

PLA SERIES ALL IN ONE ESS ENERGY STORAGE SYSTEM

Single Phase 6kW



Performance Characteristics

1. Integrated 6kW On/Off-grid hybrid solar inverter and lithium-ion battery module
2. Built-in Wi-Fi module for mobile monitoring (Android/iOS App is available)
3. Wide PV input range 40VDC-600VDC
4. Select high power charging current
5. Select input voltage range for home appliances and personal computers
6. Compact footprint and space-saving with all-in-one design
7. Reserved communication port for BMS (RS232/ RS485)
8. Compatible to Utility Mains or generator input
9. Scalable lithium-ion battery expansion
10. Waterproof IP65

Application Diagram





Technical Specifications

Model	PLA ESS6K10	PLA ESS6K20
PHASE	1-phase in/1-phase out	
RATED POWER	6000VA / 6000W	
Dimension, LxWxH (mm)	620x212x1302	620x212x1900
Net Weight (kgs)	110	195
PV INPUT (DC)		
Max. PV Input Power	11000W	
Nominal DC Voltage/Max. DC Voltage	360Vdc/ 600Vdc	
Start-up Voltage/Min. Operation Voltage	50Vdc/ 40Vdc	
Number of MPP Trackers/String	2/1	
Max. PV Input Current	16A	
AC INPUT		
Max. Input Power From Grid	11000 VA	
Voltage	220VAC/230VAC/240VAC	
Voltage Range	154V~276V	
Rated Frequency	50Hz/60Hz	
Frequency Range	50Hz: 45Hz~55Hz / 60Hz: 55~65Hz	
Power Factor	≥ 0.99	
GRID OUTPUT (AC)		
Max. Output Power	6000W	
Voltage	220VAC/230VAC/240VAC ± 5%	
Rated Output Current (at 230V)	26.1 A	
Max. Output Current (at 230V)	27.3 A	
Rated Frequency	50Hz/60Hz(±0.5%)	
Harmonic Distortion	≤3% (Linear Load), ≤5% (Non-Linear Load)	
Waveform	Pure sine wave	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	97.30%	
European Efficiency	97.70%	
BATTERY & CHARGER		
Battery Voltage	51.2VDC	
Battery Type	LiFePO4	
Battery Cell Combination	16S2P*1	16S2P*2
Rated Capacity	200AH	400AH
Energy Storage	10.24KWH	20.48KWH
Cycle Life	6000 cycles @80% DOD, 0.5C	
Floating Charge Voltage	57.6VDC	
Max. Solar Charge Current	100A	
Max. AC Charge Current	100A	
Max. Charge Current	100A	
Max. Discharge Current	100A	
Discharge Cut-off Voltage	43.2VDC	
Charge Cut-off Voltage	58.4VDC	
SYSTEM		
Communication Interface	RS485/RS232, WLAN Optional	
IP Class	IP65	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Charge Temperature	0°C to 50°C	
Discharge Temperature	-20°C to 50°C	
Storage Temperature	-20°C to 50°C	
STANDARD		
Compliance Safety	IEC 62619, UN38.3, MSDS, NRS, G99	