# 8-12kW Single-phase Hybrid All-in-one RESS

## A Series H8/10/12S

### A8000S/A10000S/A12000S+B8900M-HAW

8kW/10kW/12kW
8.9kWh-17.8kWh / 8.9kWh-106.8kWh




- 4 independent MPPTs with up to 200% PV oversizing
- Off-grid continues output power up to 12KW
- Battery parallel function-up to 6 clusters per inverter(8.9-106kWh)
- 18cm ultra-slim design
- Stackable integrated design, 50% faster installation and commissioning time
- Heating function - working conditions -20°C
- Intelligent load management
- 200% EPS overload, handle high-surge loads
- Backup load transfer time ≤10ms
- Built-in by-pass switch—in the event of system failure

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## Technical Specification

| Model | A8000S | A10000S | A12000S |
|---|---|---|---|
| **PV Input Specification** | | | |
| Recommended max. PV input power(W) | 16000 | 20000 | 22500 |
| Max. PV input voltage(V) | 550 | | |
| Startup input voltage(V) | 90 | | |
| Rated PV input voltage(V) | 360 | | |
| MPPT voltage range(V) | 100–530 | | |
| No. of independent MPPT inputs | 4 | 4 | 4 |
| No. of PV strings per MPPT | 1 / 1 / 1 / 1 | 1 / 1 / 1 / 1 | 1 / 1 / 1 / 1 |
| Max. PV input current(A) | 16 / 16 / 16 / 16 | 16 / 16 / 16 / 16 | 16 / 16 / 16 / 16 |
| Max. DC short-circuit current (A) | 20 / 20 / 20 / 20 | 20 / 20 / 20 / 20 | 20 / 20 / 20 / 20 |
| Max.inverter backfeedcurrent to the array | 0Ad.c. | | |
| **Battery Port Specification** | | | |
| Battery type | Li-ion Battery | | |
| Battery voltage range(V) | 80–460 | | |
| Max. charge / discharge current(A) | 45 / 47 | | |
| Max. charge / discharge power(W) | 15000 / 15000 | 15000 / 15000 | 15000 / 15000 |
| Communication | CAN | | |
| Charging strategy | BMS instructions | | |
| Battery Expansion | 1 ~ 2 series-connected 8.9 kWh high-voltage battery modules per cluster | | |
| **Grid Port Specification** | | | |
| Max. AC power from grid(VA) | 8000 | 10000 | 12000 |
| Max.AC input current(A) | 36.4 | 45.5 | 54.6 |
| Rated AC output power(W) | 7999 | 9999 | 12000 |
| Max. AC output apparent power(VA) | 7999 | 9999 | 12000 |
| Max. AC output current(A) | 36.4 | 45.5 | 54.6 |
| Rated AC output current(A) | 34.8 | 43.5 | 52.2 |
| AC output inrush current(A) | 70.8 | | |
| AC inputinrush current(A) | 48.3 | | |
| Rated AC voltage | L / N / PE, 220 V / 230 V / 240V | | |
| Rated grid frequency(Hz) | 50 / 60 | | |

# Technical Specification

| Model | A8000S | A10000S | A12000S |
|---|---|---|---|
| THDI @Full load | < 3% | | |
| Power factor at rated power/ Adjustable power factor | >0.99(0.8 leading – 0.8 lagging) | | |
| **GEN Port Specification** | | | |
| Max. AC input apparent power（VA） | 12000 | 12000 | 12000 |
| Rated AC voltage | L / N / PE, 220 V / 230 V / 240V | | |
| Rated GEN frequency(Hz) | 50/ 60 | | |
| **Backup Port Specification** | | | |
| Max AC output apparent power(VA) | 12000 | 12000 | 12000 |
| Rated output power(W) | 7999 | 9999 | 12000 |
| Peak output power | 2 times of rated power, 10s | 1.65 times of rated power, 10s | 1.12 times of rated power, 10s |
| Max AC output current(A) | 54.6 | 54.6 | 54.6 |
| Rated voltage | L / N / PE, 220 V / 230 V / 240V | | |
| Rated grid frequency(Hz) | 50/ 60 | | |
| THDV @Linear load | <3 % | | |
| Backup switch time | ⩽10 ms | | |
| **Efficiency** | | | |
| Max. efficiency(%) | 97.5 | | |
| European efficiency(%) | 96.8 | | |
| **Protection & Function** | | | |
| Grid monitoring | Yes | | |
| DC reverse polarity protection | Yes | | |
| AC short - circuit protection | Yes | | |
| Leakage current protection | Yes | | |
| DC switch | Yes | | |
| Battery input reverse polarity protection | Yes | | |
| Active anti-islanding method | Yes (Frequency Shift) | | |
| Surge protection | DC type II / AC type III | | |
| **General Information** | | | |
| Topology (solar / battery) | Transformerless / Transformerless | | |
| Degree of protection | IP65 | | |

