Better Energy Storage,
Better Life.@SUNOHOO

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SUNOHOO Public Platform

SUNOHOO Tik Tok

Disclaimer Notices

This manual contains forecast information, including but not limited to information about the company' s future plans, products, technical specifications, etc.
Due to uncontrollable factors in the implementation process, the actual results may differ significantly from the predicted information.
Therefore, the information in this manual is for informational purposes only and doesn' t constitute any offer or acceptance.
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SUNOHOO 芯豪科技

绿色能源综合解决方案

Green Energy Integrated Solution

浙江芯豪科技有限公司
ZHEJIANG SUNOHOO TECHNOLOGY CO., LTD

COMPANY PROFILE

COMPANY PROFILE

Zhejiang Sunohoo Technology Co., Ltd，a subsidiary of Zhejiang Sunoren Solar Technology Co., Ltd. (Global leading distributed photovoltaic enterprise, Stock Code: 603105)

Founded in 2008, Zhejiang Sunoren Solar Technology Co., Ltd. ("Sunoren") is a national new high-tech enterprise that focuses on investment, construction, and operation of distributed photovoltaic power stations and is dedicated to distributed solar power generation. The companyhas been deeply engaged in the photovoltaic industry for more than 10 years, adhering to the vision of "let the sky bluer, the water cleaner and life better", On the basis of continuously expanding the scale of self-sustained distributed power stations and relying on existing distributed photovoltaics customer resources, the company makes steady progress in charging piles and industrial and commercial distributed energy storage business, pro-actively engages in the R&D and sales of off-grid and on-grid energy storage products, constantly explores new application fields of distributed energy, resolves to become the pioneer, model, and leader in pursuit of carbon peak and carbon neutrality, and contributes to the construction of a new power system based on new energy.

Gross Generation Of PV Power Station Projects
1300+MW

Annual Saving Of Standard Coal
470000+t

Annual Power Output
1300000+Mwh

Carbon Dioxide Emission Reduction
1300000+t

Sulfur Dioxide Emission Reduction
39000+t

Annual Energy Cost Saving For Real Economy
100+million

2023 To The Parent Company's Net Profit
220+million

Registered Capital Of Company
500million

Subsidiary Company
80+


PV Module Manufacturing


PV Power Plant Investment And Operation


Industrial And Commercial Energy Storage Investment Operation


Charging Pile Investment Operation

COMPANY PROFILE

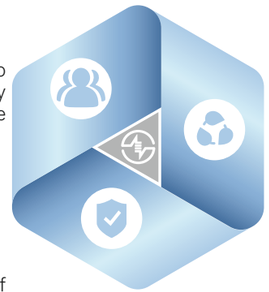
Zhejiang Sunohoo Technology Co., Ltd

Committed to becoming an excellent green energy comprehensive solution provider, comprehensivelyimprove the energy efficiency and reliability of users, providing users with intelligent and efficientgreen energy, Sunohoo Technology is determined to become a forerunner and demonstrator for peakcarbon dioxide emission and carbon neutrality.

Sunohoo Technology is a scientific and technological innovative enterprise of R&D, design, production and sales to provide users with excellent energy storage system solutions. Currently we have on/off grid hybrid energy storage series hybrid energy storage series, portable power station series , etc.

Safe And Reliable Quality Assurance

Products are strictly designed according to international and domestic standards; Fully consider the application of various extreme conditions; Sufficient power, no false mark.



Full system configuration

The company covers many aspects of photovoltaic module production, inverter research and development and production, whole system scheme design and landing services.

Flexible, efficient and responsive

Adhering to the principle of prioritizing customer satisfaction,we have established a comprehensive customer service system. Whether it's presales consultation, sales support,or aftersales service, thecompany can promptly address customer needs and deliver professional and attentive assistance

Can customize a variety of cooperation

Provide different brands/appearance/ performance and other customizable products and services to meet the individual needs of customers.

The company's products are independent research and development, focusing on the combination of production, learning and research and intellectual property protection. Independent research and development reflects the strength of the company, and has a good guarantee for brand establishment and quality assurance.

