

DC - HPC

ultra fast charging solution



Charges up to 400 km in less than 15 mins (350 kW)














Equipped with a power output of 175 kW up to 350 kW, and provides up to 500 A continuously (can also provide 360 A to two cars simultaneously)

Provides an exceptional user experience with ergonomic, 4.5 m auto-retractable cables

Scalable thanks to its flexible architecture, evolves easily with the market,

and safeguards your investment

Fully reliable and made to last with cooling unit, liquid cooled cables, and rugged high-impact housing

-  175–350 kW fast charging capacity
-  Anti-glare, color touchscreen with 4 languages
-  Flexible architecture
-  Tariff settings
-  Universally compatible
-  Roaming
-  Auto-retractable cables
-  Easy transportation, installation and maintenance
-  Advanced cooling and heating system
-  Remote maintenance
-  3-year warranty
-  Liquid cooled cable
-  Smart charging capable

evbox.com



DC-HPC Product portfolio



Power Unit 375 A (PU)

- This station does not include any charging connectors
- This station must be connected to a User Unit
- Equipped with an AC / DC converter
- Equipped with a DC controller
- Equipped with integrated energy meters
- Equipped with independent AC and DC electrical protections



User Unit 200 A (UU)

- Up to 175 kW / 950 V
- This station must be connected to a Power Unit
- Includes a charging connector
- Does not include an AC / DC converter
- Equipped with an HMI controller
- Equipped with a dry cable
- Available with both CCS2 and CHAdeMO connectors



User Unit 500 A (UU)

- Up to 350 kW / 950 V
- This station must be connected to a Power Unit
- Includes a charging connector
- Does not include an AC / DC converter
- Equipped with an HMI controller
- Equipped with a part of the pumping system for cooled cable (the other part of the pumping system is included in the cooling system)
- Equipped with a cooled cable
- Available with both CCS2 and CHAdeMO connectors



Cooling Unit (CU)

- This unit is used to cool down charging cables when the current is higher than 200 A
- This unit can be connected to two User Units



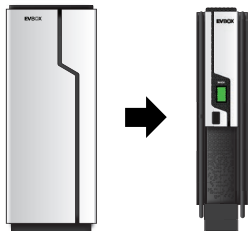
Product configurations



Configuration A

1 x Power Unit 375 A + User Unit 200 A*

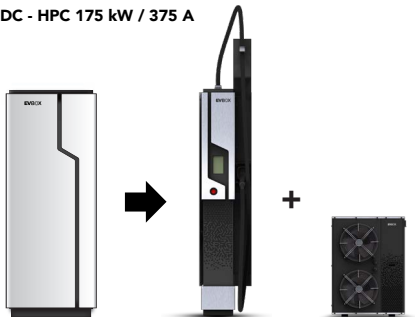
DC - HPC 175 kW / 200 A



Configuration B

1 x Power Unit 375 A + User Unit 500 A**

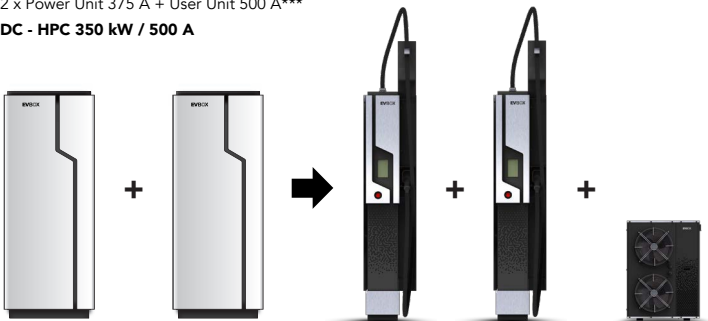
DC - HPC 175 kW / 375 A



Configuration C

2 x Power Unit 375 A + User Unit 500 A***

DC - HPC 350 kW / 500 A



More configurations are available thanks to the flexible architecture.

