



EV FACT SHEET

Skywell EC11

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



Skywell EC11 van. Image: EV Automotive

INTRODUCTION

The EC11 battery electric van is built in China under the Skywell brand and brought to Australia by private importer EV Automotive. Purchasing is done through the importer's website (<https://ev-a.com.au/>). Note: this sales model is becoming increasingly common for EVs on the Australian market – including the Hyundai Ioniq 5 and all Polestar, BYD and Tesla models.

Similar in appearance and dimensions to a high-roof Mercedes Sprinter – the EC11 is the first significantly sized Light Commercial Van to be brought to the Australian market. Two variants are offered here: the 1.7t cargo van called the *e-cargo* (pictured) and the *e-crew* with side/rear windows and seating for 12.

Warranty and service work is provided by the national MyCar service and repair network.

DRIVING RANGE

Australian test standards are currently in a state of flux, with the Green Vehicle Guide¹ showing some vehicle driving ranges using either an equivalent to the old (and highly over optimistic) European NEDC test cycle figure or the newer European WLTP test cycle figure. Worse still, for some recent additions to the Australian market the GVG gives no data is given at all! Around town, the WLTP figure is the best guide to range or, if doing outer suburban to regional driving – use the US EPA figure.

However, the EC11 to date has only been rated under the NEDC standard. As a consequence, it would be best to assume the usual discount applies and deduct 30% off NEDC to give an approximate 'real world' range estimate.

Testing system range estimates:		
NEDC (Aust)	WLTP (Euro)	EPA (USA)
288	Not yet rated	Not yet rated

Table 1: Driving range estimates for the EC11 cargo.

DRIVING RANGE (CONTINUED)

The distributor suggests the range rating is for a 50% loaded van (850 kg) – therefore discounting the NEDC range by 30% gives an approximate 'real-world' semi-loaded range figure of 202 km. This suggests the EC11 should be capable of a return trip from the Melbourne GPO to Rye on Melbourne's Mornington Peninsula, 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 22kW AC charge in Mornington, or a short DC top-up at the DC chargers in the Chelsea foreshore carpark. (For more charging options, see Plugshare.com).

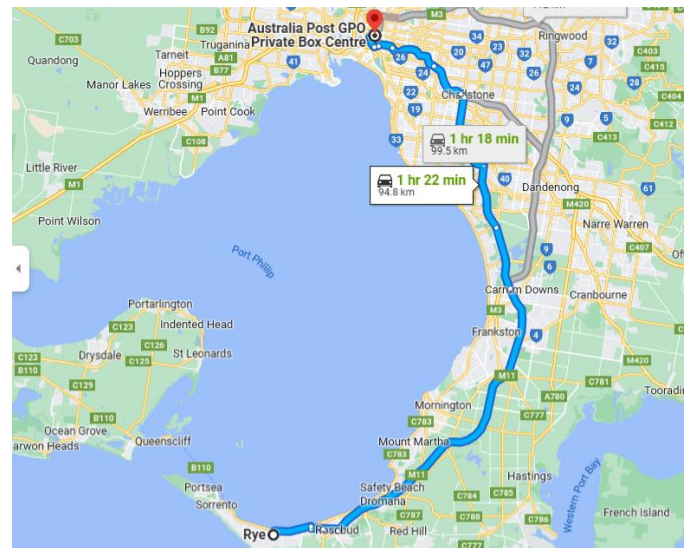


Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port:

The EC11 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:

- <https://www.greenvehicleguide.gov.au>
- The EC11 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 EC11 2 is fitted with a type 2 AC socket. (As part of the CCS2 AC/DC charge plug system).

AC Charging rates:

Single phase: maximum of 7.4 kW (32A)

Three phase: maximum of 22 kW (32A per phase)

DC fast charging:

The EC11 uses the CCS2 DC fast-charge connector and can charge at up to 60kW DC.

This connector is fast becoming the majority DC fast-charge connector type in both Australia and overseas.

Charging times:

Charging speeds and times vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) it is connected to. Charging times for the EC11 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 phase Home EVSE)	16 or 32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (100+kW)
33h	22h	11h	16A: 8h 32A: 4h	2h	1.5h

Table 2: Approximate charging times for the Skywell EC11

HOME AND BUSINESS CHARGING CONSIDERATIONS

General:

To get the shortest charging time for the EC11, a 22 kW three phase AC EVSE would be needed. In commercial applications, for quick turn-around times it is suggested that 22kW charging be provided at business premises. However, depending on your existing power supply and/or charging needs, a lower rated EVSE may only be practicable, or needed. (See notes below). Lower capacity EVSEs will increase charging times, as shown in table 2. The EC11 also comes with a Mode 2 portable EVSE for plugging into a 15A power point. (Switchable down to 8A). Charging an EC11 from 0 – 100% with this EVSE set to the standard power point rate (10A/2.4kW) will take around 33 hours.

Important notes for any 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 or business building is more than 20 years old. (For more information see EV Information articles at EVchoice.com.au or:
(a) Renew magazine edition 143. (EVSE wiring)
(b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Exterior:

- Overall length: 6,030 mm
- Overall width with/without door mirrors: 2,090/2,410 mm
- Unladen height: 2,715 mm

Interior:

- 2 or 3 seats in front (e-cargo version)
- 12 seats total in e-crew version
- Cargo bay height (max): 1,950 mm
- Rear door opening: 1,550 x 1,840
- Width between wheel arches: 1,340 mm
- Internal cargo height: 1,970 mm
- Loading length: 3.370 mm
- Load volume: 12.3 m³

Weights:

- Payload: 1,700 kg
- Kerb weight – empty, without options: 2,790 kg
- Gross vehicle weight: 4,490 kg

Battery: 73.6 kWh

Energy consumption:

- Data not available.

Charging:

- 1 phase AC: 7.4 kW max.
- 3 phase AC: 22 kW max.
- DC: 60 kW max.

Charge port location:

- Left side behind front passenger door

Drive configuration:

- Single motor, rear wheel drive.

Towing:

- 1250 kg braked/450 kg unbraked.

Performance:

- Rated power: 60kW, peak: 100kW
- 0 – 100 km/h: 10 sec (unladen)

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.