

## 11 kW DC-Wallbox

V2G  
VEHICLE  
TO GRID



## Specifications

<b>Version:</b>	DC-Wallbox
<b>Max. power:</b>	11 kW
<b>AC Input Voltage level:</b>	3 Phases, 400V AC (Europe)
<b>AC Input voltage tolerance:</b>	+ - 10% (Static)
<b>Power factor:</b>	>= 99%
<b>Total Harmonic Distortion (THD):</b>	<= 5%
<b>DC Output voltage:</b>	120 – 500V DC
<b>DC Output Current:</b>	30A
<b>DC Output Current ripple:</b>	<+-3% max. current
<b>AC/DC Topology:</b>	Active 3 Ph PFC, bidirectional
<b>DC/DC Topology:</b>	Isolated, bidirectional DC/DC Converter
<b>Input Voltage stage:</b>	Phase management and DC input
<b>Safety and Protection:</b>	Galvanic isolation (Basic isolation Input to Output) Rapid discharge DC Output Over current monitoring Reverse polarity protection DC Output Fuses Temperature monitoring Isolation monitoring Self-test
<b>Life time:</b>	10+ years
<b>Standby operation time:</b>	100.000 hours
<b>Active operation time:</b>	>21.000 hours (according OEM standard use case)
<b>Communication to car:</b>	ISO15118-20, ISO15118-2, DIN SPEC 70121
<b>Diagnose:</b>	Remote, OCCP
<b>to Backend/CPO/EMS:</b>	OCPP2.0.1,OCPP1.6J, HTTPS (Websockets etc.)*, MQTT*, SmartHome protocols*
<b>Data interfaces:</b>	Ethernet (LAN), WLAN, RS485/RS232
<b>Weight:</b>	25kg
<b>Dimensions:</b>	609mm x 365mm x 224mm
<b>Operating temperature:</b>	-25 to +50°C
<b>Humidity:</b>	Up to 95 %
<b>Operation height:</b>	2000m over sea level
<b>Cooling concept:</b>	active
<b>IP Class:</b>	IP54 enclosure
<b>EMC:</b>	According to EN61000-6-2 / EN61000-6-3
<b>Norms and Standards:</b>	IEC 61851-1, IEC 61851-23
<b>Certifications:</b>	CE for European market

\*on request

## Options

CCS Combo1 (CCS1)
CCS Combo2 (CCS2)
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

The **ambiCHARGE 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.