

≥ 96%

System
Efficiency

Max. 720kW

Single power cabinet
compatible 720/600/480kW

Max. 12 Outputs

Max. 2 liquid cooling and 10
natural cooling dispensers



MCS

Full Liquid High Power Charger

Features

Ultimate User Experience

The charging experience is as quick as refueling
Charging in 10 minutes, 500km range

Low noise, no disturbance
Noise level $\leq 55\text{dB}$, Silent mode available

Easy to handle, good experience
Compact and lightweight, The wire diameter is only 31mm

No queue anxiety
Whitelist, Remote reservation available

Multiple authorization modes
APP, mini-programs, screens, buttons, etc.

Automatic charging
Place an order, then automatically charged

Intelligent & Efficient

High Efficiency
System efficiency $\geq 96\%$, Highest level in the industry

Intelligent operation and maintenance
Intelligent remote diagnosis, Remote upgrade, unattended

High online rate
System online rate $\geq 98.5\%$

Intelligent microgrid
Built-in EMS function smarter, Intelligent microgrid

Smart Charging
Support orderly charging, vehicle-to-grid interaction, etc

Dual AC inputs
Supports two different transformer feed inputs

Flexible & Convenient

Strong adaptability to various charging stations
Power cabinet compatible 720/600/480kW

Diverse choice
Maximum 2 liquid cooling and 10 natural cooling dispensers

Small Footprint
Split design, compact and lightweight

Flexible charging
Intelligent matrix allocation, Improve parking space and power grid utilization

Microgrid
Can connect solar and BESS and multiple distributed energy, V2G Ready*

Secure & Reliable

High performance

- Full liquid cooling AC/DC and DCDC modules
- Liquid cooling dispenser
- Dual pump liquid cooling
- Management system redundancy design

Strong protection capability

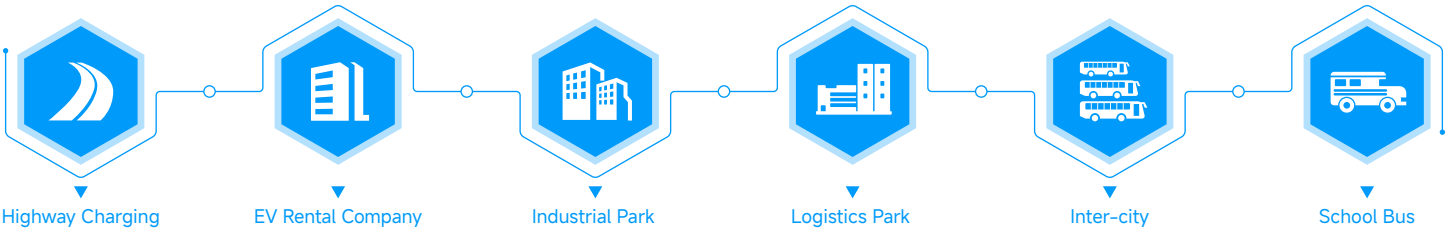
- Power Cabinet: IP65,
- Charging Dispenser: IP55

Long-life Design
 ≥ 10 years design life, 3 times longer than traditional air cooling

Interlock design
Power matrix hardware and software interlock



Scenarios



Specification

	Power Cabinet
Model	EVHPC-720K-L-US
AC Input	
Input Type	3P 5W, Dual Inputs
Cable Entrance Method	Bottom entrance
Rated Input Voltage	AC 480V +10%/-30%
Input Frequency	45Hz ~ 65Hz
Power Factor	≥ 0.99 (>50% Load)
THDi	≤ 5% (Rated Input)
DC Input	
Input Type	DC+, DC-, PE
Cable Entrance Method	Bottom entrance
Input Voltage	700Vdc ~ 950Vdc, Full Power 770Vdc ~ 930Vdc
Input Current	DC 972A (720kW)
Appearance & Weight	
Configuration	Maximum Power 720kW, Downward compatible 600KW, 480KW
Dimensions(W*H*D)	≤ 1700*2150*1000mm
Weight	≈ 1500Kg
Maintenance Interface	Power cabinet: front,rear and side opening doors for maintenance
Protection	
Ingress Protection Rating	Power cabinet: IP65
Noise	Noise Standard mode: Noise ≤ 55dBA@1m (ambient temperature 25°C); Noise ≤ 65dBA@1m max; Silent mode: Noise ≤ 55dBA@1m max
Environment	
Operating Temperature Range	-35°C ~ 70°C
Storage Temperature Range	-40°C ~ 75°C
Relative Humidity	5% ~ 95%
Operating Altitude	4000m