SUNOHOO Full Range Products

Single-phase
ON/OFF Grid Inverter
2.2kW~3.3kW

Single-phase
ON/OFF Grid Inverter
4.5kW~5.5kW

Single-phase
ON/OFF Grid Inverter
8.5kW~12kW

Split-phase
ON/OFF Grid Inverter
8.5kW~12kW

Three-phase
ON/OFF Grid Inverter
8.5kW~12kW

Single-phase
ON/OFF Grid Inverter
3kW~6kW

Portable Power Station
3600W~5500W

All-In-One Energy Stora
(Off-Grid)5H~20H

Integrated Power for Rvs
6000W

Portable Power Station
500W

Portable Power Station
300W~700W

Portable Power Station
1300W~1800W

Portable Power Station
2000W~3000W

Portable Power Station
1000W

Portable Power Station
800W~1200W

Single-phase
Hybrid Solar Inverter
3kW~8kW

Three-phase
Hybrid Solar Inverter
8.5kW~30.5kW

Small industrial &Commercial
Hybrid Solar Inverter
29.9kW~63.5kW

All-In-One Energy Stora
(On-Grid)5H~20H

Single-phase
Hybrid Solar Inverter
10kW~12kW

Split-phase
Hybrid Solar Inverter
5kW~12kW

Three-phase
Hybrid Solar Inverter
Low Volt 5kW~15.5kW

Horizontal stacked battery
51.2V-100Ah

Rack-mount battery
51.2V-100Ah

Rack-mount battery
51.2V-230Ah

Rack-mount battery
51.2V-314Ah

Wall-mounted battery
51.2V-100Ah

SUNOHOO PRODUCTS

HOUSEHOLD ENERGY STORAGE SOLUTIONS

ON/OFF Grid Hybrid Inverter

ON/OFF grid Hybrid energy storage system solution: the product power covers single-phase from 2kW to 18kW, aiming to provide energy storagesolutions for areas without electricity, lack of power or with unstablepower, to satisfy the basic energy needs of users.

ON/OFF grid Hybrid energy storage system solution: the product power covers single-phase from 3kW to 6kW, IP65 protection rating, making it suitable for outdoor use. Its rich range of models and efficient solutions are fully capable of meeting the electricity needs of modern households.

Hybrid Solar Inverter

Single-phase hybrid energy storage system solution: product power covers single-phase from 3kW to 8kW, which are costeffective leadersin residential green energy. A wide range of models and efficient solu-tions are enough to meet the power needs of modern homes.

Split-phase hybrid energy storage system solution: product power covers from 5kW to 12kW, mainly used in North American residential orlight commercial scenarios. The product adopts frequency fall controlalgorithm and supports single-phase and three-phase parallel applications, with a maximum of 12 parallel units.

Three-phase hybrid energy storage system solution: the product power covers three-phase 8.5kW to 30.5kW, providing a smarter green energysolution for your residence,with more comprehensive functions to meetthe user's pursuit of high-quality modern technological life.

Small industrial & commercial hybrid energy storage system solution:the product power covers three-phase 29.9kW to 63.5 kW,Smartergreen energy solutions for small industrial and commercial users.Morecomprehensive functions to meet the user's pursuit of high-qualitymodern science and technology life.

INDUSTRIAL & COMMERCIAL ENERGY STORAGE SOLUTIONS

Industrial & Commercial Energy Storage Converters

Product power covers from 50kW to 125kW,a wide range of productmodels can be used for flexible energy storage system scheme de.signs,economic benefits of energy storage systems and the return on investment.

Centralized Energy Storage Converter

The power of the products cover from 250kW to 1.5MW.High-power products have been optimized and innovated throughout the processand are deeply integrated with IoT technology,bringing maximum valueto customers through the characteristics of peak load shifting, safe reliable and intelligent operation.

PORTABLE POWER STATION PRODUCTS

Portable Power Station

SUNOHOO Portable energy storage product series: the product power covers 300W to 700W.The exquisite, compact, lightweight and portable design offers ultimate convenience for your colorful life

SUNOHOO Portable energy storage product series: the product power covers 800Wto 1200W.Moderate power and capacity provide you withmore choices to choose the product that best suits your needs.

SUNOHOO Portable energy storage product series: the product power covers 2000W to 3000W.High power and large capacity eliminate yourpower anxiety and provide the most reliable guarantee for youroutdoor travel and entertainment.

SUNOHOO Portable energy storage product series: the product power covers 3600W to 5500W.High power and large capacity eliminate yourpower anxiety and provide the most reliable guarantee for youroutdoor traveland entertainment.

ENERGY STORAGE BATTERY PRODUCTS

Portable Power Station

SUNOHOO Rack-mounted energy storage battery, with a capacity of 5120Wh offers flexible expansion and convenient installation. It is suited for residential and small-scale commercial and industrial energy storage systems, providing fundamental green energy needs.

SUNOHOO Rack-mounted energy storage battery, with a capacity of 11776Wh,offers flexible expansion and convenient installation. It is suitedfor residential and small-scale commercial and industrial energy storage systems, providing fundamental green energy needs.

SUNOHOO Rack-mounted energy storage battery, with a capacity of 16076Whoffers flexible expansion and convenient installation. It is suitedfor residential and small-scale commercial and industrial energy storage systems, providing fundamental green energy needs.

SUNOHOO Horizontal stacked energy storage battery, with a capacity of 5120Wh,offers flexible expansion and convenient installation. It issuited for residential and small-scale commercial and industrial energystorage systems, providing fundamental green energy needs.

SUNOHOO Wall-Mounted Energy Storage Battery Product, with a battery capacityof 5120Wh, features a wall-mounted installation design that savesspace and offers convenient and flexible installation. It provides a solid guarantee for users green energy needs.

