EV FACT SHEET

LDV eDELIVER 9

Created and written by:
Bryce Gaton
Contact:
Bryce@EVchoice.com.au

LDV eDeliver 9. Image: LDV

INTRODUCTION

Rated at around 1.4 t load capacity and between 11 and 12.3 m^3 volume for the van models, the eDeliver 9 is the first foray into the electric light commercial vehicle (LCV) market by Chinese manufacturer LDV (along with the eT60 dual cab ute and Mifa 9 people mover). In van form it comes with a respectable 280 km range (WLTP), however the cab-chassis has a smaller battery and subsequently much lower range of 150 km when fitted with the traditionally un-aerodynamic box body.

The eDeliver 9 does come with a few limitations though. First-up is its maximum top speed of 90 km/h. The second is the initial (2022) sticker price of $100,000 plus on-road costs. (As a comparison, in New Zealand it was released at NZ$87,000 before ORCs). However, for businesses with use-cases that fit within its limitations (and having the wherewithal to justify the high price) it makes a welcome EV offering to what is still an EV starved segment here in Australia.

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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 quote this figure for their new releases. Instead they give 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 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. (Currently, only WLTP figures are available for the eDeliver 9).

DRIVING RANGE (continued)

National testing system range estimates in kilometres			
Model	NEDC (Aust)	WLTP (Euro)	US EPA
LWB mid roof	Not rated	280	Not sold in US
LWB high roof	Not rated	275	Not sold in US
Cab chassis	Not rated	150[1]	Not sold in US

Table 1: test cycle range estimates for eDeliver 9 variants

The eDeliver 9 is effectively a ‘last mile’ delivery vehicle for city/town and suburban use. With a 90 km/h top speed, it would not be viable for a use-case that included regular 100 or 110 km/h highway driving.

FLEET EV TRANSITION TIPS:

Key to increasing the efficient use of an electric LCV is recharging whilst loading and unloading at delivery points as well as during down-times at its home base. Installing the maximum AC charger size at the home base may be useful, as well as placing that charger adjacent to the loading area.

Note: Planning for a business EV transition where more than one LCV is used will include the need to review the business location’s power supply situation as well as an overall EV fleet use-case charging needs assessment.

Knowing, finding and using three phase outlets and DC fast-chargers is important for longer trips in shorter range EVs like the cab-chassis eDeliver 9. To navigate this new aspect of EV fleet management, fleet managers will need to provide information and training to drivers on higher power portable chargers (if supplied), DC charging and how to use the Apps from the major fast-charge providers. (These include Chargefox, Evie, BP Pulse and Ampol’s AmpCharge, as well as the open source Plugshare[2]).

CHARGING SPEEDS/REQUIREMENTS

Charging port

The eDeliver 9 is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers[3] as well as via CCS2 DC fast-chargers.

CCS2 charging plug and socket

Notes:

1. with large box-style body fitted.
2. https://www.plugshare.com/
3. The eDeliver 9 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 eDeliver 9 is fitted with a type 2 AC socket as part of the CCS2 AC/DC charge plug system.

Charging rates:

Single phase: maximum of 7.4 kW (32A)
Three phase: maximum of 11 kW (16A per 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 eDeliver 9 are shown in table 2 below.

	AC: 0 – 100% time				DC: 0 – 80% time	
Battery size:	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 80+kW
65kWh	33h	18h	9h	6.5h	1h	36m
88.5kWh	44h	24h	12h	8h	72m	45m

Table 2: Approximate charging times for the LDV eDeliver 9 variants

DC fast charging:

The eDeliver 9 uses the CCS2 DC fast-charge connector and can charge at up to 80 kW.

V2X capability:

Unlike the other two electric LCVs offered by LDV, the eDeliver 9 does not include any V2X capabilities.

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 a 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 eDeliver 9, an 11kW three 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 eDeliver 9 also comes with a Mode 2 portable EVSE for use with a 10A power point. Charging an eDeliver 9 with this EVSE will take around 44 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.
3. 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: 3

Dimensions and weights:

Dimensions/weights/volumes	Mid roof	High roof	Cab chassis
Length* (mm)	5940	5940	6680
Width (mm)	2062	2062	2052
Height* (mm)	2545	2765	2315
Wheel base (mm)	3760	3760	4048
Turning circle (m)	14.8	14.8	15.8
Cargo area length (mm)	3413	3413	NA
Cargo area width (mm)	1800	1800	NA
Cargo area height (mm)	1802	2019	NA
Width at wheel arches (mm)	1366	1366	2094
Rear door opening width (mm)	1570	1570	NA
Rear door opening height (mm)	1656	1864	NA
Side door opening width (mm)	1269	1269	NA
Side door opening height (mm)	1570	1570	NA
Gross vehicle mass (kg)	4050	4050	4050
Payload (kg)	1410	1350	1960
Tare weight (kg)	2640	2700	2090
Cargo volume (m^3)	10.97	12.33	NA

***** excluding rear camera

Battery:

- Van: 88.55 kWh
- Cab-chassis: 65 kWh

Charging:

- 1 phase AC: 7.4 kW (maximum)
- 3 phase AC: 11 kW (maximum)
- DC: 80 kW (maximum)

Charge port location:

- Centre front (under LDV badge)

Vehicle to Load connection: (position and power)

- Not fitted

Energy consumption: (WLTP):

- Mid roof van: 33.9 kWh/100km
- Mid roof van: 34.5 kWh/100km
- Cab-chassis: not specified

Drive configuration:

- Front wheel drive

Towing:

	Mid-roof	High roof	Cab-chassis
Unbraked	1500 kg	1500 kg	1200 kg
Braked	750 kg	750 kg	750 kg

Performance:

- Maximum power: 150 kW
- Maximum speed: 90 km/h

IMPORTANT NOTES:

Always check for the latest vehicle specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gaton (EV Choice) 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.