

DC plug-in fast charging stations have high contribution in charging infrastructure of the electric vehicles. Try to design chargers with higher power ratings, lower infrastructure costs, and efficient charging scenarios are necessary targets to achieve suitable architecture of the charging stations in various applications.

240kW plug-in load sharing station DC charger constructed by HKD can charge one/two common electric vehicle(s) in less than half/one hour. Power sharing between two connected electric vehicles and perform a smart charging process are the main features of this charger type.

Special features

- Remote management, support, and update
- Galvanic isolation for load protection
- Redundancy-based architecture and modular structure
- ◆ Industrial grade power cabinets with indoor/outdoor application capability
- Possibility to offer in various power ratings according to customer order
- Capability to have various user authentication methods
- Output power sharing according to the connected electric vehicles requirement for charging time optimization



Separating of the power conversion cabinets and the charging dispensers in this class of the HKD chargers cause to reduction of noise and occupied place near the electric vehicle.

User authentication at the start of charging process and also supporting by a back office protocol (based on OCPP 1.6) are another features of the HKD load sharing station DC charger. This product is supported by CCS 2 charging protocol and also can be designed in other types of the DC fast protocols, such as CHAdeMO and GB/T.

The HKD load sharing station DC charger can be offered in a variable power rating that includes: 120 kW, 150kW, 180 kW, 240 kW, 300kW, 360 kW, and 480 kW.

Technical specification

Input

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Input voltage range	$260VAC{\sim}530VAC$
Input frequency range	45Hz \sim 65Hz
Input AC connection	3P + PE
Rated input current & power	350A @ 240kW
Power factor (nominal load)	≥0.99
THD	≤5%

Output

Rated output power	240kW
Output voltage range	150VDC \sim 1000VDC
Maximum output current	250A (per connector)
Efficiency	>95% (nominal load)
Charging protocol	CCS 1/CCS 2
DC connection standard	IEC 61851-23/ISO 15118/DIN 70121
Upstream communication protocol	OCPP 1.6 JSON
Display	LCD 7" touch screen (optional)
Network connection	LAN, WiFi, GSM/3G/4G

Mechanical and environmental

Dimensions (H*D*W)	Power cabinet: 2000mm*800mm*1000mm Dispenser: 1300mm*1000mm*300mm
Protection	Power cabinet: IP54 & IK10 Dispenser: IP65 & IK10
Allowable humidity range	≤95% RH, without condensation
Operating temperature	-30°C~70°C, derating from 55°C
Storage temperature	-40°C∼85°C
Pressure/Altitude	79kPa~106kPa/2000m
Distance between power cabinet and dispenser	Up to 30m
Cable length	Up to 10m (optional)









info@hkdgreentech.de