*One PU 375 A together with a UU 200 A will provide up to 950 V / 200 A / 175 kW. This means the charger can deliver up to 175 kW to cars with a 950 V battery and 100 kW to cars with a 500 V battery. ** One PU 375 A together with a UU 500 A and a Cooling Unit will provide up to 950 V / 375 A / 175 kW. This means the charger can deliver up to 175 kW to cars with a 500 V or 950 V battery. ***Combining two PU 375 A together with a UU 500 A and a Cooling Unit will provide up to 950 V / 500 A / 350 kW. This means the charger can deliver up to 350 kW to cars with a 950 V battery and 250 kW to cars with a 500 V battery. By having 2 UU 500 A, two cars can charge simultaneously at 175 kW with CCS2 (375 A).

General specifications



Charging modes

Mode 4 (DC charging)

CHAdeMO up to 500 V / 200 A / 100 kW
CCS2 up to 950 V / 200 A / 175 kW
CCS2 up to 950 V / 375 A / 175 kW
CCS2 up to 950 V / 500 A / 350 kW

Connector type

Mode 4

CCS2 and CHAdeMO dry cable (UU 200)
CCS2 and CHAdeMO cooled cable (UU 500)

Cable length

Mode 4

4.5 m with auto-retractable cable

Structure and physical properties

Enclosure material

Galvanized steel (structure), aluminum (casing), stainless steel (feet)

Enclosure ratings

IP54 / IK10

Ambient temperature

-30°C to +50°C

Storage temperature

-40°C to +70°C

Operating humidity

5% to 95% non-condensing

Enclosure fire ratings

M3 (NF P 92-501)

Cooling

Forced ventilation

Mounting method

Floor / Ground (optional with clamping-sealing kit)

Maximum installation height

< 2000 m

Dimension and weight - W x H x D

Power Unit 375 A

705 x 1920 x 930 mm / 1260 kg

User Unit 200 A

331 x 1895 x 467 mm / 88 kg

User Unit 500 A

825 x 1920 x 465 mm / 250 kg

Cooling Unit

900 x 940 x 370 mm / 75 kg

Connectivity

Authorization

RFID/NFC (ISO 14443, ISO 18092, ISO 15693, ISO 18000-3, Calypso, Mifare Ultralight C, Classic, Desfire)
RGB LED Indicators / 7" anti-vandalism LCD touch screen
GPRS/3G modem and Ethernet
OCPP 1.5 S, 1.6 S and 1.6 J

Status indication / HMI

Communication standard

Communication protocol

Certifications

CE, EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU, EN/IEC 61851-1, EN/IEC 61851-21-2, EN/IEC 61851-23, DIN 70121, ISO15118, CHAdeMO

	Configuration A DC - HPC 175 kW / 200 A	Configuration B DC - HPC 175 kW / 375 A	Configuration C DC - HPC 350 kW / 500 A
AC input (Power Unit 375 A)			
Voltage range	400 VAC +/- 10%		
Number of phases	3 P + N + PE		
Frequency	50 Hz		
Power factor	> 0.99		
Efficiency	95%		
Grounding system	IT, TT or TN-S		
Stand-by power consumption	100 W + 40 W	100 W + 40 W	100 W + 100 W + 40 W
Required power supply capacity	177 kVA	184 kVA	2 x (184 kVA)
Nominal input current	253 A	263 A	2 x (263 A)
DC output			
Maximum output power	175 kW	175 kW	350 kW
Output voltage range	50 VDC – 950 VDC	50 VDC – 950 VDC	50 VDC – 950 VDC
Maximum output current	184 A @ 950 V 200 A @ 875 V	184 A @ 950 V 375 A @ 466 V	368 A @ 950 V 500 A @ 700 V
Electrical protections			
Internal electrical protections	RCBO 30 mA Type A; MCB curve C/D; DC output fuses; 10 mA ground detector		
Required circuit breakers upstream	Adjustable MCCB, set to: $I_o = 270 \text{ A} / I_{sd} = x 10$ & RCD 300 mA, Type A, HI, (S)		2 x (Adjustable MCCB, set to: $I_o = 270 \text{ A} / I_{sd} = x 10$) & 2 x (RCD 300 mA, Type A, HI, (S))

Output Characteristics Graph

