

# **Liquid Cooling Intelligent All-In-One BESS** CP200L-100kW/215kWh





The LSHE CP200L BESS includes energy storage battery packs, BMS, PCS, EMS, liquid cooling unit, fire protection, pipeline, power distribution and other components integrated all in one. Highly integrated modular, expandable, and rapidly deployable, dedicated for distributed industrial and commercial side use.



## **Product Features**

- Adopt liquid system with latest technology, 10 years no need maintenance.
- Maximum 10 units can be combined into parallel for expansion.
- Support black start with inserted UPS.
- Adopt aerosol/perfluorohexanone PACK level fire protection system.
- High energy density and small covered area.
- Support access to new energy sources such as photovoltaic/charging points.
- Support on-grid and off-grid seamless switch.
- Support web online real-time monitoring.
- With integrated slave control on the main screen to display all the details.
- Meet the requirement of different loads with a three-phase four-arm topology.

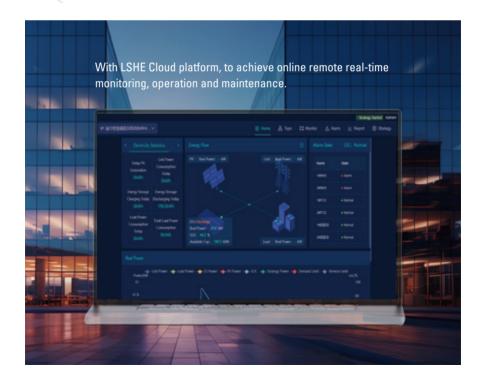
## **Global Certifications**

Successfully certified in main global markets, complying with IEC, CE, UN38.3, etc.





EC CE UN38.3



## **Application Scenarios**



#### **Peak-cutting and Valley-filling**

The connection of the energy storage system means to store electricity during the low electricity price period and to use it during the peak electricity price period, to realize the transfer of peak load, and save electricity cost for users.



#### **Emergency Power Supply (EPS)**

When the mains power is cut off, it can be switched to off-grid to ensure that the load is powered. At the same time, it supports off-grid black start to ensure power supply for emergency.



#### Access to new energy

Support different modes of new energy access such as PV+ storage/PV + storage + charging points. prioritize the supply of photovoltaic power to the loads.



#### PV + storage + EV charging point

Support charging point communication, and also support grid dispatching and photovoltaic system application, solar storage charging and other application strategies.



### **Pure off-grid operation**

It supports independent use of off-grid or micro-grid, and can also be operated with wind energy, diesel generator and photovoltaic systems.





## **Specification**

Battery System Parameters	
Battery Cell	LFP 3.2V/280Ah
Battery Pack	1P48S/43kWh
Battery System	1P240S
Voltage Range	672~864Vdc
Total Capacity	215kWh
AC Side Parameters (grid-co	nnected)
Rated Power	100kW (@50°C)
Maximum Output Power	110kW (@45°C)
Rated Voltage	400Vac (- 15%~15%)
Rated Grid Frequency	50/60Hz
Power Factor	0.99 (lagging)~0.99 (leading)
Power Supply	3P+N+PE(optional)
AC Side Parameters (off-grid	)
Rated Output Power	100kW
Rated Voltage	400Vac (-15%~15%)
Rated Output Frequency	50/60Hz
Overload Capacity	110% long term (45°C), 120% 1min
System Efficiency	
Maximum Efficiency	> 98%
Total System Efficiency	>87%
Charge/Discharge Rate	≤ 0.5C, peak power (@1C, 30s)
General Parameters	
Dimensions (WxDxH)	1350x1350x2000mm
Weight	About 2.7t
Incoming Line	Bottom incoming line
Operating Temperature	-30~55°C
Environment Humidity	0~95%
Altitude	2000m
Protection Class	IP54
Cooling Method	Liquid cooling
Communication	
Communication Interface	RS485/Ethernet
Communication Protocol	Modbus-RTU/TCP
Certificate	
Battery	IEC62619, IEC63056, IEC62477-1, IEC60730-1, EN61000-6-2/-4
Grid-Connected	VDE-AR-N4105, CEI0-21, EN50549-10



- No. 432, Kuntai Road, Kunshan City, Jiangsu Province China
- info@lsh-ess.com
- www.lsh-ess.com