PORTABLE POWER STATION PRODUCTS

Portable Power Station

E 300W ~ 700W/512Wh

1.3 h — Mains Electricity

3 Types — Charging Method

8 Layers — Safety Protection

10 Pcs — Output Port

≤20 ms — Seamless Switching

4000 Times — Charge-discharge Cycles

Product Highlights

- LiFePO4 battery, safer and longer cycle life
- Abundant output ports to power multiple devices simultaneously
- It is equipped with the function of dimensionality-upgrading drive and has extremely strong load adaptability
- AC160~280V ultra-wide charging voltage input range, greater than industry mainstream180~260V
- Accurate temperature control of battery, 5℃ lower than mainstream products, and longer battery life
- The hidden handle design makes it easier tocarry outdoors

Application Scenarios

Drone · Laptop · Phone · Car refrigerator · Electric kettle · Rice cooker · TV · Digital cameras

Digital entertainment, outdoor use, do whatever you want, no need to worry about power problems, say goodbye to battery life anxiety

HPQ0300E ~ HPQ0700E Parameters

MODEL	HPQ0300E	HPQ0400E	HPQ0500E	HPQ0600E	HPQ0700E
Battery Capacity	512Wh				
Output specifications					
AC Output (*2)	230Vac,1.3A,50/60Hz Total 300W(Peak 600W)	230Vac,1.8A,50/60Hz Total 400W(Peak 800W)	230Vac,2.2A,50/60Hz Total 500W(Peak 1000W)	230Vac,2.7A,50/60Hz Total 600W(Peak 1200W)	230Vac,3.1A,50/60Hz Total 700W(Peak 1400W)
AC Output bypass mode (*2)	220-240Vac,50/60Hz,Total 1495W				
USB-A 1 Fastcharge Output(*1)	5/9/12Vdc,1.5A； 18W Max				
USB-A2/3 Output (*2)	Single 5Vdc,2.4A;Total 5Vdc,3A;15W Max				
TYPE- C Output (*1)	5/9/12/15Vdc,3A； 20Vdc,5A;100W Max				
DC12V Output (*2)	Single 12Vdc,3A,36W				
Car Charging Port Output	12Vdc,10A, 120W Max				
Wireless Charging Output	5W/7.5W/10W/15W				
LED Emergency Lighting	2W,3 gear adjustment				
DC12V output and car charging port output power sharing, maximum output 120W.					
Input specifications					
AC Input	220-240Vac,50/60Hz,10A Max				
Charging Time	AC direct charging/1.3 hours				
Solar Charging Input	11~50Vdc,Max 13A,300W				
Car Charging Input	12/24Vdc,Max 8A,100W				
Battery parameters					
Cell Material	LiFePO4				
Battery Standard Cycle Life	4000 cycles to 80+% capacity				
Protection Features	High temperature protection, low temperature protection, charging overvoltage protection, discharge undervoltage protection, charging overcurrent protection, discharge overcurrent protection, overload protection, short circuit protection				
The standard cycle life of the battery is measured in the laboratory at an ambient temperature of 25°C, and the actual data will vary according to the specific use of the user.					
General parameters					
Dimension. W*D*H(mm)	280*190*196				
Weight (kg)	6.8				
Operating Environment					
Charging Ambient Temperature	0°C~45°C				
Discharge Ambient Temperature	-10°C~45°C				
Storage Ambient Temperature	-20°C~45°C				
Humidity	10~95% (Non-condensing)				
Altitude	< 2000m				
Protection Degree	IP20				
Certifications					
Authentication Certificate	CE、UKCA、SAA、CCC、RoHS、UN38.3、MSDS				
Note: Whether this series of products can be charged and discharged normally is determined by the actual temperature of the battery pack.					

Specifications are subject to change without advance notice.

PORTABLE POWER STATION PRODUCTS

Portable Power Station

E 800W~1200W/768Wh

1.3h Mains Electricity

3 Types Charging Method

8 Layers Safety Protection

10 Pcs Output Port

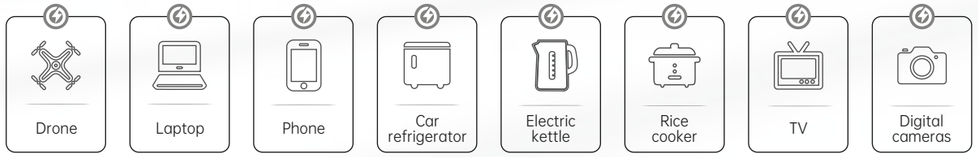
≤20 ms Seamless Switching

3000 Times Charge-discharge Cycles

Product Highlights

- LiFePO4 battery, safer and longer cycle life
- Abundant output ports to power multiple devices simultaneously
- It is equipped with the function of dimensionality-upgrading drive and has extremely strong load adaptability
- AC160~280V ultra-wide charging voltage input range, greater than industry mainstream180~260V
- Accurate temperature control of battery, 5℃ lower than mainstream products, and longer battery life
- The hidden handle design makes it easier tocarry outdoors

Application Scenarios



Digital entertainment, outdoor use, do whatever you want, no need to worry about power problems, say goodbye to battery life anxiety

