

# Home Series Residential ESS

Hybrid / All-in-one System / Single-phase input & output 10 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-5.1A
<b>Battery Module Specification</b>	
Nominal Energy	5.12 kWh
Continucus Output Power(charge/discharge) for a Single Module	2560 W / 2560 W
Warranty	5 years Warranty
Voltage Range	44.8 V ~ 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°C ±2°C 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)	416 x 204 x 580 mm
Weght	47 kg
Mounting	Wall Mount / Floor Stand
Operating Temperature (charge/discharge)	0 ~ 50°C (Charging), -10 ~ 50°C (Discharging)
Storage Temperature (12 months between recharges)	-10 ~ 50°C
Max. Operating Altitude	2000 m
Enclosure Protection	IP21
Cooling	Natural convection
Noise (at 1m distance)	< 25 dBA

Hybrid Inverter Model	HH10KS
<b>PV String Input</b>	
Max. PV Array Input Power	18.0 kWp
Max. DC Voltage	500 V
Nominal Voltage	390 V
MPPT Voltage Range	60 ~ 450 V
MPPT Voltage Range (Full Load)	250 ~ 425 V
Start Voltage <sup>1)</sup>	120 V
Number of MPPT	2
Strings Per MPPT	1
Max. Input Current Per MPPT	27 A
Max. Short-Circuit Current Per MPPT	30 A
<b>AC Output (Grid)</b>	
Nominal AC Output Power	10.0 kW
Max. AC Apparent Power	10.0 kVA
Nominal AC Voltage	230 Vac
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)
Nominal Output Current	43.5 A
Max. Output Current	58.8 A
THDi	< 5%
<b>Battery Input</b>	
Battery Type	LFP (LiFePO4)
Nominal Battery Voltage	51.2 V
Charging Voltage Range	44 - 57.6 Vdc
Max. Solar Charging Current	200 A (4*packs)
Max. AC Charging Current	160 A (4*packs)
Max. Overall Charging Current	200 A (4*packs)
Max. Discharging Current	200 A (4*packs)
Battery Capacity	5.12 kWh (Single Pack)
<b>AC Output (Backup)</b>	
Dual Output	Yes
Nominal AC Output Power <sup>(Battery Mode)</sup>	9.5 kW
Nominal AC Output Power <sup>(Battery + PV Mode)</sup>	10.0 kW
Nominal Output Voltage	230 Vac
Nominal Output Frequency	50 Hz / 60 Hz
Output THDv (@Linear Load)	<3% (Linear Load)
<b>Protection</b>	
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
<b>General Specifications</b>	
Dimensions (W x H x D)	435 x 580x 155 mm
Weight	24.5 kg
Operating Temperature Range	-10°C ~ 50°C
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.