

# AGAVE-SH

Home Battery Energy Storage System For AU

 eCACTUS



## Product Introduction

Agave-SH, a hybrid all-in-one BESS, compatible with high voltage LFP battery system, can achieve the best function to maximize clean solar power usage for your home while maintaining a sleek and professional look and making BESS installation easier than ever.

### Convenient

- Battery pre-installed.

### Quiet

- Less than 25 dB, no noise pollution.

### Flexible

- IP65, indoor or outdoor applications.
- Inverter up to 6kW, battery capacity up to 10kWh.

### Adaptative

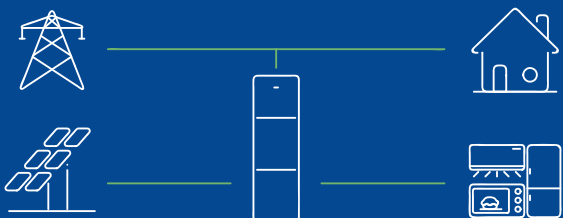
- Self-power, backup, and load shifting modes.

### Independent

- No additional modules and inverters are required.

### Smart

- Support VPP and IOT.



- Agave-SH will store photovoltaic or grid energy. If there is not enough solar energy to support consumption, the stored battery power will be discharged by Agave-SH to meet the power demand.
- Autonomous strategy, automatically optimising energy use based on the user's needs and preferences.

