

ESS-SYS-125/261L-Y

Silent Integrated Battery Energy Storage System (liquid cooling)



High Energy Density

Occupies a footprint of 1.56m².



Low Noise

Ultra-quiet PCS, built-in silencing design of air conditioner, noise <65dB.



Flexible Installation

Integrated design supports side-by-side and back-to-back installation.



High Efficiency

Maximum system efficiency > 90%, strict thermal insulation design, efficient PCS conversion efficiency brings higher benefits.



High Security

BMS + PCS dual monitoring, emergency stop linkage, remote shutdown, active fire protection, water fire protection, explosion-proof and explosion-relief design.



Digital Management

3S (BMS, PCS, EMS) + cloud for full lifecycle digital management.

Product model		ESS-SYS-125/261L-Y
Battery type	Lithium Iron Phosphate (LFP)	
Cycle Life	≥6000 cycles (95% DOD charge/discharge, 25±2°C, EOL 70%)	
Depth of Discharge	0.95	
Rated Energy (kWh)	261.25 kWh (0.5P, 25±2°C)	
Nominal Voltage (V)	832V	
Voltage Range (V)	728-949V	
Cell type	LFP 3.2V/314Ah	
Battery Configuration	1P52S × 5	
AC Side		
AC Side Rated Power	125kW	
AC Side Maximum Power	137.5kW	
Maximum Output Current (A)	198A	
Rated Frequency (Hz)	50/60	
Harmonic Current	<3% (at rated power)	
DC Component	<0.5% (at rated power)	
Rated AC Voltage (V)	AC 400	
Power Factor	>0.99 (at rated power)	
Power Factor Adjustment Range	1 (leading) – 1 (lagging)	
Isolation Method	Transformerless	
Wiring Method	3P+N+PE	
System Data		
Overall System Efficiency	>86%	
Noise Level (dB)	75 (measured at 1 m)	
Earthing System	TN-S	
SOE Estimation Accuracy	<5%	
Protection Level	IP55	
Operating Temperature (°C)	-20~55	
Operating Humidity	≤95% (non-condensing)	
Operating Altitude (m)	4000 (derated above 2000 m)	
Fire Protection System	Composite detection + gas extinguishing + water-based fire suppression	
Early Detection	Four-in-one detector (smoke, temperature, CO, VOC)	
Thermal Management System	Intelligent liquid cooling unit	
Gas Extinguishing Medium	FK-5-1-12	
System Dimensions (W×H×D mm)	1200 × 2350 × 1400 mm	
Weight (kg)	2940kg	
Communication Interfaces	CAN, RS485, Ethernet, 4G	
Communication Protocols	CAN, Modbus RTU, Modbus TCP, MQTT	