BSLBATT®
Best Solution Lithium Battery

# AIO 8K16US HESS

All in one Residential Energy Storage System




**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 compatibilit y (connectable to solar panels and the grid), intelligent energy management functions (multi-mode operation and remote mo nitoring), and robust safety features (overvoltage protection and islanding protection).

- UPS-level switchover time < 10ms
- 120% peak load output @10S
- 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 8K16US HESS |
|---|---|
| **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℃) |

| **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℃~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) | 620*240*1120(±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.

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