BSLBATT®
Best Solution Lithium Battery

AIO 6K16 HESS

All in one Residential Energy Storage System



6.2 kW / 16kWh
Smart AIO ESS

The AIO 6K16 HESS is a versatile home hybrid energy storage system that highly integrates the battery, BMS, inverter, and EMS into a single system. It features flexible compatibility (connectable to solar panels and the grid), intelligent energy management functions (multi-mode operation and remote monitoring), and robust safety features (overvoltage protection and islanding protection).

- UPS-level switchover time < 10ms
- 150% peak load output @ 5S
- Support parallel connection up to 2 units
- Remote monitoring and management with PC or mobile app.
- MPPT efficiency is as high as 99%
- Multiple charging and power supply modes

Model	AIO 6K16 HESS
Battery Side Parameters	
Cell Type	205Ah / 3.2V Prismatic LFP Cell
Cell Configuration	1P16S
Nominal Voltage	51.2V
Nominal Capacity	314Ah
Nominal Energy	16.07kWh
Operating Voltage Range	47V~55V
Standard Charge Current	80A
Standard Discharge Current	100A
*Max. Continuous Charge/Discharge Current	100A/135A
Cycle Life	≥6,000 cycles (at 80% DOD, 0.5C rate, 25℃)

PV Side Parameters	
Maximum DC Input Power	6.5kW
Maximum DC Input Voltage	500V
Start-up Voltage	120V
MPPT Operating Voltage Range (at Full Load)	240V~450V
Maximum DC Input Current	27A
Number of MPPT Trackers	1

AC Output Parameters	
Rated AC Output Power	6.2kW
Maximum AC Output Power	6.2kVA
Rated Output Voltage	230Vac
AC Connection Type	L+N+PE
AC Output Frequency	50/60Hz
Power Factor (PF)	＞0.99

AC Input Parameters	
Rated Output Power	170~280Vac
Rated Output Voltage	47~55Hz/57~65Hz
Rated Output Frequency	40A
Efciency	
Max. Efciency (Batter to Load)	>94.5%
General Parameters	
Operating Temperature Range	-20℃~55℃
Operating Humidity Range	10% to 90% RH (Non-condensing)
Storage Temperature Range	0℃~35℃
Operating Altitude	3000m (2000m ≤ No Derating)
Installation Environment	Indoor
Cooling Method	Natural Cooling
Fire Safety / Fire Protection	Pack-Level Aerosol Fire Suppression Device (Optional)
Communication Interface	RS485/232/WIFI
Ingress Protection (IP) Rating	IP20
Dimensions (W*D*H, mm)	600*240*1048(±3)
Weight	130kg±3%
Warranty	5 Years

Note: *100A/135A refers to the maximum charge/discharge current on the batter side at the inverer terminals;
A batter combiner box is required when three or more units are connected in parallel.

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