

EV FACT SHEET

Polestar 3

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Polestar 3. Image: Polestar media

INTRODUCTION

For those who haven't heard of Polestar before — Polestar used to be a performance modifier of Volvo cars, subsequently bought out by Volvo in 2015. Relaunched as an all-electric vehicle manufacturer, Polestar's headquarters are in Sweden and vehicle production occurs in parent company Geely's factories in China.

The Polestar 3 is classified by VFACTS as a 'Large SUV' and is built on Geely's BEV-only SEA (Sustainable Experience Architecture) platform. That platform by the way is shared with many of parent company Geely's models – including the Polestar 4 and 5, Volvo EX30, Smart #1, Smart #3, Zeekr X, Zeekr 007 as well as Lotus's Eletre and Emira.

Whilst Polestar do not sell through a traditional dealer network (instead, selling at a fixed price through the Polestar website), potential buyers can go to a Polestar 'experience centre' to view vehicles and take test drives.

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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)

Testing system range estimates					
	NEDC	NEDC WLTP			
Variant	(Aust)	(Euro)	(USA)		
Long-range 2WD	Not rated	706 km	NA^1		
Long-range AWD	Not rated	632 km	506 km		
LR AWD & Perf. pk	Not rated	560 km	450 km		

Table 1: Driving range estimates for the 2025 Polestar 3

Using the WLTP range (with a roughly 10% discount for extended highway driving) a 2WD long-range Polestar 3 should be capable of a return trip from the Melbourne GPO to Horsham in western Victoria, provided neither the heating nor air conditioning were heavily used. For this sort of trip, it could be useful to do either a $\frac{1}{2}$ - 1 hour top-up charge at an 11kW AC charger or a 10 to 15 min DC fast-charge at one of the AC or DC fast-charge sites along this route.

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



Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port:

The Polestar 3 is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers² as well as CCS2 DC fast-chargers.



CCS2 charging plug and socket

Notes:

- 1. Variant not sold in the US
- The Polestar 3 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 Polestar 3 is fitted with a type 2 AC socket.

Charging rates:

Single phase: maximum of 7.4 kW (32A) **Three phase:** 11 kW (16A 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 Polestar 3 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 (250+kW)
55h	34h	17h	11kW: 11h	1h 48m	35m

Table 2: Approx. charging times for the 2024 Polestar 3

DC fast charging

Like all new BEVs on the Australian market (except the ageing Nissan Leaf), the Polestar 3 uses the CCS2 DC fast-charge connector and can charge at up to 250 kW DC.

V2X capability:

The Polestar 3 does not (yet) include 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 Polestar 3, an 11kW 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 <u>EVchoice.com.au</u> or read articles in:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Seating: 5

Boot volumes in litres: (1 litre = $10 \times 10 \times 10 \text{ cm}$)

Boot - seats up: 484 L*

Boot - seat folded/to roof: 1,411 L*
 * Plus 90 L under rear floor space

• Froot: 32 L (front boot: under-bonnet storage)

Dimensions:

Overall length: 4,900 mm

Overall height: 2WD = 1618 mm; AWD = 1614 mm

Ground clearance: 2WD = 205mm; AWD = 202mm

Overall width (edge of doors): 1,968 mm
 Overall width (edge of mirrors): 2,120 mm

Battery:

• 111 kWh

Energy consumption: (WLTP test cycle)

• 17.6-20.3 kWh/100km (LR, 2WD)

19.7-21.8 kWh/100km (LR, AWD)

• 22.2-23.0 kW/100km (LR, AWD, Perf. pack)

Kerb weight:

2623 kg (LR, AWD)

Charging:

• 1 phase AC: 7.4 kW max.

3 phase AC: 11 kW max.

• DC: 250 kW.

Charge port location:

• Rear left side (above rear wheel).

Drive configuration:

Rear wheel drive (2WD)

All-wheel drive (AWD)

Towing:

2WD: 1500 kg braked/750 kg unbraked.

• AWD: 2200 kg braked/750 kg unbraked.

Performance:

Variant	Max. Power (kW)	0 to 100km/h (Sec)
Long range 2WD	220	7.8
Long-range AWD	360	5.0
LR AWD & Perf. pack	380	4.7

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.

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