	MCS Cooling Dispenser	Liquid Cooling Dispenser	Natural Cooling Dispenser
Model	EVHD2-960K-L-US	EVHD1-480K-L-US	EVHD2-360K-N-US
Charging Output Dispenser(s)			
Electrical Configuration	Each liquid cooling dispenser with one MCS liquid cooling connector	Each liquid cooling dispenser with one CCS1/NACS liquid cooling connector	Each natural cooling dispenser with one CCS1/NACS natural cooling connector
Output Voltage	200Vdc ~ 1000Vdc		
Rated Output Power	960kW	480kW	180kW
Maximum Current For Single Circuit	1500A	800A	300A
Power Distribution	Dynamic power distribution. Minimum granularity of 60KW for a single connector.		
System Efficiency	≥ 96% (≥ 50% Load)		
Stabilized Current Precision	≤ ± 1%		
Stabilized Voltage Precision	≤ ± 0.5%		
Voltage Ripple	≤ ± 0.5%		
Appearance & Weight			
Dimensions(W*H*D)	390*1900*295mm	390*1700*295mm	390*1700*295mm
Weight	≤ 140kg	≤ 120kg	≤ 110kg
Charging Connector	Cable length: 3.5m	Cable length: 3.5m Wire diameter: 31mm	Cable length: 5m
Maintenance	Charging dispenser: Rear door maintenance		
Protection			
Ingress Protection Rating	Liquid cooling & Natural cooling dispenser: IP55; Heat exchange cabinet unit: IP20		
Noise	Noise ≤ 55dBA@1m (ambient temperature 25°C)		
Environment			
Operating Temperature Range	-35°C ~ 70°C		
Storage Temperature Range	-40°C ~ 75°C		
Relative Humidity	5% ~ 95%		
Operating Altitude	4000m		
Standby Power Consumption	Power Cabinet ≤ 70W, Charging Dispenser ≤ 50W		
Monitor and Communication			
BMS Communication	ISO 15118		
Telecommunication	Private communication protocol, compatible with mainstream platform communication protocol default LAN Wired connection, LTE 4G connection optional		
HCI (Dispenser)	10 inch color touch screen, 1280*800 resolution, 1000 nit brightness; Panel LED lights show device status; Support RF card.		
Charging Mode	Automatic switch according to power, take turns to charge, insert connector switch, timing switch		
Remote Upgrade	Remote software and firmware upgrades		
Protection			
Input Protection	Input overvoltage and undervoltage protection		
Output Protection	Over voltage protection, over current protection, short circuit protection, battery reverse protection, insulation protection		
Overtemperature protection	60°C≤ Ambient temperature< 70°C (For every 1°C increase in ambient temperature, the maximum output power decreases by 5%. 70°C overtemperature protection) Charging connector overtemperature protection		
Others	Open door protection, BMS data abnormal protection, emergency stop protection, abnormal drawing protection, lock conector function when charging		
Maintainability			
Operating Space	Operating space for replacement and maintenance of any component in the electrical cabinet		
Easy to Replace	Modular design, easy replacement of charging module, controller and electrical components		
MTBF	≥ 26280 h		
Service life	≥ 10 Years		
Standards			
Design Standards	SAEJ1772-2017, UL 2202, UL 1998, UL 991		