



EV FACT SHEET

Kia EV5

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Kia EV5. Image: Kia Australia

INTRODUCTION

The Kia EV5 is Kia's first EV to be built in China. It is also their first EV to be built on the N3-ek electric-only platform. Classed in Australia as a medium SUV, it has initially been released here in three variants:

- Air: two-wheel drive (2WD), 64 or 82 kWh battery.
- Earth: all-wheel drive (AWD), 82 kWh battery.
- GT-Line: all-wheel drive, 82 kWh battery.

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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

Variant	Testing system range estimates		
	NEDC (Aust)	WLTP (Euro)	EPA (USA)
Air 64 kWh (2WD)	490 km	400 km	NA ¹
Air 88 kWh (2WD)	665 km	555 km	NA ¹
Earth 88 kWh (AWD)	620 km	500 km	NA ¹
GT-Line (AWD)	Not rated	470 km	NA ¹

Table 1: Driving range estimates for the Kia EV5 variants

DRIVING RANGE (continued)

Using the WLTP range (with a roughly 10% discount for extended highway driving) a Kia EV5 Air with the 82kWh battery should be capable of a return trip from the Melbourne GPO to Golden Beach. (Golden Beach is on 90 Mile Beach next to the Gippsland Lakes in Victoria's east). This is assuming neither the heating nor air conditioning are heavily used.

If done as a day-trip, it would be useful to do either a ½ - 1 hour top-up charge at an AC charger or 5 to 10 min at a DCFC (DC fast-charger) at one of the expanding number of AC and DCFC sites along this route. For further charging options and availability, see:

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



Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port:

The Kia EV5 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. The Kia EV5 is currently not sold in the USA.
2. The EV5 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 Kia EV5 is fitted with a type 2 AC socket.

Charging rates:

Single phase: maximum of 6.6 kW (28A)

Three phase: 11 kW (16A per phase)

Note: three phase only available with 88 kWh battery.

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 EV5 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 (150+kW)
64 kWh: 31.5h	21h	9.75h	11kW: 9.75h 22kW: 9.75h	63m	40m
88 kWh: 40.5h	27h	13.5h	11kW: 9h 22kW: 9h	80m	42m

Table 2: Approx. charging times for the Kia EV5

DC fast charging

Like all new BEVs on the Australian market (except the ageing Nissan Leaf), the Kia EV5 uses the CCS2 DC fast-charge connector and can charge at up to 140 kW DC.

V2X capability:

The EV5 includes an interior 2400W V2L outlet in the boot (all versions) and V2L from the charge port (Earth and GT line only).

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 an EV5, either a 7kW (single phase) or 11kW (3 phase) AC charger would be needed (depending on version). 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.
3. 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

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

- Boot - seats up: 513 L
- Boot - seat folded/to roof: 1,714 L
- Froot (front boot) – 67 L

Dimensions:

- Overall length: 4,615 mm
- Overall height: 1,715 mm
- Ground clearance:
 - SR 2WD: 175 mm
 - LR 2WD: 161 mm
 - AWD: 166 mm
- Overall width (edge of doors): 1,875 mm
- Overall width (edge of mirrors): Not supplied

Battery:

- 64.2 kWh
- 88.1 kWh

Energy consumption: (WLTP test cycle)

- SR 2WD: 18.2 kWh/100km
- LR 2WD: 18 kWh/100km
- AWD: 20.1 kWh/100km
- GT-Line AWD: 21 kWh/100km

Kerb weight:

- 1,910 – 2,229 kg (depending on variant)

Charging:

- 1 phase AC: 6.6 kW max.
- 3 phase AC: 11 kW max. (88 kWh battery only)
- DC: 140 kW.

Charge port location:

- Driver's side, front (just in front of driver's door)

Drive configuration:

- 2WD: front or AWD

Towing:

- 64 kWh: 300kg/300kg (unbraked/braked)
- 88 kWh: 750kg/1,250kg (unbraked/braked)

Performance:

Variant	Max. Power (kW)	0 to 100km/h (Sec)
Air (2WD, 64 kWh)	160	8.5
Air (2WD, 88 kWh)	160	8.9
Earth (AWD)	230	6.1
GT-Line (AWD)	230	6.3

Spare tyre: No

IMPORTANT NOTE

Always check all specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gatton (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.