



EV FACT SHEET

Mini Cooper electric

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2024 Mini Cooper. Image: BMW group.

INTRODUCTION

Whilst the first trials of what was then called the Mini E happened in 2009 (when about 500 test cars built for a proposed full production run in 2013) – it took a while for Mini to finally arrive with their first full production version of an electric Mini.

First previewed in 2017, it was rolled out for worldwide sales through 2020, with Australian sales beginning in the second half of 2020. However, for 2020 only 100 were allocated to Australia – which were sold out before deliveries began!

Early 2024 Australian model update:

- Two versions now offered: E and SE with increased battery size and two battery sizes. (41 kWh for the E and 54kWh for the SE. These are up from the original 32 kWh).
- Higher DC fast-charge rates
- Updates to dash and voice command interface
- Minor exterior cosmetic tweaks

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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

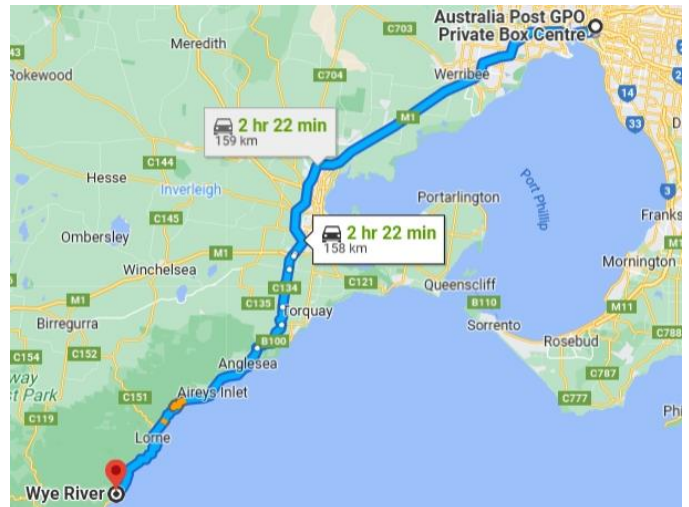
Therefore, to avoid disappointment always check which test cycle has been used when assessing an EV for your needs. As a rough guide, NEDC is generally 30% too high, WLTP a good estimate if doing mostly urban and outer suburban driving and US EPA the better guide if doing mostly outer suburban to regional driving.

DRIVING RANGE (continued)

Version	National testing system range estimates:		
	NEDC (Aust)	WLTP (Euro)	US EPA
32 kWh	270 km	233 km	176 km
41 kWh	Not rated	305 km	272 km ¹
54 kWh	Not rated	403 km	320 km ¹

Table 1: Driving range estimates for the Mini Cooper E and SE.

Using the US EPA a Mini Cooper SE fitted with the 54 kWh battery would, at its limit, make a round-trip from the Melbourne CBD to Wye River in Victoria's south-west – provided the heating or air conditioning were not heavily used. For this sort of trip, a short DC top-up would be recommended at one of an increasing number of DC fast-charger on the route. For further DC and AC charging options and availability, see: <https://www.plugshare.com/>



Approximate Mini Cooper SE Melbourne GPO return trip range
Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The Mini electric is fitted with a CCS2 socket allowing it to charge using standard AC wall sockets or fixed chargers² (EVSEs), as well as CCS2 DC fast-chargers.



Notes:

1. Estimated. At time of writing, has yet to be formally rated under the US EPA test cycle.
2. The Mini Cooper electric can be charged at any AC EVSE, however an adaptor will be needed to use the (extremely few) remaining older EVSEs fitted with Type 1 (J1772) plugs.

CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

AC charging:

Like all new EVs sold in Australia, the Mini Cooper Electric 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 Cooper Electric 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)
Old version 32 kWh: 14h	9h	4.5h	3h	36m	36m
41 kWh: 18h	11.4h	5.7h	3.75h	46m	30m
54 kWh: 24h	15h	7.5h	5h	1h	30m

Table 2: Approximate charging times for the three battery sizes

DC fast charging

The Mini Cooper electric uses the CCS2 DC fast-charge connector and can charge at up to 75 kW DC for the E, 95 kW for the SE and 50kW for the 2020-23 32 kWh version.

V2X capability:

The Mini electric is not capable of V2L, V2H or V2G.

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 Mini Cooper electric, a three phase, 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.
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: 4

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

- Boot under parcel shelf: 211
- Rear seat folded: Not specified

Dimensions:

- Overall length: 3,850 mm
- Overall height: 1,432 mm
- Ground clearance: TBC
- Overall width (edge of doors): 1,727 mm
- Overall width (edge of mirrors): 1,928

Battery:

- First version (2020-23): 32.6 kWh (29 kWh usable)
- Cooper E: 40.7 kWh (37 kWh usable)
- Cooper SE: 54.2 kWh (49 kWh usable)

Energy consumption: (WLTP)

- 15 kWh/100 km (32 kWh battery)
- TBC kWh/100 km (41 kWh battery)
- TBC kWh/100 km (54 kWh battery)

Kerb weight:

- 1,615 kg (41 kWh)
- 1,680 kg (54 kWh)

Charging:

- 1 phase AC: 7.4 kW max
- 3 phase AC: 11 kW max
- DC (32 kWh): 50 kW max
- DC (41 kWh): 75 kW max
- DC (54 kWh): 95 kW max

Charge port location:

- Driver's side, rear.

Drive configuration:

- Front-wheel drive

Towing:

- Not rated for towing

Performance:

Variant:	Max. Power (kW)	0 to 100km/h (Sec)
Old version: 32 kWh	135	7.3
Cooper E 41 kWh	135	7.3
Cooper SE 54 kWh	160	6.7

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.