



# SP-5000L

## Energy Storage System

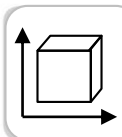
Energy Storage System SP-5000L is an excellent energy source for 48V applications. It is especially designed for off-grid application due to its extraordinary features: better charging and discharging performance, longer lifespan, smaller size. The energy storage system provides a perfect replacement for Lead Acid Battery.



Operating temperature ranges from  $-20^{\circ}\text{C}$  to  $55^{\circ}\text{C}$ .



Expandability: a maximum of 16 batteries can be parallel-connected.



Compact Design: 19 inch rack, 3U height  
volume energy density((VED) $\geq 198$  Wh/L



Safety performance: state-of-the-art LFP cell and reliable BMS design.



Total Capacity / Usable Capacity	100 Ah / 93Ah @ 93%DOD
Cathode Material	LiFePO4
Rated Voltage	48V
Operating Voltage Range	42V~54V
Max. Discharging Power	4800W
Cycle Life	4000 cycles @ 0.5C, 80% DOD, 25°C
Cell Connection	1P15S
Weight	< 37kg
Dimensions (W×D×H)	≤442 mm×420 mm×130 mm (excluding latches and terminals)
Self-discharging Rate	≤3%/month/-20~45°C@95%RH
Charging and Discharging Capacity Efficiency	≥96%(@25°C)
Communication Port	CAN & RS485;
Status Indication	SOC / ALM / RUN
Maximum Number of Parallel-connected Battery	16
Installation	19-inch rack installation (horizontal or vertical)
Protection & Alarm	Protection or alarm against over-temperature, over-current, over-charge, over-discharge, short circuit, etc.
Certification	CE, UN38.3, IEC62619, RoHS2.0, REACH
IP Rate	≥IP20
Cooling	Natural Cooling
Storage Temperature	7 days @(-30°C~ -20°C)@(45°C~ 60°C), 95%RH; 6 months @ -20°C~ 45°C, 95%RH
Operating Temperature	Charge: -20°C - 55°C; Discharge: -20°C~55°C (Degrading application with temperature beyond 0°C-45°C)
Operating Relative Humidity	5% - 95%
Altitude	≤4000m (Degrading application with altitude ranging from 2000m to 4000m)