



# EV FACT SHEET

## Foton T5 cab chassis

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Foton T5 cab-chassis. Image: Foton Mobility

### INTRODUCTION

Founded in 1996, Foton is headquartered in Beijing, China. Foton build mainly ICE trucks, tractors and busses, plus some passenger vans and utes. More recently they have expanded into building electric versions of their range.

Foton also have joint ventures in place with Cummins (for developing diesel engines) and Daimler (for technology).

In Australia, Foton has a slightly confusing history and currently their electric trucks are distributed through Foton Mobility, whilst the ICE range plus the full electric Tunland ute will soon relaunch under the umbrella of major Australian vehicle importer, Inchcape. (Inchcape also distribute Peugeot, Subaru and Deepal).

The Foton T5 available as a cab chassis with 4,500 kg (car licence) or 6,000 (light rigid licence) options. Being a cab-chassis, it is capable of being adapted to various uses such as tipper, enclosed van body, tray, etc.

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Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle.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

### DRIVING RANGE (continued)

No standardised test system estimate provided by Foton. Manufacturer provides an in-house testing 200km range estimate for the cab-chassis.

National testing system range estimates in kilometres		
NEDC (Aust)	WLTP (Euro)	US EPA
Not provided	Not provided	NA <sup>1</sup>

Table 1: test cycle range estimates for the Foton T5.

### FLEET EV TRANSITION TIPS:

Key to increasing the efficient use of an electric light commercial vehicle 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 a 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 where you intend to take a T5 on a single trip exceeding around 150 km. 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 Foton T5 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. Foton do not sell in the US.
2. <https://www.plugshare.com/>
3. The Foton T5 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 charge at a maximum of 7.4kW on a Type 1 plug EVSE.

## CHARGING SPEEDS/REQUIREMENTS (CONTINUED)

### AC charging:

Like all new EVs sold in Australia, Foton T5 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 Foton T5 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)	16 or 32 A (3 phase)	DC Fast charge 50kW	DC Fast charge 100+kW
36h	24h	12h	7.5h: 16A 7.5h: 32A	90m	50m

Table 2: Approximate charging times for the Foton T5

### DC fast charging:

The T5 uses the CCS2 DC fast-charge connector and can charge at up to 85 kW DC.

### V2X capability:

The Foton T5 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 -base charging time for the Foton T5, an 11 kW 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 T5 with a 2.3 kW Mode 2 portable EVSE from a 10A power point will take around 36 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, although many businesses do.
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](http://EVchoice.com.au) or see:
  - (a) Renew magazine edition 143. (EVSE wiring)
  - (b) Renew magazine edition 156. (EVSE buyer's guide)

## SPECIFICATIONS

**Seating capacity:** 2 or 3 (choice)

### Dimensions and weights: (cab-chassis)

Dimensions/weights/volumes	
Length (mm)	5960
Width (mm) – mirrors in	1950
Width (mm) – mirrors out	Not provided
Height (mm)	2260
Ground clearance (mm)	Not provided
Wheel base (mm)	3360
Turning circle (m)	13.5
Cargo area length (mm)	NA
Cargo area width (mm)	NA
Cargo area height (mm)	NA
Width at wheel arches (mm)	NA
Rear door opening width (mm)	NA
Rear door opening height (mm)	NA
Side door opening width (mm)	NA
Side door opening height (mm)	NA
Gross vehicle mass (kg)	4500/6000
Payload (kg)	NA
Tare weight (kg)	2400
Cargo volume (m <sup>3</sup> )	NA
Spare wheel?	Yes
Maximum rated speed (km/h)	95

**Battery:** 81.4 kWh

#### Charging:

- 1 phase AC: 7.4 kW (maximum)
- 3 phase AC: 11 kW (maximum)
- DC: 85 kW (maximum)

#### Charge port location:

- RH side, just under and to rear of driver's door

**Vehicle to Load connection: (position and power):** Not fitted

#### Energy consumption: (WLTP):

- Not provided

#### Drive configuration:

- rear wheel drive

#### Towing:

- 750 kg unbraked/3,500 kg braked.

#### Performance:

Motor power	Motor torque	0 – 100 km/h time
64 kW	Not provided	Not provided

### IMPORTANT NOTES:

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