*Pictures may differ from real products

Product Image of Liquid-cooled ES Standard Cabinet 125kW/261kWh

Commercial & Industrial ESS Solution

Liquid-cooling ESS All-in-one Cabinet

125kW/261kWh Datasheet

Specification

Model	125kW/261kWh		
DC Side			
Cell Type	LFP-3.2V-314Ah	Operating Voltage Range	702V-910V
Battery Configuration	1P260S	Charge/discharge Ratio	0.5P
AC Side			
Rated voltage	380V/400V	Maximum Current	209A
Rated Voltage Range	±15 percent	Power Factor	0.99/-1-1
Rated Frequency	50/60Hz	Current Distortion Rate	<2% (rated power)
Wiring Method	Three-phase four-wire	Overload Capacity	110% Long Term
Rated Power	125kW	Comprehensive Efficiency	89.00%
Maximum Power	137.5kVA		
General Parameters			
Dimensions (W)x(H)x(D)	1010x1360x2430mm	Humidity	0%RH-95%RH, non-condensing
Weight	<3000KG	Cooling Method	Liquid cooling
Altitude	4000m (reduced for >2000m)	Ingress Protection	IP55
Storage Temperature	-30°C~60°C	Communication Mode	CAN/RS485/TCP/IP
Operating Temperature	-20°C~55°C (>45°C when using at a reduced rate)		

By supporting up to **8 cabinets** in parallel expansion, it meets the requirements from **125kW/261kWh to 1000kW/2090kWh**. When multiple units form a system, an additional combiner cabinet is required.

An integrated system with high energy density consists of:

Power Conversion System (PCS) | Battery Cluster Unit (BCU) | Battery Management System (BMS)
Energy Management System (EMS) | Fire Suppression System (FSS) | HVAC Thermal Management System
Low-voltage Distribution System

Features

Ultra-long Service Life

- Intelligent liquid cooling system: control the temperature difference of the battery cells within 4 degrees, significantly improving the safety and life of the battery system
- The design service life is greater than 12 years

Integrated Design

- Standard module design, consisting of five 46.59KWh battery packs in series; Inverter 105KVA
- Floor space is less than 1.3m2
- PCS and PDU integrated design; can meet 1.1 times long-term overload, 1.2 times short-term overload requirements

Multi-scenario Application

- Wide range: Seaside to plateau wide application
- Wide temperature: -30°C - 55°C

Fire Suppression System

- The product is equiped with Active Fire Supporession system in both battery pack level and battery cabinet level, which according to the thermal risky point automatically reacts in shortest time to release extinguisher and control the thermal runaway risk.

Low Operating Cost

- All in one design, ports and channels are reserved to wire, simple installation work, low EPC cost.
- Minimum discharge of 210KWh, meeting 95% DOD requirements; operating efficiency greater than 89%; PCS efficiency greater than 98%;
- Adopting 5 large battery packs design scheme;
- Integrates PCS, EPC manufacturers can complete the installation by connecting the external wiring harness, which effectively reduces the installation cost.

Multiple Safety Design

- Pressure relief window:Secondary water firefighting, can spray water to extinguish fire from a distance;
- EMS three-level management structure: There are slave-master EMS three-level management structure, cluster-level and pack-level dual fire extinguishing system, multiple protection system design, stable and reliable.
- Battery pack meets IP67 requirements; battery compartment IP65 on the top; electrical compartment IP55 on the bottom.
- The battery box comes with explosion-proof valve, and the system comes with pressure relief window;