

## 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>Lifetime:</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>Charge controller:</b>	integrated
<b>Communication to car:</b>	CCS, PLC, PWM, Control Pilot, Proximity Pin
<b>Diagnose:</b>	Remote, OCCP
<b>to Backend/CPO:</b>	OCCP2.0, HTTPS (Websockets etc.)*, MQTT* to EMS OCCP, Modbus TCP*, RS485/RS232, Smart Home protocols*
<b>Data interfaces:</b>	Ethernet (LAN)
<b>Weight:</b>	<25kg
<b>Dimensions:</b>	< 583mm x 346mm x 195mm
<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 (air cooling, fans)
<b>Noise:</b>	@1m, full load, <25 dB (A) @ <40 °C
<b>IP Class:</b>	IP54 enclosure
<b>EMC:</b>	According to EN61000-6-2 / EN61000-6-3
<b>Norms and Standards:</b>	IEC Version: IEC61851, SAE1772 / UL Version: UL2202
<b>Certifications:</b>	CE for European market

\*on request

## Options

CCS Combo1  
CCS Combo2  
Stand / post for free stand mounting

## Branding / Customization

Labels  
Front cover  
Interface  
Housing

## Features

Bidirectional V2G/V2H operation  
ISO 15118 compatible  
Integrated charge controller  
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 semi-conductors.

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

Ambibox GmbH  
An der Ochsenwiese 3, 55124 Mainz  
info@ambibox.de, www.ambibox.de  
+49 6131 6339020

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.