeds vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) the car is connected to. Approximate AC charging times for the EQS SUV are shown in table 2.

AC: 0 – 100% time				DC: 0 – 80% time	
10 A (power point)	15 A 1 phase (Caravan outlet)	32 A (1 ph. Home EVSE)	16 or 32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (200+kW)
54h	30h	15h	16A: 10h 32A: 10h	1h 50m	32m

Table 2: Approx. charging times for the Mercedes EQS SUV

DC fast charging

The Mercedes EQS SUV uses the CCS2 DC fast-charge connector and can charge at up to 200 kW DC.

V2X capability:

The Mercedes EQS does not currently offer any V2X functionality.

Notes:

V2X is the generic term covering the options of getting 230V AC power from the battery and supplying it as:

- V2L: vehicle to load (230V power available from outlet in car)
- V2H: vehicle to home (supply home via special connection)
- V2G: vehicle to grid (supply home or grid via spec. connection)

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for the EQS SUV, an 11 kW three phase AC charger would be needed.

However, depending on your existing power supply and/or charging needs, it may only be practicable to fit a lower rated EVSE. (See notes below). Lower capacity EVSEs will increase charging times, as shown in table 2.

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.
- 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 Fact Sheets at EVchoice.com.au or read articles in:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Seating: 5 (7 optional)

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

Boot under parcel shelf: 645Rear seat folded: 2,100

Dimensions:

Overall length: 5.127 mm
Overall height: 1,722 mm
Ground clearance: 192 mm

Overall width (edge of doors): 2,034 mmOverall width (edge of mirrors): 2,157 mm

Battery:

• 120 kWh (107.8 kWh usable)

Energy consumption: (WLTP)

• 21.2 kWh/100 km

Kerb weight:

• 2,918 kg

Charging:

1 phase AC: 7.2 kW max.

• 3 phase AC: 11 kW max.

• DC: 200 kW max.

Charge port location:

• Right-hand rear corner (in front of tail-light)

Drive configuration:

All-wheel drive

Towing:

Not rated in Australia for towing

Performance:

Maximum power: 265 kW0 to 100 km/h: 6.0 sec

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, manufacturers regularly make changes (often unannounced) to their model ranges and specifications.

Dec. 2023 ©B. Gaton EV fact sheet Mercedes EQS SUV V10-1