HPQ0800E ~ HPQ1200E Parameters

MODEL	HPQ0800E	HPQ1000E	HPQ1200E
Battery Capacity	768Wh		
Output specifications			
AC Output (*2)	230Vac,3.5A,50/60Hz Total 800W(Peak 1600W)	230Vac,4.4A,50/60Hz Total 1000W(Peak 2000W)	230Vac,5.2A,50/60Hz Total 1200W(Peak 2400W)
AC Output bypass mode (*2)	220-240Vac,50/60Hz,9A Max		
USB-A 1 Fastcharge Output(*1)	5/9/12Vdc,1.5A； 18W Max		
USB-A2 Output (*1)	5Vdc,2.4A;12W Max		
TYPE- C Output (*2)	Single 5/9/12/15 Vdc,3A;20Vdc,5A;100W Max		
DC12V Output (*2)	Single 12Vdc,3A,36W		
Car Charging Port Output	12Vdc,10A; 120W Max		
Wireless Charging Output	5W/7.5W/10W/15W		
LED Emergency Lighting	2W,3 gear adjustment		
DC12V output and car charging port output power sharing, maximum output 120W.			
Input specifications			
AC Input	220~240Vac,50/60Hz,10A Max		
Charging Time	AC direct charging/1.3 hours		
Solar Charging Input	11-50Vdc,Max 15A,400W		
Car Charging Input	12/24Vdc,Max 8A,100W		
Battery parameters			
Cell Material	LiFePO4		
Battery Standard Cycle Life	3000 cycles to 80+% capacity		
Protection Features	High temperature protection, low temperature protection, charging overvoltage protection, discharge undervoltage protection, charging overcurrent protection, discharge overcurrent protection, overload protection, short circuit protection		
The standard cycle life of the battery is measured in the laboratory at an ambient temperature of 25°C, and the actual data will vary according to the specific use of the user.			
General parameters			
Dimension. W*D*H(mm)	336*218*203		
Weight (kg)	9.8		
Operating Environment			
Charging Ambient Temperature	0°C~40°C		
Discharge Ambient Temperature	-10°C~40°C		
Storage Ambient Temperature	-20°C~45°C		
Humidity	10~95% (Non-condensing)		
Altitude	< 2000m		
Protection Degree	IP20		
Certifications			
Authentication Certificate	CE、SAA、RoHS、UN38.3、MSDS		
Note: Whether this series of products can be charged and discharged normally is determined by the actual temperature of the battery pack.			

Specifications are subject to change without advance notice.

PORTABLE POWER STATION PRODUCTS

Portable Power Station

E 1300W~1800W/1280Wh

1.3h
Mains Electricity

3 Types
Charging Method

8 Layers
Safety Protection

10 Pcs
Output Port

≤20 ms
Seamless Switching

4000 Times
Charge-discharge Cycles

Product Highlights

- LiFePO4 battery, safer and longer cycle life
- Abundant output ports to power multiple devices simultaneously
- It is equipped with the function of dimensionality-upgrading drive and has extremely strong load adaptability
- AC160~280V ultra-wide charging voltage input range, greater than industry mainstream180~260V
- Accurate temperature control of battery, 5℃ lower than mainstream products, and longer battery life
- The hidden handle design makes it easier tocarry outdoors

Application Scenarios

Drone · Laptop · Phone · Car refrigerator · Electric kettle · Rice cooker · TV · Digital cameras

Digital entertainment, outdoor use, do whatever you want, no need to worry about power problems, say goodbye to battery life anxiety

HPQ1300E ~ HPQ1800E Parameters

MODEL	HPQ1300E	HPQ1500E	HPQ1800E
Battery Capacity	1280Wh		
Output specifications			
AC Output (*3)	230Vac,5.7A,50/60Hz Total 1300W(Peak 2600W)	230Vac,6.5A,50/60Hz Total 1500W(Peak 3000W)	230Vac,7.8A,50/60Hz Total 1800W(Peak 3600W)
AC Output bypass mode (*3)	220-240Vac,50/60Hz,10A Max		
USB-A Fastcharge Output(*2)	Single 5/9/12Vdc,1.5A； 18W Max		
TYPE- C Output (*2)	Single 5/9/12/15Vdc,3A； 20Vdc,5A;100W Max		
DC12V Output (*2)	Single 12Vdc,3A,36W		
Car Charging Port Output	12Vdc,10A; 120W Max		
LED Emergency Lighting	5W,3 gear adjustment		
DC12V output and car charging port output power sharing, maximum output 120W.			
Input specifications			
AC Input	220~240Vac,50/60Hz,10A Max		
Charging Time	AC direct charging/1.3 hours		
Solar Charging Input	11-55Vdc,Max 20A,800W		
Car Charging Input	12/24Vdc,Max 8A,100W		
Battery parameters			
Cell Material	LiFePO4		
Battery Standard Cycle Life	4000 cycles to 80+% capacity		
Protection Features	High temperature protection, low temperature protection, charging overvoltage protection, discharge undervoltage protection, charging overcurrent protection, discharge overcurrent protection, overload protection, short circuit protection		
The standard cycle life of the battery is measured in the laboratory at an ambient temperature of 25°C, and the actual data will vary according to the specific use of the user.			
General parameters			
Dimension. W*D*H(mm)	385*223*260		
Weight (kg)	16.5		
Operating Environment			
Charging Ambient Temperature	0°C~40°C		
Discharge Ambient Temperature	-10°C~40°C		
Storage Ambient Temperature	-20°C~45°C		
Humidity	10~95% (Non-condensing)		
Altitude	< 2000m		
Protection Degree	IP20		
Certifications			
Authentication Certificate	CE、RoHS、UN38.3、MSDS		

Note: Whether this series of products can be charged and discharged normally is determined by the actual temperature of the battery pack.

