



8 kW / 16 kWh
Smart AIO ESS

The AIO 8K16US 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



120% peak load output @10S



Support parallel connection
up to 6 units



Remote monitoring and
management with PC or
mobile app.



MPPT efficiency is as high
as 99%



Multiple charging and power
supply modes

Battery Side Parameters			
Cell Type	314Ah / 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	100A		
Standard Discharge Current	100A		
*Max. Continuous Charge/Discharge Current	160A/180A		
Cycle Life	≥6,000 cycles (at 80% DOD, 0.5C rate, 25°C)		
PV Side Parameters		AC Ouput Parameters	
Maximum DC Input Power	5000W+5000W	Rated Output Power (Per Phase)	8000W
Maximum DC Input Voltage	500V	Rated Output (Same Phase)	6000W
Start-up Voltage	120V	Rated Output Voltage	120V/240Vac
MPPT Operating Voltage Range (at Full Load)	200V~450V	Rated Output Current	33.3A
Maximum DC Input Current	16A+16A	Output Frequency	50/60Hz
Maximum DC Short-Circuit Current	24A+24A	Power Factor	>0.99
Number of MPPT Trackers	2	AC Connection Type	L1+L2+N+PE
AC Input Parameters			
Per-Phase AC Input Range	85~140Vac		
Frequency Range	47~55Hz/57~65Hz		
Max. AC Input Current	50A		
Efficiency			
Max. Efficiency (Battery to Load)	>93%		
General Parameters			
Operating Temperature Range	-20°C~55°C		
Operating Humidity Range	10% to 90% RH (Non-condensing)		
Storage Temperature Range	0°C~35°C		
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	485/CAN/WIFI		
Ingress Protection (IP) Rating	IP20		
Dimensions (W*D*H, mm)	620*241*1218(±3)		
Weight	150kg±3%		
Warranty	5 Years		

Note: *160A/180A refers to the maximum charge/discharge current on the battery side at the inverter terminals;
A battery combiner box is required when three or more units are connected in parallel.