

EV FACT SHEET Kia EV9

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Kia EV9 Image: Kiamedia

INTRODUCTION

Built on the shared Hyundai/Genesis/Kia E-GMP EV-only platform, the EV9 is Kia's entry into the 7 seater, ultralarge SUV segment. Manufactured in South Korea, it features a very high level of 'goodies' for its \$100k plus price tag. These by the way include Remote Smart Parking Assist (GT-Line only), over-the-air updates and 400/800V architecture for faster charging. In AWD form it also has a class-leading tow rating of up to 2,500 kg.

As of the start of 2024, the only electric 7-seat rivals to the EV9 are the LDV Mifa9, plus the Mercedes EQV and E-Vito Tourer duo. All three however are van based rather than SUVs. In other words, if you want an electric 7 seater SUV - the EV9 is (for the moment) your sole choice.

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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: | | | | | | |
|--|-------------|-------------|--------|--|--|--|
| Version | NEDC (Aust) | WLTP (Euro) | US EPA | | | |
| Air: 76.1 kWh | Not rated | 443 | 370 | | | |
| Earth: 99.8 kWh | Not rated | 512 | 448 | | | |
| GT-Line: 99.8 kWh | Not rated | 505 | 432 | | | |

Table 1: Driving range estimates for the Kia EV9.

Using the US EPA rating a Kia EV9 in 'Earth' trim would, at its limit, make a round-trip from the Melbourne CBD to Port Campbell on Victoria's south coast – provided the heating or air conditioning were not heavily used. For this sort of trip, a short DC top-up charge in Colac at the Tesla Supercharger site (now open to all EVs) or at one of the increasing number of DC charger sites between Geelong and Melbourne would be recommended. (For further charging options and availability, see: https://www.plugsbare.com/)

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Example Kia EV9 return trip range. Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The Kia EV9 is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers¹ as well as CCS2 DC fast-chargers.



CCS2 charging plug and socket

Notes:

 The Kia EV9 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 Kia EV9 is fitted with a type 2 AC socket.

Charging rates:

Single phase: maximum of 7 kW (32A) Three phase: maximum of 10.5 kW (16A/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 Kia EV9 are shown in table 2.

| | 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 (350kW) |
| 76.1 kWh: 35h | 24h | 12h | 8h | 70m | 22.5m |
| 99.8 kWh: 44h | 31h | 15.5h | 10.25h | 95m | 27m |

Table 2: Approx. charging times for the two battery sizes

DC fast charging

The Kia EV9 uses the CCS2 DC fast-charge connector and can charge at up to 230 kW DC with the 76.1 kWh battery and 210 kW DC for the 99.8 kWh battery.

V2X capability:

Kia EV9 offers V2L up to 3.6 kW (15A) through a plug-in adaptor for the AC charge socket and internally via a 3 pin socket.

Notes:

Overseas versions of the EV9 include 11 kW V2H/G functionality, but Kia do not currently advertise this as included in the EV9 here. 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 Kia EV9, an 11kW 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: 7

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

- All 7 up: 333
- Rear row folded/5 seats up: 828
- All rear seats folded: 2,318
- Froot (Front Boot): 2WD: 90; AWD: 52

Dimensions:

- Overall length: 5,010 mm
- Overall height: 1,750 mm (GT Line: 1,780 mm)
- Ground clearance: 177 mm
- Overall width (edge of doors): 1,980 mm
- Overall width (edge of mirrors): 2,263 mm

Battery:

- Air: 76.1 kWh (usable: not specified)
- Earth, GT-Line: 99.8 kWh (96 usable)

Energy consumption: (WLTP)

- 19.5 kWh/100 km (Air)
- 22.3 kWh/100 km (Earth)
- 22.8 kWh/100km (GT-Line)

Kerb weight:

- 2,312 kg (SR, 2WD)
- 2,552 kg (LR, AWD)
- 2,636 kg (GT-Line)

Charging:

- 1 phase AC: 7 kW maximum
- 3 phase AC: 10.5 kW maximum
- DC: 230/210 kW max (76 kWh/99 kWh).

Charge port location:

• Driver's side rear.

Drive configuration:

- Air: Rear-wheel drive
- Earth and GT-Line: AWD

Towing:

- SR, 2WD: 450 kg unbraked/900 kg braked
- LR, AWD: 750 kg unbraked/2,500 kg braked

Performance:

| | Max. Power | 0 to 100km/h |
|--------------|------------|--------------|
| Variant: | (kW) | (Sec) |
| Air: RWD | 160 | 8.2 |
| Earth: AWD | 282.6 | 6.0 |
| GT-Line: AWD | 282.6 | 5.3 |

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.