

## 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. With years of experience Ambibox has developed an 11kW bidirectional (BiDi) EV charger based on silicon carbide semiconductors. The BiDi DC-Wallbox is optimised for the private charging sector and features a passive cooling concept.

That pushes the noise of the wallbox below the threshold of human hearing. The bidirectional wallbox has been designed for Vehicle To Home (V2H) and Vehicle To Building (V2B) use case and is able to continuously provide both charging and discharging of the vehicle, starting from 100 watts up to the full power of 11kW.

The BiDi Wallbox will be compatible with several commercially available energy management software solutions.

**This will allow you to integrate your electric vehicle into your building software and make your electric car an integrale part of your house or office building.**

# ambibox

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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. (certification pending). This is a preliminary datasheet. Specifications are subjected 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.