Specifications are subject to change without advance notice.

PORTABLE POWER STATION PRODUCTS

Portable Power Station

E 2000W~3000W/2048Wh

1.3h
Mains Electricity

3 Types
Charging Method

8 Layers
Safety Protection

13 Pcs
Output Port

⩽20 ms
Seamless Switching

4000 Times
Charge-discharge Cycles

Product Highlights

- LiFePO4 battery, safer and longer cycle life
- Abundant output ports to power multiple devices simultaneously
- It is equipped with the function of dimensionality-upgrading drive and has extremely strong load adaptability
- AC160~280V ultra-wide charging voltage input range, greater than industry mainstream180~260V
- Accurate temperature control of battery, 5℃ lower than mainstream products, and longer battery life
- The hidden handle design makes it easier tocarry outdoors

Application Scenarios

Drone · Laptop · Phone · Car refrigerator · Electric kettle · Rice cooker · TV · Digital cameras

Digital entertainment, outdoor use, do whatever you want, no need to worry about power problems, say goodbye to battery life anxiety

HPQ2000E ~ HPQ3000E Parameters

MODEL	HPQ2000E	HPQ2400E	HPQ3000E
Battery Capacity	2048Wh		
Output specifications			
AC Output (*4)	230Vac,8.7A,50/60Hz Total 2000W(Peak 4000W)	230Vac,10.5A,50/60Hz Total 2400W(Peak 4800W)	230Vac,13A,50/60Hz Total 3000W(Peak 6000W)
AC Output bypass mode (*4)	220-240Vac,50/60Hz,10A Max		
USB-A Fastcharge Output(*4)	Single 5/9/12Vdc,1.5A； 18W Max		
TYPE- C Output (*2)	Single 5/9/12/15Vdc,3A； 20Vdc,5A;100W Max		
DC12V Output (*2)	Single 12Vdc,3A,36W		
Car Charging Port Output	12Vdc,10A; 120W Max		
LED Emergency Lighting	5W,3 gear adjustment		
DC12V output and car charging port output power sharing, maximum output 120W.			
Input specifications			
AC Input	220~240Vac,50/60Hz,10A Max		
Charging Time	AC direct charging/1.5 hours		
Solar Charging Input	11-55Vdc,Max 25A,1375W		
Car Charging Input	12/24Vdc,Max 8A,100W		
Battery parameters			
Cell Material	LiFePO4		
Battery Standard Cycle Life	4000 cycles to 80+% capacity		
Protection Features	High temperature protection, low temperature protection, charging overvoltage protection, discharge undervoltage protection, charging overcurrent protection, discharge overcurrent protection, overload protection, short circuit protection		
The standard cycle life of the battery is measured in the laboratory at an ambient temperature of 25°C, and the actual data will vary according to the specific use of the user.			
General parameters			
Dimension. W*D*H(mm)	426*253*282		
Weight (kg)	26.5		
Operating Environment			
Charging Ambient Temperature	0°C~45°C		
Discharge Ambient Temperature	-10°C~45°C		
Storage Ambient Temperature	-20°C~45°C		
Humidity	10~95% (Non-condensing)		
Altitude	< 2000m		
Protection Degree	IP20		
Certifications			
Authentication Certificate	CE、RoHS、UN38.3、MSDS		
Note: Whether this series of products can be charged and discharged normally is determined by the actual temperature of the battery pack.			

Specifications are subject to change without advance notice.

PORTABLE POWER STATION PRODUCTS

Portable Power Station

E 3600W~5500W/5222Wh

1.3h Mains Electricity

3 Types Charging Method

8 Layers Safety Protection

10 Pcs Output Port

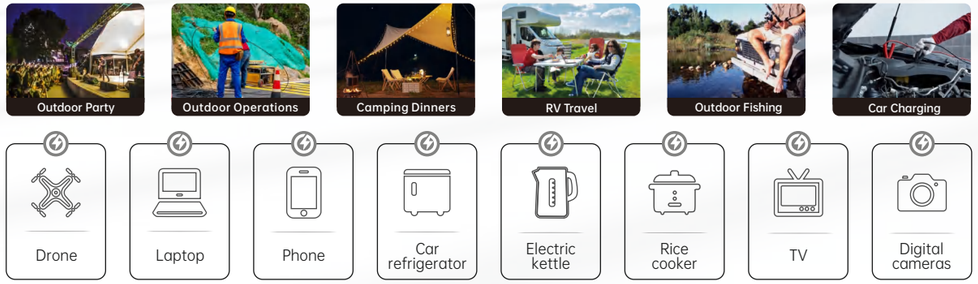
⩽10 ms UPS Seamless Switching

5000 Times Charge-discharge Cycles

Product Highlights

- LiFePO4 battery, safer and longer cycle life
- It is equipped with the function of dimensionality-upgrading drive and has extremely strong load adaptability
- AC160~280V ultra-wide charging voltage input range, greater than industry mainstream180~260V
- It can be connected to the power grid, effectively improving energy utilization efficiency.
- With a 65K-color high-definition touchscreen, it features a rich interface and supports customization of languages worldwide.
- With the design of bottom rollers, it makes outdoor trips more convenient

