

ES60

Liquid-Cooled Energy Storage System

60 kW | 128 kWh | Integrated Cabinet | Auto Grid/Off-Grid Switching



Safety in Every Detail

- IP67/IP54 protection against dust and water.
- Q235A high-strength carbon steel enclosure (500 MPa tensile) for robust durability.
- Smart fire suppression and real-time alerts ensure operational safety.



Simple to Install

All-in-one cabinet integrates PCS, solar input, STS, and batteries. Connect to grid and load for instant operation.



Reliable in Any Conditions

Operates from -25°C to 60°C with advanced liquid cooling, keeping cell temperature differences within 3°C for steady and efficient power.



Flexible and Scalable

Easily parallel multiple units with automatic grid/off-grid switching. Configure capacity to meet exact operational requirements.

Model	ES60
PV Side	
Max. Input Power	38.4 kW + 38.4 kW
Operating Voltage	200 V to 800 V
Max. Input Voltage	850 V
No. of MPP Trackers/Strings	2/2
Max. Input Current	64 A per string (× 2)
Battery Side	
Battery Type	LiFePO ₄
Rated Capacity	128 kWh
Battery Voltage	358.4 V to 460.8 V
Configuration	1P × 64S × 2S
Max. Charge/Discharge Current	150 A (subject to BMS strategy)
AC Side (On-Grid)	
Rated AC Power	60 kW
Rated AC Current	87 A
Max. Output Power	66 kW
Max. Output Current	95.7 A
Grid Voltage	400 V, 3W+N+PE/3W+PE
Grid Frequency	50/60 Hz
Power Factor	-1 leading to +1 lagging
THDi	<3% (at load >30%)
AC Side (Off-Grid)	
Rated Output Power	60 kW
Rated Output Current	87 A
Max. Output Power	66 kW
Max. Output Current	95.7 A
Output Voltage	400 V, 3W+N+PE/3W+PE
Output Frequency	50/60 Hz
THDu (Linear Load)	<3%
Overload Capability	1.1 times rated power (continuous) 1.25 times rated power for 100 s
On-Grid/Off-Grid Switchover Time	< 20 ms
Certifications	
Battery	UN 38.3, IEC 62619, EMC
General	
Max. Parallel Units	6 (both grid-tied and off-grid)
Operating Temperature	-25°C to 60°C (derating above 45°C)
Relative Humidity	5 to 95%
Operating Altitude	≤ 4,000 m (derating above 2,000 m)
Protection Rating	IP67 (battery compartment)/IP54 (electrical compartment)
Cooling	Liquid cooling
Noise Level	≤ 75 dB
Standby Power Consumption	< 100 W
Electrical Protection	Ground Fault Circuit Interrupter (GFCI) Insulation Resistance Monitoring Anti-Islanding Protection Output Overcurrent Protection Short-Circuit Protection
Electric Shock Protection Class	Class I
Overvoltage Category	PV (II), AC (III)
Weight	Approx. 1,800 kg
Dimensions (W × D × H)	1,820 × 1,120 × 1,350 mm
Warranty	5 years