

Smart DC Charger - Rapid Supercharger



Side

Front

Open Front

DESCRIPTION

Smart DC Charger is a high power charger with dual output and dual charge, handing out the loads, suitable for CBD or public areas. The product consists of human-machine interaction part, power module, internal control system, communication module and charging cable assembly.

MAIN FEATURES

- It is modular and can be expanded without changing the cabinet.
- This charger allows simultaneous charging of 2 vehicles by spreading the charging power.
- Communication: OCPP 1.6 - Open Charge Point Protocol.
- Composed of charging module, power interface, charging interface, protection module, control module, measuring module, HMI, cabinet, etc.
- Charging management function, HMI can display charging mode, charging current, charging voltage, charging time and account information.
- The charger can dynamically adjust the charging mode according to BMS charging voltage and current character. The charging output is adjusted by the request of BMS, when the charging current requested is larger than the current output range in constant power charging mode, the charging current should output according to the maximum allowable current value of the charger.
- Intelligent power distribution function, in case of fault of individual module, the module can be separated without affecting the normal operation of the charger.

RELEVANT STANDARDS

- IEC 61851 - Electric vehicle conductive charging system.
- IEC 62196 - Plugs, socket-outlets, vehicle connectors and vehicle inlets-Conductive charging of electric vehicles.
- DIN 70121 - Electromobility-Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging in the Combined Charging System.
- ISO 15118 - Road vehicles - Vehicle-to-Grid Communication Interface.



MODEL		60 kW	120 kW	150 kW
Dimensions - L x W x H (mm)		750 x 530 x 1685		
Weight (kg)		275	310	328
Input Voltage		3 - Phase 380 VAC \pm 15% (3 Ph + N + G)		
Maximum Input Current (A)		118	225	278
Input Frequency (Hz)		50 ~ 60		
Input THDi		\leq 5%		
Input Power Factor		$>$ 0.99 at a nominal output power		
Output Current Range (Two output) (A)		2 ~ 100	2 ~ 200	2 ~ 250
Output Voltage Range		DC 200 ~ 750V (DC 600 ~ 750V in Constant Power Mode)		
Power Module (kW)		30 x 2 pcs	30 x 4 pcs	30 x 5 pcs
Efficiency		$>$ 94%		
Module Output Current Unbalance		$<$ 5%		
Module Output Voltage Ripple		$<$ 0.5		
Module Output Voltage Precision		$<$ 0.5%		
Module Output Current Precision		$<$ 1%		
Enclosure Rating		IP54		
Operational Temperature Range		-25°C to 50°C		
Altitude (m)		$<$ 2000		
Operational Humidity Range		0% to 95% no-condensing		
Noise (dB)		$<$ 65		
Connector Communication Mode		In accordance with DIN 70121 and ISO 15118 standard		
Connector Interface and Standard		CCS2 (IEC 61851-23) and CHAdeMO 1.0		
Cable Assembly Length (m)		5		
Connector Output	Maximum Single Mode	CCS2 (60kW) CHAdeMO (50kW)	CCS2 (120kW) CHAdeMO (50kW)	CCS2 (150kW) CHAdeMO (50kW)
	Maximum Double Mode	CCS2 (30kW) CHAdeMO (25kW)	CCS2 (60kW) CHAdeMO (50kW)	CCS2 (90kW) CHAdeMO (50kW)
Platform Communication		OCPP 1.6		
Network Connection		LAN; GPRS 3G / 4G Option		
Authentication Method		RFID / QR-code / Remote command		
User Interface		7- inch HD screen		
Power Distribution		Single Plug Mode / Average Output Mode		
Safe Charging Mode		Smart charging mode to prevent the misoperation of human factor		
Interlock		The interlock between the charger and BMS		
Interface Safety Protection		Circuit discharge function, Insulation monitoring device (IMD), Battery reverse connection protection		
Emergency Stop		Disconnect the charger and EV to prevent emergency incidents		
Charger Safety Protection		Over / Under voltage, Overload, Output power limit function, Short Circuit, Anti-access, Earth Leakage, Lightning, Overheat protection		
Technical Standards		IEC 61851-1-2011, IEC 61851-23-2014, IEC 61851-24-2014, IEC 62196-3-2014, ISO15118-2-2014, DIN 70121-2014		

Product specifications are subject to change without further notice.

