

# EV FACT SHEET

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



# LDV eDeliver 7. Image: LDV INTRODUCTION

Rated at 1,175kg to 1,350kg payload and between 5.9 and 8.7 m<sup>3</sup>, the eDeliver 7 marks LDV's expansion into the electric light commercial vehicle (LCV) market by Chinese manufacturer LDV (along with the eDeliver 9 van, eT60 dual cab ute and Mifa 9 people mover). The eDeliver 7 comes with a very respectable WLTP driving range of up to 362 km range (LWB, 88 kWh battery).

The eDeliver 9 will also do up to 120km/hr in Normal and Power modes, meaning it is suitable for short highway runs as well as local delivery work.

Pricing is also much sharper than previous electric light commercial vehicle launches (e-LCVs). At launch (Jan 2024) the SWB, low roof version with 78 kWh battery starts at \$59,990 for ABN holders (before the dreaded ORCs – On Road Costs – are added).

# **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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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 7).

# **DRIVING RANGE (continued)**

National testing system range estimates in kilometres							
	NEDC	WLTP					
Model	(Aust)	(Euro)	US EPA				
SWB low roof: 77kWh	TBC	318	NA <sup>1</sup>				
LWB low roof: 77kWh	TBC	310	NA <sup>1</sup>				
LWB low roof: 88kWh	TBC	362	$NA^1$				
LWB high roof: 88kWh	TBC	328	NA <sup>1</sup>				

Table 1: test cycle range estimates for eDeliver 7 variants.

# 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<sup>2</sup>).

# **CHARGING SPEEDS/REQUIREMENTS**

# **Charging port**

The eDeliver 7 is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers<sup>3</sup> as well as via CCS2 DC fast-chargers.



CCS2 charging plug and socket

#### Notes:

- 1. LDV do not sell in the US.
- 2. <u>https://www.plugshare.com/</u>

<sup>3.</sup> The eDeliver 7 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 7 is fitted with a type 2 AC socket as part of the CCS2 AC/DC charge plug system.

## Charging rates:

Single phase: maximum of 6.6 kW (30A) **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 7 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 100+kW
77 kWh	38h	25h	12.6h	8.4h	1.5h	57m
88 kWh	44h	29h	15h	9.7h	1.7h	57m

Table 2: Approximate charging times for the LDV eDeliver 7 battery sizes

# **DC fast charging:**

The eDeliver 7 uses the CCS2 DC fast-charge connector and can charge at up to 78 kW for the 77kWh battery and 90kW for the 88 kWh battery.

# V2X capability:

The eDeliver 7 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 7, 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.

Charging the eDeliver 7 with a Mode 2 portable EVSE using a 10A power point will take around 38 or 44 hrs for a 0 -100% charge, depending on battery size.

#### Important notes for any EVSE installation:

- 1. High charging rates are generally not needed for overnight charging.
- Homes do not normally have three phase AC connected, 2. although many businesses do.
- Switchboard and/or electrical supply upgrades may be needed 3. 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	SWB low	LWB low	LWB high
	roof	roof	roof
	77kWh	77kWh	88kWh
Length (mm)	4998	5364	5364
Width (mm) – mirrors in	2118	2118	2118
Width (mm) – mirrors out	2323	2323	2323
Height (mm)	1990	1990	2390
Wheel base (mm)	3000	3366	3366
Turning circle (m)	12.1	13.4	13.4
Cargo area length (mm)	2547	2913	2913
Cargo area width (mm)	1800	800	800
Cargo area height (mm)	1320	1320	1693
Width at wheel arches (mm)	1390	1390	1390
Rear door opening width (mm)	1425	1425	1425
Rear door opening height (mm)	1242	1242	1494
Side door opening width (mm)	990	990	990
Side door opening height (mm)	1200	1200	1200
Gross vehicle mass (kg)	3650	3650	3650
Payload (kg)	1350	1285	1175
Tare weight (kg)	2300	2365	2475
Cargo volume (m <sup>3</sup> )	5.9	6.7	8.7

#### **Battery:**

- 77kWh: SWB. low roof
- 77 kWh or 88 kWh: LWB low roof versions
- 88 kWh: LWB, high roof

### Charging:

- 1 phase AC: 6.6 kW (maximum) •
- 3 phase AC: 11 kW (maximum)
- DC: 77 kWh battery 78 kW (maximum)
- DC: 88 kWh battery 90 kW (maximum)

#### Charge port location:

LHS – at rear of passenger door

Vehicle to Load connection: (position and power)

- Not fitted
- Energy consumption: (WLTP):
  - not specified

#### **Drive configuration:**

• Front wheel drive

## Towing:

750 kg un braked/1500 kg braked. •

#### Performance:

- Maximum power: 150 kW ٠
- Maximum speed:
  - 120 km/h (Normal, Power modes)
  - 90 km/h (Eco mode) 0

#### **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.

This Fact Sheet is prepared by EV Choice and provided free to AEVA for non-commercial use. Other Fact Sheets at: aeva.au/fact-sheets January 2024 ©B. Gaton EV fact sheet LDV eDeliver7 V10-2 com