Application Scenarios



Digital entertainment, outdoor use, do whatever you want, no need to worry about power problems, say goodbye to battery life anxiety

HPQ3600E ~ HPQ5500E Parameters

MODEL	HPQ3600E	HPQ4500E	HPQ5500E
Battery Capacity	5222Wh		
Output specifications			
AC Output （*3）	Single230Vac,10A Max,50/60Hz Total 3600W(Peak 7200W)	Single230Vac,10A Max,50/60Hz Total 4500W(Peak 9000W)	Single230Vac,10A Max,50/60Hz Total 5500W(Peak 11000W)
AC Output power port （*1）	230Vac,15.7A Max,3600W	230Vac，19.6A Max,4500W	230Vac，23.9A Max,5500W
AC Output bypass mode （*3）	220-240Vac,50/60Hz,10A Max		
USB-A Fastcharge Output(*2)	Single 5/9/12Vdc,1.5A； 18W Max		
TYPE- C Output (*2)	Single 5/9/12/15Vdc,3A； 20Vdc,5A;100W Max		
DC12V Output (*2)	Single 12Vdc,3A,36W		
Car Charging Port Output	12Vdc,10A; 120W Max		
DC12V output and car charging port output power sharing, maximum output 120W.			
Input specifications			
AC Input	220~240Vac,50/60Hz		
Charging Time	AC direct charging/1.3 hours		
Solar Charging Input	11-60Vdc,Max 50 A， 3000W		
Car Charging Input	12/24Vdc,Max 8A,100W		
Battery parameters			
Cell Material	LiFePO4		
Battery Standard Cycle Life	5000 cycles to 80+% capacity		
Protection Features	High temperature protection, low temperature protection, charging overvoltage protection, discharge undervoltage protection, charging overcurrent protection, discharge overcurrent protection, overload protection, short circuit protection		
The standard cycle life of the battery is measured in the laboratory at an ambient temperature of 25°C, and the actual data will vary according to the specific use of the user.			
General parameters			
Dimension. W*D*H(mm)	478*282*660		
Weight (kg)	70.6		
Operating Environment			
Charging Ambient Temperature	0°C~45°C		
Discharge Ambient Temperature	-10°C~45°C		
Storage Ambient Temperature	-20°C~45°C		
Humidity	10~95% (Non-condensing)		
Altitude	< 2000m		
Protection Degree	IP20		
Certifications			
Authentication Certificate	CE、SAA、RoHS、UN38.3、MSDS		
Note: Whether this series of products can be charged and discharged normally is determined by the actual temperature of the battery pack.			

Specifications are subject to change without advance notice.

PORTABLE POWER STATION PRODUCTS

Portable Power Station

U 600W-512Wh
U 800W-768Wh

1.3h
Mains Electricity

3 Types
Charging Method

8 Layers
Safety Protection

HPQ0600U

HPQ0800U

9 Pcs
Output Port

≤20ms
Seamless Switching

4000 Times
600U Charge-discharge Cycles

3000 Times
800U Charge-discharge Cycles

Product Highlights

- LiFePO4 battery, safer and longer cycle life
- Abundant output ports to power multiple devices simultaneously
- It is equipped with the function of dimensionality-upgrading drive and has extremely strong load adaptability
- AC 96~144V ultra-wide charging voltage input range
- Accurate temperature control of battery, 5℃ lower than mainstream products, and longer battery life
- The hidden handle design makes it easier tocarry outdoors

Application Scenarios

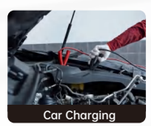

Outdoor Party


Outdoor Operations


Camping Dinners


RV Travel


Outdoor Fishing


Car Charging

Drone | Laptop | Phone | Car refrigerator | Electric kettle | Rice cooker | TV | Digital cameras

Digital entertainment, outdoor use, do whatever you want, no need to worry about power problems, say goodbye to battery life anxiety

