

Advanced Liquid-Cooled Smart Energy Storage Cabinet CP400L-418kWh



Key Features

- Utilizes cutting-edge liquid cooling technology with integrated cast liquid cooling plates
- Features a perfluorohexanone (PFHx) Pack-level fire suppression system
- High energy density while occupying minimal space
- Supports seamless switching between grid-connected and off-grid modes
- Flexible configuration with up to ten units in a single grid point
- Equipped with black start capability
- Compatible with new energy sources like PV systems and charging stations for AC coupling
- Enables real-time online monitoring through Web and APP interfaces.



Data Centers



Commercial Buildings



Industry Parks



PV and Storage



Substation Expansion



Technical Parameters

Specifications	LSHE-CP400L-418kWh
System Parameters	
Battery Cell Type	LFP3.2V/314Ah
Battery Pack Configuration	1P52S/52.25kWh
Battery System Configuration	1P416S
Battery Voltage Range	1164.8V-1497.6V
Battery System Capacity	418kWh
Temperature Detection	Battery Cell + Busbar
Charge/Discharge Efficiency	94%
System Efficiency	>87%
Charge/Discharge Rate	≤0.5P
BMS Parameters	
SOC Estimation Accuracy	<8%
SOC Range	<5%
Singe Cell Measurement Range	0-5V
Singe Cell Voltage Measurement Accuracy	±3mV (±2mV@25°C)
Single Cell Voltage Measurement Cycle	10ms
System Voltage Measurement Range	0-1500V
System Voltage Measurement Accuracy	±1%
System Voltage Sampling Cycle	100ms
System Current Measurement Accuracy	±0.2A (@-75A~+75A) 0.5% (@-500A~+500A)
System Current Sampling Cycle	20ms
Temperature Detection Range	-40°C~+130°C
Temperature Measurement Accuracy	±2°
Temperature Sampling Cycle	100ms
Operation Voltage Range	220Vac+15%
Operation Temperature Range	-40°C~+85°C
Sleep Power Consumption	200μA
Protection	
DC Input	Load Switch + Fuse
Overvoltage Protection	DCTypell
Fire Suppression System	Aerosol/Perfluorohexanone/Water Fire Suppression (Optional)
Conventional Parameters	
Dimensions (W*D*H)	1350mm×1350mm×2400mm
Inlet Mode	Inlet Mode Bottom Inlet
Permissible Ambient Temperature	-35°C~+60°C (Derating above 50°C)
Permissible Relative Humidity	0~95%
Maximum Operating Altitude	4000m (Derating above 2000m)
Weight	3600kg
Protection Level	IP54
Cooling Method	Liquid Cooling
Communication	
Communication Interface	RS485/Ethernet
Communication Protocol	MODBUS-RTU/MODBUS-TCP