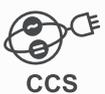




QC45BATT

DC plug-in charging systems



CCS



CHAdeMO

Main features

- High efficiency: > 93%
- High power factor: 0.98 with half load
- TFT color display (for user interface and publicity)
- Network integration (OCPP or proprietary protocol)
- Built-in communications (3G; LAN; Wi-Fi)
- Simple plug & play installation
- Standalone or network integration
- Local and remote control and monitoring
- C4 corrosion protection
- Customizable

Patent Information

Pat.Pend. PCT/ IB2016/052726

Quick Charge Station

Overview

- Battery Storage Integration
- DC power up to 50 kW
- 20 kW grid input power + 30 kW battery power
- 38 kWh battery capacity (other on request)
- Multistandard (CHAdeMO and CCS)



Battery Storage



Fast Charging

Communication
& Management

Multi-standard

Product description

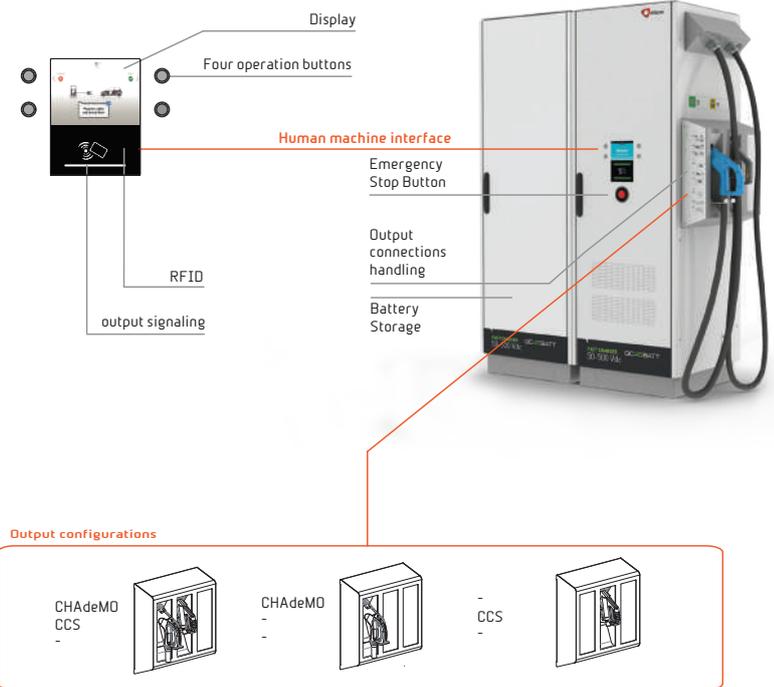
The **QC45BATT** is a Quick Charging station with a battery storage integration able to charge all EVs with CHAdeMO and CCS protocols.

To reduce the charging time, the **QC45BATT** is able to deliver power up to 50 kW. However, the power required from the grid will not be higher than 20 kW, thereby reducing costs to the charger's owner and adverse side effects caused in the grid.

The battery of the storage system has capacity to store enough energy for two or three consecutive charges, depending on the electric vehicle, and guarantee that the power supplied to the EV can achieve 50 kW. If the battery state of charge reaches a minimum value, the charger will always be able to deliver 20 kW until the battery is recharged.

Technical data	
General Specifications	
Phases / lines	3 phases + N + PE / 1 phase + N + PE
Voltage & frequency	400/230 V ± 10 %; 50/60 Hz
Nominal input current & power	32 A (three Phase) / 96 A (single Phase)
Output Power	50 kW
Efficiency	> 93 %
Equipment	Multi-standard DC outputs (Mode-4)
Communication with EV	JEVS G104 (CHAdeMO) IEC61851-23 PLC (CCS / Combo-2)
DC Plugs	JEVS G105 (CHAdeMO) Combo T2 (CCS / Combo-2)
Human Machine Interface	By default
Display	6.4" TFT Color screen
RFID system	Mifare (Classic, DesFire EV1) or others on request
Communication	3G (GSM or CDMA) LAN Wi-Fi
Communication Protocols	OCPP (1.5 / 1.6)
Place of installation	Indoor/Outdoor
Altitude	Up to 1000 m
Protection degree	IP54
Operating Temperature	-25 °C to 40 °C
Humidity	5 % to 95 %
Sound noise	<55 dB in all directions
Dimensions (W x D x H)	600 x 600 x 1800 mm
Weight	350 Kg
Battery Storage	
Nominal battery's capacity	38 kWh
Heating System	Yes
Cooling System	Forced air
Weight	675 Kg
Dimensions (W x D x H)	600 x 800 x 1800 mm

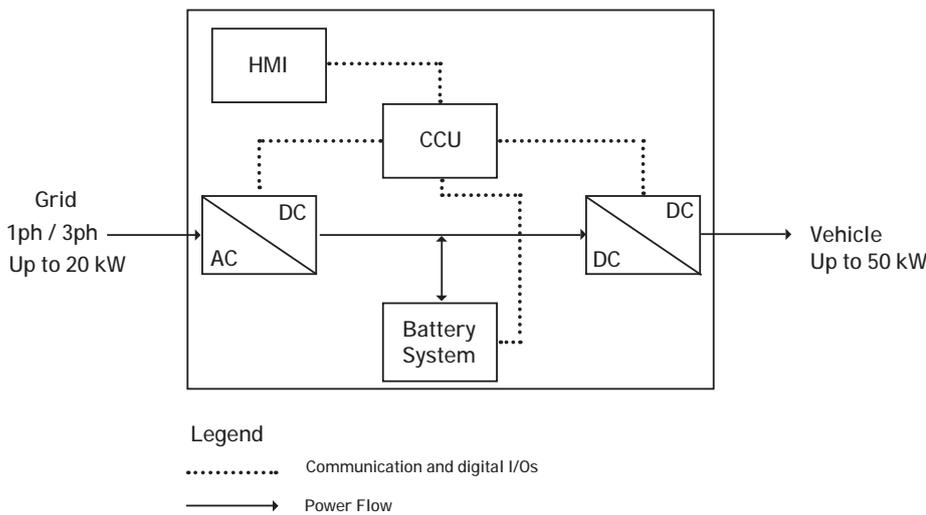
Configurations



Applications

Whenever the grid power has limitations or power availability cost is high.

System Block Diagram



The QC45BATT is constituted by a AC/DC converter (AC/DC) compatible with single phase or 3 phase supply, a DC/DC converter (DC/DC), a battery system with BMS, a Human Machine Interface (HMI), a central control unit (CCU) the AC/DC provides galvanic isolation between grid and the combination of battery + DC/DC + EV.