

EV FACT SHEET

Polestar 2

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2024 update Polestar 2. 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 are headquartered in Sweden with vehicle production done in parent company Geely's factories in China.

The Polestar 2 is classified by VFACTS as a 'medium passenger vehicle' and provides a more car like driving position than the now almost ubiquitous SUV. 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' (plus many Volvo dealers) to view and take test drives.

Updates:

September 2025 (for 2026 Model Year)

- Standard range battery increased to 70 kWh and sourced from CATL (previously LG Chem) with associated minor increase in range.
- Standard range charge rate increased from 135kW to 180kW.
- Additional optional features.

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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	WLTP	EPA		
Variant	(Aust)	(Euro)	(USA)		
Std range 2WD	Not rated	546 km	NA^1		
Std range (MY26)	Not rated	554 km	NA ¹		
Long-range 2WD	Not rated	655 km	515 km		
Long-range AWD	Not rated	593 km	444 km		
Performance AWD	Not rated	568 km	398 km		

Table 1: Driving range estimates for the 2024 Polestar 2

Using the US EPA range, a Polestar 2, (2WD long-range) should be capable of a return trip from the Melbourne GPO to Warnambool provided neither the heating nor air conditioning were heavily used. For this sort of trip, it could be useful to do either a ½ - 1 hour top-up charge at an AC charger or a 10 to 15 min DC fast-charge at one of the 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 2 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. Sta

- Standard Range battery not available in the USA
- The Polestar 2 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. Note: will only charge at 7kW on a J1772 charger.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Like all new EVs sold in Australia, the Polestar 2 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 2 are shown in table 2.

AC: 0 – 100% time DC: 0 – 80% time 15 A 32 A 16 or 32 A DC Fast DC Fast 10 A 1 phase (1 ph. (3 phase public charge charge (power point) (Caravan Home AC EVSE) (50kW) (200+kW) outlet) EVSE) 69 kWh: 34.5h 20h 10h 7h 70m 40m 70 kWh: 35h 20h 10h 7h 70m 31m 82 kWh: 41h 23h 12h 8h 80m 32m

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

DC fast charging

The Polestar 2 uses the CCS2 DC fast-charge connector and can charge at up to 135 kW DC with the original standard range (69 kWh) battery, 180 for the Model year 2026 70 kWh battery and 205 kW for the long range (82 kWh) battery.

V2X capability:

The Polestar 2 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 2, 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 x 10 x 10 cm)

- Boot seats up: 405 L*
- Boot seat folded/to roof: 1,095 L*
 * including 41 L under rear floor
- Froot: 31L (front boot: under-bonnet storage)

Dimensions:

- Overall length: 4,606 mm
- Overall height: 1,479 mm
- Ground clearance: 151 mm
- Overall width (edge of doors): 1,859 mm
- Overall width (edge of mirrors): 1,985 mm

Battery:

	Battery kWh	
Variant	actual (usable)	
Standard range	69 (67)	
Std range- 2025 (MY26) update	70 <mark>(ТВС)</mark>	
Long-range: 2021-23	78 (75)	
Long range: 2024 update	82 (79)	

Energy consumption: (WLTP test cycle)

• 15.8 kWh/100km (LR, single motor)

Kerb weight:

Variant	Kerb weight (kg)	
Standard range 2WD	2,019	
Long-range 2WD	2,084	
Long-range AWD	2,185	

Charging:

- 1 phase AC: 7.4 kW max.
- 3 phase AC: 11 kW max.
- DC: 205 kW (long range),
- 135 kW (pre Model Year 2026 std range) max.
- 180 kW (MY 2026 70kWh standard range) max.

Charge port location:

• Rear left side

Drive configuration:

- Two wheel drive models:
 - Front wheel drive: original release
 - Rear-wheel drive: 2024 update model
- All-wheel drive (AWD)

• Towing:

• 1500 kg braked/750 kg unbraked.

Performance:

Variant	Max. Power (kW)	0 to 100km/h (Sec)
Standard range 2WD	220 (170)#	6.2 (7.4) #
Long-range 2WD	220 (170) #	6.2 (7.4) #
Long-range AWD	310 (300) #	5.5 (4.7) #
LR AWD performance	350 (350)#	4.1 (4.2)#

[#] Bracketed number: previous 2021-23 version

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.