# Technical Specification

| Model | A8000S | A10000S | A12000S |
|---|---|---|---|
| Dimensions* (W * H * D)(mm) | 730 *637 *180(±4) | | |
| Weight*(kg) | 59.2(±1) | | |
| Installation type | Floor stand | | |
| Cooling method | Fan cooling | | |
| Noise(MAX)(dB) | < 45 | | |
| Ambient temperature range (°C) | -20 ~ 60(>45 derating) | | |
| Relative humidity (Non-condensing)(%) | 15 - 95 | | |
| DI / DO | DI * 1 / DO * 2 / DRM | | |
| DC connection type | MC4 | | |
| AC connection type | Plug and play connector | | |
| Max. operating altitude(m) | 3000 | | |
| Display | LCD+APP | | |
| Monitor | RS485, WLAN, Ethernet, CAN | | |
| Warranty* | 10 Years | | |
| **Certification & Standard** | | | |
| Certification | CB, CE, UKCA, SONCAP, RCM, ROHS | | |
| Standard | IEC/EN 62109-1, IEC/EN 62109-2, IEC 62619, IEC 60730-1 Appendix H,IEC/EN 62368-1, EN IEC 61000-6-1/3, IEC 61 000-2-2, CISPR 11, IEC 60529, IEC 60068-2-52,AS/NZS 4777.2, IEC 60947.1, AS 60947.3, VDE-AR-N 4105, EN 50549-1,G98, G99, UN 38.3, MSDS | | |

* The AC voltage and frequency range may vary depending on specific country grid standard.
Dimensions ( W * H * D )*： Total dimension of inverter and control box.
Weight*： Total weight of inverter and control box.
Warranty*： Refer to the product warranty terms for details.

# Technical Specification

| Model | A8000S/ A10000S/ A12000S |
|---|---|
| Hybrid inverter<br>Rated AC output power<br>Dimension (W*H*D)<br>Weight | 8000W / 10000W / 12000W<br>730mm*637mm*180mm<br>≈61kg |
| Control box | Built-In Grid / Backup /<br>DC circuit Breaker |

# Technical Specification

| Model | B8900M-HAW |
|---|---|
| High Voltage Battery Management System<br>Operating Voltage<br>Max.Charge / Discharge Current<br>Operating Temperature<br>Ingress Protection<br>Dimension (W*H*D)<br>Weight | 135~583.2VDC<br>52A<br>-20°C~60°C<br>IP65<br>730*160*180mm<br>10kg |
| Battery Module<br>Battery Type<br>Nominal Voltage<br>Rated Capacity<br>Rated Energy<br>Max. Charge / Discharge Current<br>Charge Temperature<br>Discharge Temperature<br>Ingress Protection<br>Dimension (W*H*D)<br>Weight | $LiFePO_4$(LFP)<br>172.8V<br>52Ah<br>8.985kWh<br>52A<br>0°C~55°C<br>-20°C~60°C<br>IP65<br>730*510*180mm<br>83kg |
| Battery Module Base<br>Dimension (W*H*D)<br>Weight | 730*40*180mm<br>5.8kg |