

11 kW Home BiDi DC Wallbox



V2G
VEHICLE
TO GRID

V2H
VEHICLE
TO HOME



Specifications

Version:	11EU316
AC max. power:	11 kVA - 10,7kW charge / 10,4kW discharge
AC Input Voltage level:	3 Phases, 230/400V AC (Europe) , 50Hz
AC Input voltage tolerance:	+ - 10% (Static)
Power factor:	>= 99%
Total Harmonic Distortion (THD):	<= 5%
DC Output voltage:	150 – 500V DC
DC Output Current:	30A
DC Output Current ripple:	<+-3% max. current
DC max. power:	10.5kW charge & discharge at 350V
Topology:	Isolated
Safety and Protection:	Galvanic isolation Input to Output Rapid discharge DC Output Over current monitoring Reverse polarity protection DC Output Fuses Temperature monitoring Isolation monitoring 6mA DC differential current sensor Self-test
Life time:	10+ years
Standby operation time:	100.000 hours
Active operation time:	>21.000 hours (according OEM standard use case)
Communication to car:	ISO15118-2, ISO15118-20*, DIN SPEC 70121*
Diagnose:	Remote, OCCP
to Backend/CPO/EMS:	Ocpp1.6J, Ocpp2.0.1*, Ocpp2.1*, HTTPS (Websockets etc.)*, MQTT*, SmartHome protocols*, Modbus TCP
Data interfaces:	Ethernet (LAN), WLAN
Weight:	27kg (w/o beauty cover and charging cable)
Dimensions:	633mm x 385mm x 230mm
Operating temperature:	-20 to +50°C
Humidity:	Up to 95 %
Operation height:	2000m over sea level
Cooling concept:	active, temperature controlled
IP Class:	IP54 enclosure
EMC:	According to EN61000-6-2 / EN61000-6-4
Norms and Standards:	IEC 61851-1, IEC 61851-23, EN 50549, local grid codes
Certifications:	CE for European market

*via update/on request

Options

CCS Combo1 (CCS1*)
NACS*
Stand / post for free stand mounting* extended Housing*
Touch Display*
Vandal proof for public places*
DC Metering*
RFID*
Cable- / Plugholder*

Branding / Customization

Labels
Front cover
Interface
Housing

Features

Bidirectional V2G/V2H operation
ISO 15118 compatible
sid-OS Energy Framework
Grid compliant - local grid code certifications

The **ambiCHARGE BiDi DC Wallbox** turns your electric vehicle into a battery on wheels.

Compared to conventional charging, bidirectional DC charging enables energy to be transferred in both directions – charging from the grid to the vehicle and discharging from the vehicle to the home or electricity grid.

Vehicle-to-Home (V2H)

The vehicle can contribute to further optimizing PV self-consumption.

Furthermore, your own electricity consumption can be optimized to take advantage of flexible electricity tariffs.

In this way, the vehicle makes a significant contribution to smoothing out peak loads and feed-in peaks in the grid and improving grid stability.

Vehicle to Grid (V2G)

The vehicle can actively participate in the energy market and grid services – it can be marketed as a storage device.

The **ambiCHARGE BiDi DC Wallbox** comes with an build in **Home-Energy-Management-System (HEMS)**. And is compatible with several available EMS.

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All parameters not specially mentioned are measured at 400V AC input, rated load and 20°C ambient temperature. Ripple & noise are measured at 20MHz bandwidth by using a standard probe. This product is intended for European Mains connections. Grid connectivity settings can differentiate depending on country codes. Specifications are sub-jected to change without notice. The contents of this brochure have been prepared with the greatest possible care. However, no guarantee is given for the correctness, completeness and up-to-dateness of the information and illustrations. We reserve the right to make changes and illustrations may differ. All product names are trademarks and registered trademarks of their respective owners.