HPQ0600U ~ HPQ0800U Parameters

MODEL	HPQ0600U	HPQ0800U
Battery Capacity	512Wh	768Wh
Output specifications		
AC Output (*2)	120Vac~5A,50/60Hz Total 600W(Peak 1200W)	120Vac,6.7A,50/60Hz Total 800W(Peak 1600W)
AC Output bypass mode (*2)	100~130Vac,50/60Hz,Max 9A	
USB-A 1 Fastcharge Output	5/9/12Vdc,1.5A; Max 18W (*1)	5/9/12Vdc,1.5A; Max 18W (*1)
USB-A2/3 Output	Single 5Vdc,2.4A; Total 5Vdc,3A;Max 15W (*2)	Single5Vdc,2.4A;Max 12W (*1)
TYPE- C Output	5/9/12/15Vdc,3A; 20Vdc,5A;Max 100W (*1)	5/9/12/15Vdc,3A; 20Vdc,5A;Max 100W (*2)
DC12V Output (*2)	Single 12Vdc,3A,36W	
Car Charging Port Output	12Vdc,10A, 120W Max	
LED Emergency Lighting	2W,3 gear adjustment	
DC12V output and car cha ging port output power sharing, maximum output 120W.		
Input specifications		
Charging Power	96~144Vac,50/60Hz,10A Max	
Charging Time	AC direct charging/1.3 hours	
Solar Charging Input	11-55Vdc,Max 13A,300W	11-55Vdc,Max 15A,400W
Car Charging Input	12V/24Vdc,Max 8A,100W	
Battery parameters		
Cell Material	LiFePO4	
Battery Standard Cycle Life	4000 cycles to 80+% capacity	3000 cycles to 80+% capacity
Protection Features	High temperature protection, low temperature protection, charging overvoltage protection, discharge undervoltage protection, charging overcurrent protection, discharge overcurrent protection, overload protection, short circuit protection	
The standard cycle life of the battery is measured in the laboratory at an ambient temperature of 77℉, and the actual data will vary according to the specific use of the user.		
General parameters		
Dimension. W*D*H	280*190*196mm (11*7.5*7.7inch)	336*218*203 (13.2*8.6*8inch)
Weight	6.8kg (15Lbs)	9.8kg (21.6Lbs)
Operating Environment		
Charging Ambient Temperature	0℃~45℃ (32℉~113℉)	0℃~40℃ (32℉~104℉)
Discharge Ambient Temperature	-10℃~45℃ (14℉~113℉)	-10℃~40℃ (14℉~104℉)
Storage Ambient Temperature	-20℃~45℃ (-4℉~113℉)	
Humidity	10~95% (Non-condensing)	
Altitude	< 2000m	
Protection Degree	IP20	
Certifications		
Authentication Certificate	CA65、TSCA、UN38.3、FCC、UL2743	
Note: Whether this series of products can be charged and discharged normally is determined by the actual temperature of the battery pack.		

Specifications are subject to change without advance notice.

PORTABLE POWER STATION PRODUCTS

Portable Power Station
500W/480Wh

8 Pcs
Output Port

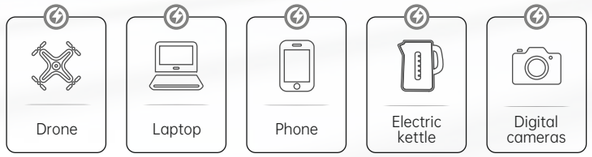
8 Layers
Safety Protection

4000 Times
Charge-discharge Cycles

Product Highlights

- LiFePO4 battery, safer and longer cycle life
- Abundant output ports to power multiple devices simultaneously
- Pure DC output, safe and reliable with guaranteed security.
- The hidden handle design makes it easier tocarry outdoors

Application Scenarios



Digital entertainment, outdoor use, do whatever you want, no need to worry about power problems, say goodbye to battery life anxiety

HPD0500D Parameters

MODEL	HPD0500D
Battery Capacity	480Wh
Output specifications	
USB-A Output(*2)	Single 5V3.4A , 9V2A , 12V1.5A; 18W Max
TYPE- C Output (*2)	Single 5V3A, 9V3A, 12V2.5A, 15V2A, 20V1.5A;30W Max
DC24V Output	Single 24Vdc,12A,288W
DC12V Output (*2)	Single 12Vdc,3A,36W
Car Charging Port Output	12Vdc,10A; 120W Max
LED Emergency Lighting	2W,3 gear adjustment
DC12V output and car charging port output power sharing, maximum output 120W.	
Input specifications	
Solar Charging Input	11-60Vdc,Max 15A,180W
Car Charging Input	12/24Vdc,Max 8A,100W
Battery parameters	
Cell Material	LiFePO4
Battery Standard Cycle Life	6000 cycles to 80+% capacity
Protection Features	High temperature protection, low temperature protection, charging overvoltage protection, discharge undervoltage protection, charging overcurrent protection, discharge overcurrent protection, overload protection, short circuit protection
The standard cycle life of the battery is measured in the laboratory at an ambient temperature of 25°C, and the actual data will vary according to the specific use of the user.	
General parameters	
Dimension. W*D*H(mm)	228*198*232
Weight (kg)	7.3
Operating Environment	
Charging Ambient Temperature	0°C~45°C
Discharge Ambient Temperature	-10°C~45°C
Storage Ambient Temperature	-20°C~45°C
Humidity	10~95% (Non-condensing)
Altitude	< 2000m
Protection Degree	IP20
Certifications	
Authentication Certificate	CE、RoHS、UN38.3、MSDS、GB
Note: Whether this series of products can be charged and discharged normally is determined by the actual temperature of the battery pack.	

Specifications are subject to change without advance notice.