# Agave-SH Series

## Technical Specifications



| Model                                                    | WH-SPHA3.6H-5.12kWh<br>WH-SPHA3.6H-10.24kWh |  | WH-SPHA5.0H-5.12kWh<br>WH-SPHA5.0H-10.24kWh |  | WH-SPHA6.0H-5.12kWh<br>WH-SPHA6.0H-10.24kWh |  |
|----------------------------------------------------------|---------------------------------------------|--|---------------------------------------------|--|---------------------------------------------|--|
| PV Input                                                 |                                             |  |                                             |  |                                             |  |
| Absolute max Voltage (d.c.V)                             |                                             |  | 600                                         |  |                                             |  |
| MPPT Voltage Range (d.c.V)                               |                                             |  | 100..550                                    |  |                                             |  |
| Max. DC Input Power (W)                                  | 4800                                        |  | 6650                                        |  | 8000                                        |  |
| Start-up Voltage (d.c.V)                                 |                                             |  | 90                                          |  |                                             |  |
| Rated Operating Voltage (d.c.V)                          |                                             |  | 360                                         |  |                                             |  |
| Max. Input Current (d.c.A)                               |                                             |  | 12.5/12.5                                   |  |                                             |  |
| Max. inverter backfeed current to array (d.c.A)          |                                             |  | 0                                           |  |                                             |  |
| Isc PV (d.c.A)                                           |                                             |  | 18/18                                       |  |                                             |  |
| NO. of MPP Trackers                                      |                                             |  | 2                                           |  |                                             |  |
| NO. of Strings per MPP Tracker                           |                                             |  | 1                                           |  |                                             |  |
| Battery Model                                            |                                             |  | WH-BXB5.12                                  |  | WH-BXB10.24                                 |  |
| Battery Capacity                                         | LFP 5.12kWh                                 |  |                                             |  | LFP 10.24kWh                                |  |
| Usable Capacity                                          | 4.608kWh                                    |  |                                             |  | 9.216kWh                                    |  |
| Nominal Battery Voltage (d.c.V)                          | 204.8                                       |  |                                             |  | 409.6                                       |  |
| Battery Voltage Range (d.c.V)                            | 160..227.2                                  |  |                                             |  | 320..454.4                                  |  |
| Max. Charge/Discharge Current (d.c.A)                    |                                             |  | 25/25                                       |  |                                             |  |
| Depth of Discharge (%)                                   |                                             |  | 90                                          |  |                                             |  |
| AC Input/Output                                          |                                             |  |                                             |  |                                             |  |
| Rated output Power (W)                                   | 3600                                        |  | 5000                                        |  | 6000                                        |  |
| Rated Apparent Power to Grid (VA)                        | 3600                                        |  | 5000                                        |  | 6000                                        |  |
| Max. Apparent Power to Grid (VA)                         | 3600                                        |  | 5000                                        |  | 6000                                        |  |
| Max. Apparent Power from Grid (VA)                       | 4320                                        |  | 6000                                        |  | 7200                                        |  |
| Rated Voltage (a.c.V)                                    |                                             |  | 220/230/240                                 |  |                                             |  |
| Rated Frequency (Hz)                                     |                                             |  | 50/60                                       |  |                                             |  |
| Rated AC Current to Grid (a.c.A)                         | 15.6                                        |  | 21.7                                        |  | 26.1                                        |  |
| Max. output current (a.c.A)                              | 17.2                                        |  | 23.9                                        |  | 28.7                                        |  |
| Max. Current from Grid (a.c.A)                           | 18.8                                        |  | 26.1                                        |  | 31.3                                        |  |
| Inrush current (a.c.A)                                   |                                             |  | 16 a.c.A (peak), 11.3 us (duration)         |  |                                             |  |
| Max. output fault current (a.c.A)                        |                                             |  | 57 (peak), 40 (rms)                         |  |                                             |  |
| AC output Maximum output overcurrent protection (a.c.A)  |                                             |  | 40                                          |  |                                             |  |
| AC input power factor                                    |                                             |  | ~0.8..+0.8                                  |  |                                             |  |
| AC output power factor                                   |                                             |  | 1 (~0.8..+0.8 adjustable)                   |  |                                             |  |
| THDi                                                     |                                             |  | <3%                                         |  |                                             |  |
| EPS Output                                               |                                             |  |                                             |  |                                             |  |
| Max. Output Power (W)                                    | 3600                                        |  | 5000                                        |  | 6000                                        |  |
| Rated Apparent Power (VA)                                | 4320                                        |  | 6000                                        |  | 7200                                        |  |
| Max. Apparent Power (VA)                                 | 4320                                        |  | 6000                                        |  | 7200                                        |  |
| Rated Voltage (a.c.V)                                    |                                             |  | 230 (±2%)                                   |  |                                             |  |
| Norminal Frequency (Hz)                                  |                                             |  | 50/60 (±0.2%)                               |  |                                             |  |
| Max. Output Current (a.c.A)                              | 18.8                                        |  | 26.1                                        |  | 31.3                                        |  |
| Max. output fault current (a.c.A)                        |                                             |  | 57 (peak), 40 (rms)                         |  |                                             |  |
| EPS output Maximum output overcurrent protection (a.c.A) |                                             |  | 40                                          |  |                                             |  |
| Switch time (ms)                                         |                                             |  | <10                                         |  |                                             |  |
| THDv @Linear Load (%)                                    |                                             |  | <2                                          |  |                                             |  |
| Power Factor                                             |                                             |  | ~0.8..+0.8                                  |  |                                             |  |
| Efficiency                                               |                                             |  |                                             |  |                                             |  |
| PV Max. Efficiency (%)                                   |                                             |  | 97.6                                        |  |                                             |  |
| PV Europe Efficiency (%)                                 |                                             |  | 97                                          |  |                                             |  |
| PV Max. MPPT Efficiency (%)                              |                                             |  | 99.9                                        |  |                                             |  |
| Battery Charge by PV Max. Efficiency (%)                 |                                             |  | 98                                          |  |                                             |  |
| Battery Discharge Efficiency (%)                         |                                             |  | 96.7                                        |  |                                             |  |
| Protection                                               |                                             |  |                                             |  |                                             |  |
| Over/Under voltage protection                            |                                             |  | Yes                                         |  |                                             |  |
| DC isolation protection                                  |                                             |  | Yes                                         |  |                                             |  |
| DC injection monitoring                                  |                                             |  | Yes                                         |  |                                             |  |
| Residual current detection                               |                                             |  | Yes                                         |  |                                             |  |
| Anti-islanding protection                                |                                             |  | Yes                                         |  |                                             |  |
| Over load protection                                     |                                             |  | Yes                                         |  |                                             |  |
| Battery Input reverse polarity protection                |                                             |  | Yes                                         |  |                                             |  |
| PV reverse polarity protection                           |                                             |  | Yes                                         |  |                                             |  |
| Surge protection                                         |                                             |  | Yes                                         |  |                                             |  |
| Over heat protection                                     |                                             |  | Yes                                         |  |                                             |  |
| General Data                                             |                                             |  | WH-BXB5.12                                  |  | WH-BXB10.24                                 |  |
| Dimension (W/D/H)(mm)                                    | 550 × 233 × 1125mm                          |  |                                             |  | 550 × 233 × 1750mm                          |  |
| Dimension of Packing (W/D/H)(mm)                         | 655 × 302 × 1390mm                          |  |                                             |  | 655 × 302 × 2085mm                          |  |
| Net weight (kg)                                          | 68                                          |  |                                             |  | 115                                         |  |
| Gross weight (kg)                                        | 78                                          |  |                                             |  | 130                                         |  |
| Operation Temp (°C)                                      |                                             |  | -10...+55                                   |  |                                             |  |
| Relative Humidity (%)                                    |                                             |  | 0..95                                       |  |                                             |  |
| Altitude (m)                                             |                                             |  | ≤3000                                       |  |                                             |  |
| Ingress Protection                                       |                                             |  | IP65                                        |  |                                             |  |
| Cooling                                                  |                                             |  | Natural                                     |  |                                             |  |
| Inverter Topology                                        |                                             |  | Non-isolated                                |  |                                             |  |
| Over voltage category                                    |                                             |  | III (AC), II (DC)                           |  |                                             |  |
| Protective class                                         |                                             |  | Class I                                     |  |                                             |  |
| Active anti-islanding method                             |                                             |  | frequency shift                             |  |                                             |  |
| Human Interface                                          |                                             |  | LED/APP                                     |  |                                             |  |
| BMS Communication Interface                              |                                             |  | RS485/CAN                                   |  |                                             |  |
| Meter Communication Interface                            |                                             |  | RS485                                       |  |                                             |  |
| Internet Connectivity                                    |                                             |  | WiFi+4G+Ethernet                            |  |                                             |  |
| Noise Emission (dB)                                      |                                             |  | <25                                         |  |                                             |  |
| Standby Power Consumption (W)                            |                                             |  | <5                                          |  |                                             |  |
| Safety and Approvals                                     |                                             |  |                                             |  |                                             |  |
| Safety                                                   |                                             |  | UN 38.3, IEC 62619, IEC 62100, IEC 62109    |  |                                             |  |
| Country                                                  |                                             |  | AS/NZS 4777.2                               |  |                                             |  |

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