

EV FACT SHEET

BYD Atto 3

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BYD Atto 3. Image: BYD

INTRODUCTION

The Atto 3 is built in China by Chinese manufacturer BYD and imported to Australia by EV Direct. The Atto 3 can only be purchased online (like Polestar, Tesla and the Hyundai loniq 5). However, like Tesla and Polestar, BYD 'experience centres' for viewing and test-drives are either open or being built in most state/territory capitals (See <u>EV Direct</u> website for locations). Servicing and warranty work is done through BYD service centres as well as the independent mycar network.

The Atto 3 is a classified in Australia as a 'small SUV' and offers many of the features you would expect from the latest generation of EV technology built on a dedicated EVonly platform. These include better interior space, Vehicle to Load (V2L) functionality, a structural battery enabling better torsional rigidity and an improved battery chemistry which BYD claims to offer better fire resistance, higher DC charging rates past 80% and regular 100% charging.

DRIVING RANGE

Australian test standards are currently in a state of flux, with the Green Vehicle Guide¹ showing some vehicle driving ranges using either the old (and highly over optimistic) European NEDC test cycle figure or the newer European WLTP test cycle figure. Worse still, for recent additions to the Australian market the GVG often 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.

National testing system range estimates						
Model	NEDC (Aust)	WLTP (Euro)	US EPA			
Std. range	410	345	Not rated			
Long range	480	420	Not rated			

Table 1: Driving range estimates for the BYD Atto 3

DRIVING RANGE (continued)

Using the WLTP range – a typical Atto 3 with the 'Standard Range' battery should manage a return daytrip from the Melbourne GPO to Lorne on the Victorian south coast, provided the heater or air conditioner are not heavily used. Top-up charging options include a 1hr top-up AC charge over lunch in at the Lorne Visitor Centre using an AC charger, a 10 - 15 minute DC fast charge at the RACV resort in Torquay.

For further charging options and locations, visit: https://www.plugshare.com/



Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

Notes:

The Atto 3 electric is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers² as well as via CCS2 DC fast-chargers.



CCS2 charging plug and socket

1. https://www.greenvehicleguide.gov.au

 The Atto 3 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.

AC charging:

Like almost all new EVs sold in Australia, the Atto 3 is fitted with a type 2 AC socket as part of the CCS2 AC/DC charge plug system.

Charging rate:

Maximum of 7 kW (30A) single phase.

Charging speeds and times vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) it is connected to and the chosen battery size. Approximate charging times for the Atto 3 are shown in table 2 below.

AC: 0 – 100% time				DC: 0 – 80% time	
	10 A (power point)	15 A 1 phase (Caravan outlet)	32 A (1 phase Home EVSE)	DC Fast charge (50kW)	DC Fast charge (100+kW)
SR:	25h	14h	7h	50m	40m
LR:	30h	17h	9h	1h	42m

Table 2: Charging times for the Atto 3 Standard Range and Long Range

DC fast charging:

The Atto 3 has the CCS2 DC fast-charge connector and can charge at up to 70 kW for the Standard Range (SR) and 80 kW for the Long Range (LR).

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

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for an Atto 3, a 7 kW single phase AC EVSE would be needed. 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 above. The Atto 3 also comes with a Mode 2 portable EVSE for plugging into a 10A power point. Charging an Atto 3 Long Range with this EVSE will take around 30 hrs for a 0 - 100% charge.

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.
- Switchboard and/or electrical supply upgrades may be needed if your home or business is more than 20 years old. For more information on this item - read EV Information articles at EVchoice.com.au or see:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Seating capacity: 5

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

- Seats up: 440 L
- Seats down: 1340 L

Dimensions:

- Overall length: 4455 mm
- Overall width:
 - o mirrors in: Not available
 - o mirrors out: 1875 mm
- Overall height: 1615 mm

Battery:

- Standard Range (SR): 49.92 kWh (gross)
- Long Range (LR): 60.48 (gross)

Charging:

- 1 phase AC: 7kW.
- DC: 70kW (SR); 80kW (LR).

Charge port location:

• Right-hand side front (next to driver's door).

Energy consumption: (WLTP)

- 145 Wh/km (SR)
- 144 Wh/km (LR)

Kerb weight:

- 1680 kg (SR)
- 1750 kg (LR)

Drive configuration:

• Front wheel drive

Towing:

• 750 kg braked/750 kg unbraked.

Performance:

- Maximum power: 150 kW
- Maximum torque: 310 Nm
- 0 100km/hr: 7.3 sec

IMPORTANT NOTES:

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

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