

# Home Series Residential ESS

Hybrid / All-in-one System / Single-phase input & output 3.6–6 kW



Safety

**1. Aerogel Insulation:**

Superior protection against heat and fire.

**2. Consistent Quality:**

Automated production ensures top-tier standards.



Reliability

**1. Top Lithium Cells:** Powered by CATL & EVE, the world's TOP 3 lithium cell brands.

**2. All-in-One Design:** Integrated system for smooth and coherent operation.



Friendly

**1. Quick-Connect Terminals:**

Easy and secure installation.

**2. Remote Monitoring:** Control your system anytime via WiFi and app.



| Battery Model                                                 | H-PACK-5.1                                 |
|---------------------------------------------------------------|--------------------------------------------|
| <b>Battery Module Specification</b>                           |                                            |
| Nominal Energy                                                | 5.12 kWh                                   |
| Continucus Output Power(charge/discharge) for a Single Module | 2560 W / 2560 W                            |
| Warranty                                                      | 10 years performance Warranty              |
| Voltage Range                                                 | 44.8 ~ 56.5 V                              |
| Communication Interfaces                                      | CAN & RS-485                               |
| Modules Per Inverter                                          | Up to 8 connected in parallel              |
| Battery Type                                                  | LFP (LiFePO4)                              |
| Life Cycle                                                    | 6000 cycles @25℃ ±2℃ or 0.5C Condition     |
| <b>Standard Compliance</b>                                    |                                            |
| Cell                                                          | IEC/EN 62619, UN 38.3, UL 1973             |
| Module                                                        | IEC/EN 62619, UN 38.3                      |
| <b>Mechanical Specifications</b>                              |                                            |
| Dimensions(W×H×D)                                             | 435 x 580 x 155 mm                         |
| Weght                                                         | 48 kg                                      |
| Mounting                                                      | Rack Mount                                 |
| Operating Temperature (charge/discharge)                      | 0 ~ 50℃(Charging), -10 ~ 50℃ (Discharging) |
| Storage Temperature (12 months between recharges)             | -10 ~ 50℃                                  |
| Max. Operating Altitude                                       | 2000 m                                     |
| Enclosure Protection                                          | IP21                                       |
| Cooling                                                       | Natural convection                         |
| Noise (at 1m distance)                                        | < 25 dBA                                   |

| Hybrid Inverter Model                      | HH3.6KS                                                                                                |               | HH6KS              |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------|--------------------|
| PV String Input                            |                                                                                                        |               |                    |
| Max. PV Array Input Power                  | 6.0 kWp                                                                                                |               | 9.0 kWp            |
| Max. DC Voltage                            | 500 V                                                                                                  |               |                    |
| Nominal Voltage                            | 270 V                                                                                                  |               | 300 V              |
| MPPT Voltage Range                         | 120 ~ 450 V                                                                                            |               | 120 ~ 450 V        |
| MPPT Voltage Range (Full Load)             | 270 ~ 425 V                                                                                            |               | 300 ~ 425 V        |
| Start Voltage <sup>1)</sup>                | 120 V                                                                                                  |               |                    |
| Number of MPPT                             | 1                                                                                                      |               |                    |
| Strings Per MPPT                           | 1                                                                                                      |               |                    |
| Max. Input Current Per MPPT                | 18 A                                                                                                   |               | 27 A               |
| Max. Short-Circuit Current Per MPPT        | 21 A                                                                                                   |               | 30 A               |
| AC Output (Grid)                           |                                                                                                        |               |                    |
| Nominal AC Output Power                    | 3.6 kW                                                                                                 |               | 6.0 kW             |
| Max. AC Apparent Power                     | 3.6 kVA                                                                                                |               | 6.0 kVA            |
| Nominal AC Voltage                         | 230 Vac                                                                                                |               |                    |
| AC Grid Frequency Range                    | 50 Hz / 60 Hz (±5 Hz)                                                                                  |               |                    |
| Nominal Output Current                     | 15.6 A                                                                                                 |               | 26.0 A             |
| Max. Output Current                        | 21.0 A                                                                                                 |               | 35.0 A             |
| THDi                                       | <5%                                                                                                    |               |                    |
| Battery Input                              |                                                                                                        |               |                    |
| Battery Type                               | LFP (LiFePO4)                                                                                          |               |                    |
| Nominal Battery Voltage                    | 51.2 V                                                                                                 |               |                    |
| Charging Voltage Range                     | 44 ~ 57.6 Vdc                                                                                          |               |                    |
| Max. Solar Charging Current                | 50 A(1*pack)                                                                                           | 60 A(2*packs) | 100 A(2*packs)     |
| Max. AC Charging Current                   | 50 A(1*pack)                                                                                           | 60 A(2*packs) | 100 A(2*packs)     |
| Max. Overall Charging Current              | 50 A(1*pack)                                                                                           | 60 A(2*packs) | 100 A(2*packs)     |
| Max. Discharging Current                   | 50 A(1*pack)                                                                                           | 78 A(2*packs) | 100 A(2*packs)     |
| Battery Capacity                           | 5.12 kWh (Single Pack)                                                                                 |               |                    |
| AC Output (Backup)                         |                                                                                                        |               |                    |
| Dual Output                                | No                                                                                                     |               |                    |
| Nominal AC Output Power(Battery Mode)      | 2.3 kW                                                                                                 | 3.6 kW        | 4.7 kW             |
| Nominal AC Output Power(Battery + PV Mode) | 3.6 kW                                                                                                 |               | 6.0 kW             |
| Nominal Output Voltage                     | 230 Vac                                                                                                |               |                    |
| Nominal Output Frequency                   | 50 Hz / 60 Hz                                                                                          |               |                    |
| Output THDv (@Linear Load)                 | <3% (Linear Load)                                                                                      |               |                    |
| Protection                                 |                                                                                                        |               |                    |
| Anti-islanding Protection                  | Yes                                                                                                    |               |                    |
| Output Over Current Protection             | Yes                                                                                                    |               |                    |
| DC Reverse Polarity Protection             | Yes                                                                                                    |               |                    |
| DC / AC Surge Protection                   | DC Type II;AC Type III                                                                                 |               |                    |
| Insulation Detection                       | Yes                                                                                                    |               |                    |
| AC Short Circuit Protection                | Yes                                                                                                    |               |                    |
| General Specifications                     |                                                                                                        |               |                    |
| Dimensions (W x H x D)                     | 435 x 410 x 155 mm                                                                                     |               | 435 x 410 x 155 mm |
| Weight                                     | 13.7 kg                                                                                                |               | 15.2 kg            |
| Operating Temperature Range                | -10℃ ~ 50℃                                                                                             |               |                    |
| Cooling Type                               | Fan                                                                                                    |               |                    |
| Max. Operation Altitude                    | 3000 m (> 2000m Derating)                                                                              |               |                    |
| Operation Humidity                         | 5% ~ 95%                                                                                               |               |                    |
| IP Class                                   | IP20                                                                                                   |               |                    |
| Topology                                   | Battery Isolation                                                                                      |               |                    |
| Communication                              | RS232 / RS485 / USB / CAN / DRY Contact                                                                |               |                    |
| Display                                    | LCD / APP                                                                                              |               |                    |
| Certification & Standard                   | IEC62109-1&2; EN/IEC 62920:2017+A1:2021; EN55011:2016+A2:2021; ISTA-2A; IEC 62116; IEC 61727; IEC60068 |               |                    |

\* 1) Minimum voltage for inverter to start power output.