

HOUSEHOLD ENERGY STORAGE SYSTEM

ALL-IN-ONE ENERGY STORAGE SYSTEM (ON-GRID)

Application Scenarios

Small household single-phase hybrid energy storage system, suitable for new installation or modification of photovoltaic energy storage system, AC 220V/230V output.



Product Features

Intelligent And Easy To Use

- Optional 4G, WIFI or GPRS remote communication module, 24-hour load monitoring.
- Compatible with lead-acid battery, lithium battery, gel battery, etc., with battery management function.

Safe And Efficient

- With short circuit, under-voltage, overload, anti-reflux, PV anti-reverse connection, and other safety protection functions.
- With IP66 protection degree, it can be installed outdoors.
- The design is fanless and low noise.

Product Highlight

Powerful Function

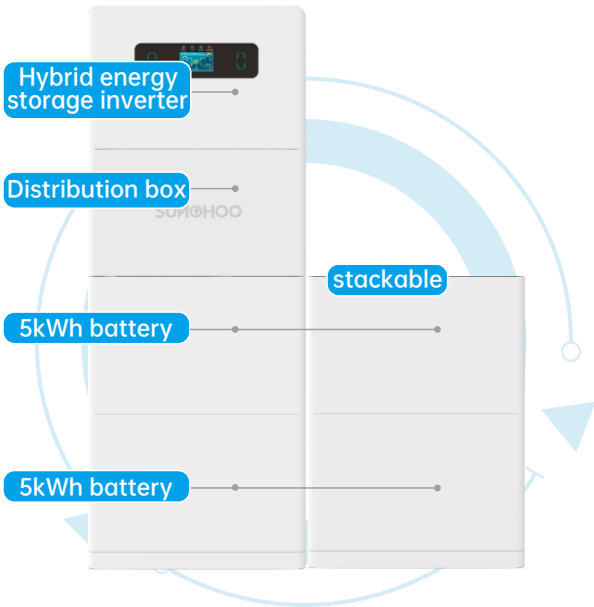
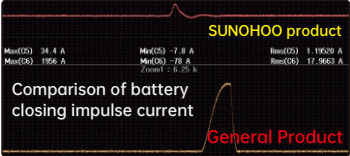
- Equipped with uphill driving function, with higher load power and more types of loads.
- Independent multi-function generator interface, intelligent switching, saving additional investment.

Easy To Install

- Modular stacking design, plug and play, easy to install
- Modular battery pack, supporting battery expansion, up to 20.48kWh.

Novelty In Appearance

- 4.3-inch 65K color high-definition touch screen, rich content, friendly human-computer interface.
- The appearance is like a panda, lively and friendly.



Flexible And Efficient

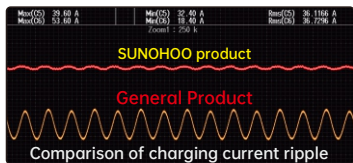
- Integrated MPPT controller, MPPT efficiency up to 99.9%.
- Multiple working modes to meet the needs of users in different scenarios: Self Use, Selling First, Back-Up Mode, Force Time Use, Composite Pattern.
- Three output modes: grid-connected, off-grid, and bypass.
- It has the function of UPS, and the switching time $\leq 10\text{ms}$.
- It has two anti-reflux functions

Strong Adaptability

- Customizable design to meet different customer needs.
- Power grid self-adaptation, supporting normal power generation under weak grid conditions.

Safe And Reliable

- Charge and discharge current three-stage conversion, low current ripple, improving battery life.
- The grid port adopts a dual relay series scheme for multiple safety guarantees.
- Soft start function of battery, without starting impact current, protect the machine and battery.



HB1050EH48-5H ~ 1050EH48-20H SERIES

MODEL	HB1050EH48-5H		HB1050EH48-10H		HB1050EH48-15H		HB1050EH48-20H	
Output								
Rated Output Power	5500VA/5000W							
Rated Output Voltage	220/230Vac							
Rated Output Frequency	50/60Hz(±5), Intelligent adaptive/Settable							
Rated Output Current	22.7A							
Max Grid-connected Viewing Power	5500VA							
DC Component	< 0.5% In							
Grid Type	Single-phase, L+N+PE							
Output Power Factor(cosφ)	> 0.99 @ Rated power (Adjustable 0.8 leading~0.8 lagging)							
THDi	< 3%							
THDu	< 2%(Linear load)							
Transfer Time	10ms(Typical value)							
Off-grid Overload Capability	100%-110% 3min , 110%-125% 1min , >125% 10S							
Battery								
Battery Type	LiFePO4							
Battery Rated Voltage	51.2V (16S)							
Battery Energy	5.12KWh	10.24KWh		15.36KWh		20.48KWh		
Battery Capacity	100Ah	200Ah		300Ah		400Ah		
Max Charing/Discharing Current	100A							
DOD	80%							
Designed Life-span	5000							
PV Input								
Max Input Power	6500W							
Max PV Open-circuit Voltage	550Vdc							
MPPT Input Voltage	370Vdc(90~500V)							
Max PV Input Current	13A+13A							
Number of MPPT / Strings per MPPT	2/1+1							
Efficiency								
Max PV Conversion Efficiency	97.6%							
European Efficiency	97.0%							
MPPT Efficiency	> 99%							
General Parameters								
Dimension. W*D*H(mm)	540*190*1300	540*190*1800		540*190*1300		540*190*1800		
Weight (kg)	80kg	120kg		160kg		200kg		
Communication Mode	RS485/CAN/DRM, Optional 4G/WIFI/GPRS							
Display	Touch Screen+LED							
Surge Protection	DC Type II / AC Type III							
Operating Ambient Temperature	-25℃ ~ 60℃(> 45℃ Derating)							
Humidity	0~100%							
Protection Degree	IP66							

Specifications are subject to change without advance notice.

Application System Diagram

