

# L-CHARGE ULTRA-FAST OFF-GRID CHARGER 300 KW

We are proud to present our fixed off-grid ultra-fast EV charging solution that works on clean fuels – LNG and Hydrogen.

Our charger consists of  
**4 general components:**



A generating system



A battery pack



A DC-DC convertor



Fuel storage

Unlike regular on-street chargers, our concept doesn't need a grid connection – it generates electricity via an onboard generator. The only operational requirement is for the charging solution to be fuelled once a week with LNG / Hydrogen.



### Generating system

Engine: 300 kW 4-stroke

Fuel input: LNG, Hydrogen or a mixture of these two

Fuel consumption - LNG

- 43,5 kg/hour 100% load
- 145 g per 1 kWh of power generated

Fuel consumption - Hydrogen

- 16,8 kg/hour 100% load
- 56 g per 1 kWh of power generated



### Battery pack

Material: LiFePO4  
Capacity: in compliance  
with request  
Voltage: 538 V



### Fuel storage

LNG: 12500 m3 / 7300 kg  
Hydrogen: 70m3 / 2800 kg



### Size / weight

Size: 12000 x 3000 x 3000 mm  
Gross weight: 20 tons



### EV charging system

Standards supported: CHAdeMO / CCS

4 charging points, each equipped with 1 x CCS + 1 x CHAdeMO as standard.

Max power output per charging point: 150 kW

Max power session time: 30 min

Output voltage: 400 – 800 V



### Emissions:

Hydrogen:

CO2 = 0,10 mg / 1 km of range

LNG:

CO2 97 g / 1 km of range  
(30% less than a diesel or petrol car)

Sound power level: 60 dB (lower than a human voice)

# TECHNICAL DATA

## 300 KW - 2000 KW OPTIONALITY

TOTAL POWER	300 kW	500 kW	600 kW	1000 kW	1500 kW	2000 kW
<b>Operating specifications</b>						
Ambient Conditions	Operating temperature $-20^{\circ}\text{C} \dots +45^{\circ}\text{C}$ (screen $-10 \dots +50$ ), < 95% relative humidity non-condensing Operating altitude $\leq 1,000$ m without derating					
Electrical protection	Controller (own production)					
Outlet Options	Standart 1 x CCS + 1 x CHAdeMO Optional: AC Type 2 socket (with flap and shutter)					
Screens	Size 1500*750 mm, resolution 769*384 pix					
Protection rating	IP54, IK 10 (including display)					
Sound power level	60 dB					
Max power session time	30 min					
<b>Charging system</b>						
Standards supported	CHAdeMO / CCS					
Output voltage	400 – 800 V					
Charging points	2-4	2-4	4	4	4-8	4-8
Max power output per charging point:	150 kW	250 kW	300 kW	500 kW	500 kW	500 kW
Outlet Options	Standart 1 x CCS + 1 x CHAdeMO Optional: AC Type 2 socket (with flap and shutter)					
Dynamic power allocation	Demand-based equal power distribution/ Flexibility in demand-based power allocation					
<b>Fuelling</b>						
Fuel input	LNG, Hydrogen or a mixture of the two					
Fuel Consumption - LNG per 1kWh of generated power	145 g					
Fuel Consumption - Hydrogen per 1kWh of generated power	56 g					
Fuel Consumption - LNG kg/hour at 100% load	43.5	72.5	87	145	217	290
Fuel Consumption - Hydrogen kg/hour at 100% load	16.8	28	33.6	56	84	112
<b>Emissions</b>						
Hydrogen Emissions	CO <sub>2</sub> = 0,10 mg / 1 km of range					
LNG Emissions	CO <sub>2</sub> 97 g / 1 km of range (30% less than a diesel or petrol car)					
<b>General Specifications</b>						
Electrical protection	Controller					
Backend connectivity	OCPP 1.6, OCPP 2.0					
Charge controller	Own production					
Dimensions (HxWxL)	3000 x 3000 x 12000 mm			6000 x 3000 x 12000 mm		
Weight, tons	20	22	25	30	35	40
Remote management	Remote access, over-the-air (OTA) software updates					
Network Connection	Ethernet ; GSM / GPRS / LTE*					
Authorization/payment	App for a smartphone with linked credit card, QR-code					
<b>Norms and Standards</b>						
CE-certified	According to market conditions					
EMC*	IEC 61000-6-2, EN 61000-6-3					
Connector	DC: CCS Combo 2 cable acc. to IEC 61851-23, IEC 62196-3 (Mode 4, Type 2) DC: CHAdeMO 1.2, JEVS G105 (Mode 4, CHAdeMO) AC: IEC 61851-1, IEC 62196-2, (Mode 3, Type 2)					
EV communication	BS EN 61851-1, BS EN 61851-23					

\*Coming soon