# **enersense**

# **Enersense Charging**

Enersense Charging, part of the publicly listed Enersense Group, is a Finnish designer and manufacturer of state-of-the-art DC fast chargers. Since 2017, we have accumulated technical know-how and understanding of what works in the field by delivering charging sites and being an installation and maintenance partner for top DC charger manufacturers and CPO's. Today, we are utilising these learnings to provide the market with the smartest DC charging available.

### **Enersense Charging Concept**

Our concept is both scalable and modular, consisting of DC charger(s) and additional Booster unit(s) that can be installed in several ways, providing optimal setup for different charging use cases and superb flexibility to charging site design:

#### Stand-alone

As the name suggests, the charger works independently. It comes in two versions with a maximum power output of 80 kW or 160 kW.

#### Interconnected minigrid

As a unique feature our chargers can be interconnected to each other. This means the field's power can be distributed intelligently to any charging point in the field up to a maximum output of 400 kW per charging point.

#### Charger(s) & Booster

To guarantee the highest available charging power to all charging points, a separate Booster unit can be added to the field. With this setup the maximum simultaneous output is 2 x 400 kW or 4 x 240 kW. These fields can be interconnected to create even bigger fields.



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# 160 kW DC-charger

## **Key features**

- Adaptive voltage range 200–920 V
- Dynamic load balancing and power distribution
- Touch screen
- LED lighting
- Cable management
- MID-certified DC meters
- Bankcard/RFID/NFC reader
- Flexible integration to the selected back-end via API/OCPP (1.6/2.0)

# Design

- Easily scalable by adding more chargers or increasing output power
- Easy installation, commissioning and maintenance lowest possible TCO
- High charger uptime due to intelligent power module utilisation

# **Charger Management Tool**

- Charging station management tool
  - Usage data
  - User identification
  - Activation/deactivation/rebooting
  - Setting opening hours, setting prices
  - Other functionalities
- Different "dashboard" views and functionalities for different user groups

# **Additional Booster Unit**

- Guarantees the highest available charging power when all charging points are in use
- Three different versions; 320 kW, 480 kW and 640 kW

# **Technical information**

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Environment	Indoor / outdoor
Operating temperature	-35 °C to +40 °C
Input AC power connection	3P (250 A) + N + PE
Input voltage range	400 V +/-10%, 50 Hz
Efficiency	Maximum 96,5%
Data connection	4G modem / Ethernet
Protocol	API/OCPP (1.6/2.0)
Protection	IP54 / IK10
Dimensions (D x W x H)	600 mm x 600 mm x 2030 mm
Weight	320 kg
Charging standards	2 x CCS Combo2
Maximum output power	160 kW (up to 800 kW)
Maximum output current	500 A
Output voltage range	200-920 V
Cable length	5 m (optionally up to 10 m)

