

6.5kW/5kWh All-in-One PV Energy Storage System



This integrated unit combines energy storage and inverter functions in one device, drastically cutting installation time and lowering overall costs, making it ideal for residential and small commercial applications.



The battery and inverter boast an efficiency range of 94% to 98%, delivering superior energy conversion efficiency and minimizing energy loss to the greatest extent.



It supports a maximum PV input power of 9,000 watts, supplying ample power for households and small businesses.



Equipped with LFP (Lithium Iron Phosphate) batteries, the system achieves a cycle life of no less than 4,500 cycles, guaranteeing long-term power supply and stable energy storage performance.



Built-in Wi-Fi connectivity enables real-time monitoring of system status and energy consumption, allowing users to conveniently manage and track their power system remotely.

Model		6.5K/5kWh	
Battery		Max. Bypass Current	40A
Cell Material	LiFePO4	AC Output	
Module	1P16S	Main Topology	L+N+PE
Nominal Capacity	100Ah	Output Voltage Waveform	Sine Wave
Nominal Voltage	51.2V	Output Voltage	208/220/230/240VAC
Energy	5120Wh	Voltage Regulation	±5%
Communication Protocol	CAN/RS385	Rated Output Power	6500W
Charge Cut-off Voltage	58.4V	DC Offset	±100mv
Discharge Cut-off Voltage	43.2V	Standard Frequency	50/60Hz
Max. Charging Current	100A	Frequency Regulation	±0.1Hz5
Max. Discharging Current	100A	Grid Mode Output Frequency	50Hz: (43.5–56.5) Hz for UPS Mode; (43.5–56.5) Hz for APP/GEN Mode 60Hz: (53.5–66.5) Hz for UPS Mode; (40–70) Hz for APP/GEN Mode
Max. Peak Power	5000W	Overload Capacity	1min@102%~110%; 10s@110%< Load
Operating Efficiency	98%	Output Short Circuit Protection	Battery Mode: Current Limited; Grid Mode: 40A Circuit Breaker
Cycle Life	≥4500 time	Efficiency & Switchover Time	
Internal Impedance	≤15mΩ	Battery Mode (Peak Efficiency)	94%
Ambient Temperature	-20℃~55℃	Grid Mode (Peak Efficiency)	98%
PV		Grid to Battery Switchover Time	UPS Mode: 10ms; Load Mode: 10ms; Generator Mode: 20ms
PV Charging Mode	MPPT	Standby Power Consumption	<30W (No-load mode, battery disconnected)
Max. PV Input Power	27A/9000W	General Specifications	
MPPT Operating Voltage Range	60~450Vdc	IP Rating	IP21
Max. PV Input Voltage	500V	Recommended Ambient Temperature	0℃~45℃
Minimum Startup Voltage	80Vdc	Operating Temperature Range	-20℃~-+55℃
Max. PV Input Voltage	500Vdc	Ambient Humidity	5~95% (non-condensing)
Efficiency	98%	Display Type	LCD
Voltage Accuracy	±2%	Warranty Period	5-year warranty for batteries; 2-year warranty for inverter mainboard
Max. Charging Current	100A	Operating Altitude	<2000m
AC Input		Cooling Method	Intelligent Air Cooling
Main Topology	L+N+PE	Dimensions	874*440*340mm
Nominal Voltage	208V/220/230/240VAC	Weight	60kg
Input Voltage Range	90~280V (default) ; 170~200V(UPS)	Noise Level	<60dB
Frequency Range	40~70Hz, default		