

Epoch-S105/232-L

Outdoor Cabinet Liquid Cooling Energy Storage System

Epoch-S105/232-L is new outdoor cabinet liquid cooling energy storage system developed by LEOCH, which integrates battery energy storage units, intelligent PCS, battery management system, liquid cooling system, fire protection system and energy management system. It adopts AC-DC integrated design, three-level topological structure and the most advanced high-efficiency energy storage integrated technology in the market, it has the characteristics of high charging and discharging and thermal management efficiency, multiple safety designs and small floor space. It can be applied to peak shaving and valley filling, emergency power backup, demand control, microgrids and more severe application environment.



Extreme Temperature Control

Precise liquid cooling temperature control, cell temperature difference $\leq 1^{\circ}\text{C}$, system temperature difference $\leq 3^{\circ}\text{C}$. The system has higher efficiency and longer service life.



Safe and Reliable

Multiple fire protection design, cell level temperature detection+PACK level+cabinet level perfluorohexanone fire protection+water fire protection



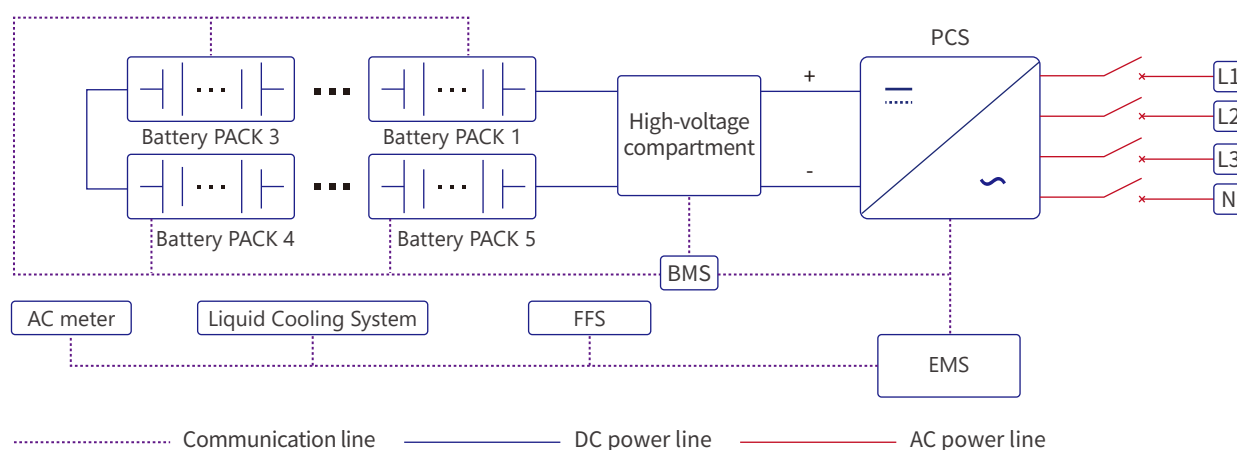
Modular Design

More flexible configuration, multiple parallel connections, fast response, and ensuring continuous uninterrupted power supply for critical loads



Intelligent Operation and Maintenance

The entire network's energy storage is visible and manageable, improving system reliability, stability, operation and maintenance efficiency, and optimizing system performance



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System Model	Epoch-S105/232-L
Battery Parameters	
Cell Type	LFP3.2V/280Ah
Battery PACK Type	1P52S
Cluster Configuration	1P260S
Nominal Energy	232kWh
Battery Voltage Range	728V~936V
Charge-Discharge Efficiency	≥95%
AC Parameters (Grid Mode)	
Rated Power	105kW
Rated Voltage	400V
Rated Current	152A
Overload Capacity	110% Long term
Rated Grid Frequency	50Hz/60Hz self-adaption
Power Factor	0.99
Power Factor Range	-1~1
Current distortion rate	<3% (Rated power)
DC component	0.5%
AC parameters (Islanded Mode)	
Rated Power	105kW
Rated Voltage	400V, 3P4W
Rated Current	152A
Rated Frequency	50Hz/60Hz
With Unbalanced Load Capacity	100%
System Parameters	
Charge and Discharge Rate	≤0.5C
Dimension(W*D*H)	1420*1350*2250mm
Weight	About 2.8t
IP Level	IP55
Altitude	2000m (> 2000m derated use)
Operating Temperature	-25°C~55°C
Relative Humidity	0~95% No condensation
Cooling method (PCS)	Intelligent air cooling
Cooling method (battery compartment)	Intelligent liquid cooling
Fire Protection System	PACK level+Cabinet level perfluorophenone Fire fighting+Water fire fighting (optional aerosols)
Communication interface	RS485, CAN, Ethernet, Dry contact
Certifications	CE-CEM/ IEC62619