



EV FACT SHEET

Mini Aceman

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2024 Mini Aceman. Image: Mini

INTRODUCTION

The Mini Aceman is classified here as a ‘Light Passenger Car’, although in appearance it looks to be more ‘crossover’ than passenger sedan or hatch. The Aceman is also Mini’s only exclusively electric model (unlike their Mini Cooper and Countryman). Built in China, it is offered here in two versions:

- Aceman E: 2WD (front wheels driven), 135 kW motor and 42.5 kWh battery/up to 310 km (WLTP).
- Aceman SE: 2WD (front wheels driven), 160 kW motor and 54.2 kWh battery/up to 406 km (WLTP).

Like all new Minis, the main driver interface and display is a central 24cm circular touchscreen with a few buttons for some basic functions plus a head-up display (HUD). As such, it is competing for buyers interested in the minimalist aesthetic initiated by Tesla, but now also inhabited by models such as the Volvo EX30 and Leapmotor C10. (Unlike Tesla though, the Aceman, EX30 and C10 do still maintain steering column stalks for the indicators and windscreen wipers).

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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

Version	National testing system range estimates:		
	ADR 81/02 (Aust)	WLTP (Euro)	US EPA
Aceman E	Not rated	310 km	NA ¹
Aceman SE	Not rated	406 km	NA ¹

Table 1: Driving range estimates for the Mini Aceman versions

Using the WLTP range (with a roughly 10% discount for extended highway driving) a Mini Aceman SE should be capable of a return trip from the Melbourne GPO to Maryborough in the central west of Victoria. (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/>

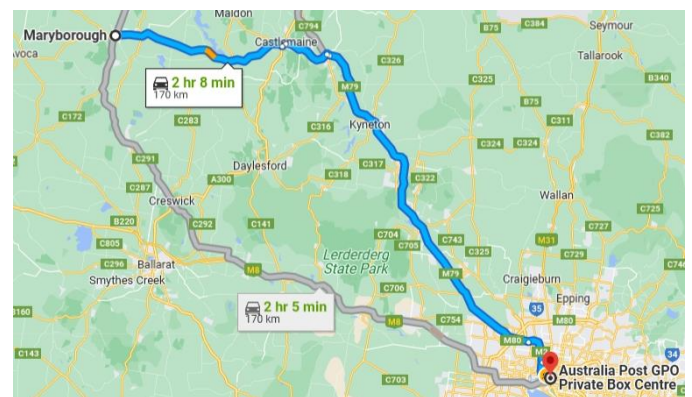


Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port:

The Mini Aceman 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. Mini do not sell the Aceman in the USA.
2. The Aceman 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. It will also only charge at a maximum of 7.4 kW on a Type 1 plug EVSE.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Like all new EVs sold in Australia, the Aceman 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 Mini Aceman 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 (100+kW)
42.5 kWh: 19h	12.5h	6.25h	16A: 4.25h 32A: 4.25h	45m	28m
54.2 kWh: 24.5h	16.5h	8.25h	16A: 5.5h 32A: 5.5h	52m	31m

Table 2: Approx. charging times for the Mini Aceman battery sizes

DC fast charging

Like all new BEVs on the Australian market (except the ageing Nissan Leaf and Lexus UX300e), the Mini Aceman uses the CCS2 DC fast-charge connector and can charge at up to 75 kW for the E and 95 kW for the SE.

V2X capability:

The Mini Aceman does not offer any 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 a Mini Aceman, an 11 kW (3 phase) 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.
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: 300 L
- Boot - seat folded/to roof: 1,005 L
- Froot (front boot): NA

Dimensions:

- Overall length: 4,079 mm
- Overall height: 1,514 mm
- Ground clearance: 143 mm
- Overall width (edge of doors): 1,754 mm
- Overall width (edge of mirrors): 1,991 mm

Battery:

- Aceman E: 42.5 kWh (38.5 useable)
- Aceman SE: 54.2 kWh (49.2 useable)

Energy consumption: (WLTP test cycle)

- Aceman E: 14.1 kWh/100km
- Aceman SE: 13.9 kWh/100km

Kerb weight:

- Aceman E: 1,645 kg
- Aceman SE: 1,710 kg

Charging:

- 1 phase AC: 7.4 kW max.
- 3 phase AC: 11 kW max.
- DC: 75 kW (Aceman E)
- DC: 95 kW (Aceman SE)

Charge port location:

- RHS, rear (just behind the rear driver's side door)

Drive configuration:

- 2WD, front wheels driven

Towing:

- 750/750 (unbraked/braked)

Performance:

Version	Max. Power (kW)	0 to 100km/h (Sec)
Aceman E	135	7.9
Aceman SE	160	7.1

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.