PORTABLE POWER STATION PRODUCTS

Portable Power Station

E 1000W/960Wh

1.5 h — Mains Electricity

3 Types — Charging Method

8 Layers — Safety Protection

8 Pcs — Output Port

⩽20 ms — Seamless Switching

6000 Times — Charge-discharge Cycles

Product Highlights

- LiFePO4 battery, safer and longer cycle life
- Abundant output ports to power multiple devices simultaneously
- It is equipped with the function of dimensionality-upgrading drive and has extremely strong load adaptability
- AC160~280V ultra-wide charging voltage input range, greater than industry mainstream180~260V
- Accurate temperature control of battery, 5℃ lower than mainstream products, and longer battery life
- The hidden handle design makes it easier tocarry outdoors

Application Scenarios

Drone · Laptop · Phone · Car refrigerator · Electric kettle · Rice cooker · TV · Digital cameras

Digital entertainment, outdoor use, do whatever you want, no need to worry about power problems, say goodbye to battery life anxiety

HPD1000E Parameters

MODEL	HPD1000E
Battery Capacity	960Wh
Output specifications	
AC Output (*2)	230Vac.4.4A,50/60Hz,Total 1000W(Peak 2000W)
AC Output bypass mode (*2)	220-240Vac,50/60Hz,9A Max
USB-A Fastcharge Output(*1)	5V2.4A; 12W Max
USB-A Output(*1)	5V3A, 9V2A, 12V1.5A; 18W Max
TYPE- C Output (*2)	Single 5/9/12/15Vdc,3A; 20Vdc,3A;60W Max
DC12V Output (*2)	Single 12Vdc,3A,36W
Car Charging Port Output	12Vdc,10A; 120W Max
LED Emergency Lighting	2W,3 gear adjustment
DC12V output and car charging port output power sharing, maximum output 120W.	
Input specifications	
AC Input	220~240Vac,50/60Hz,10A Max
Charging Time	AC direct charging/1.5 hours
Solar Charging Input	11-60Vdc,Max 15A,400W
Car Charging Input	12/24Vdc,Max 8A,100W
Battery parameters	
Cell Material	LiFePO4
Battery Standard Cycle Life	6000 cycles to 80+% capacity
Protection Features	High temperature protection, low temperature protection, charging overvoltage protection, discharge undervoltage protection, charging overcurrent protection, discharge overcurrent protection, overload protection, short circuit protection
The standard cycle life of the battery is measured in the laboratory at an ambient temperature of 25°C, and the actual data will vary according to the specific use of the user.	
General parameters	
Dimension. W*D*H(mm)	319*216*242
Weight (kg)	13.3
Operating Environment	
Charging Ambient Temperature	0°C~45°C
Discharge Ambient Temperature	-10°C~45°C
Storage Ambient Temperature	-20°C~45°C
Humidity	10~95% (Non-condensing)
Altitude	< 2000m
Protection Degree	IP20
Certifications	
Authentication Certificate	CE、RoHS、UN38.3、MSDS、GB

Note: Whether this series of products can be charged and discharged normally is determined by the actual temperature of the battery pack.

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

ON/OFF GRID HYBRID ENERGY STORAGE SYSTEM SOLUTIONS

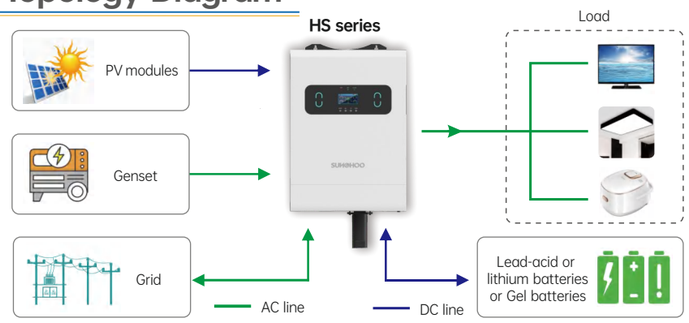
Overview

HS series on/off grid Hybrid Energy Storage Inverters are suitable for various application scenarios in areas without grid power supply or grid instability, remote rural areas, ocean islands or other off-grid needs, which can basically satisfy household electricity demand.

Function Introduction

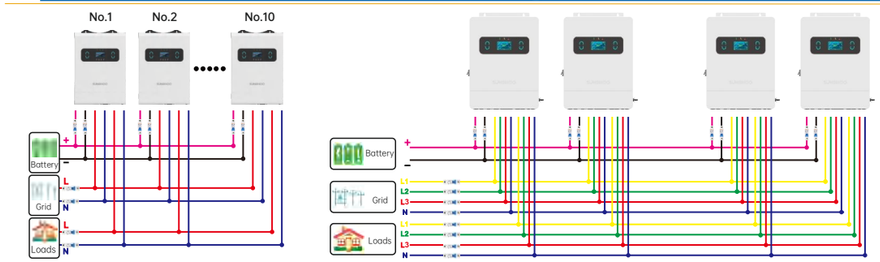
HS series on/off grid Hybrid Energy Storage Inverters will give priority to theload of PV power generation, and the excess power will charge the battery. When the load does not have enough power supply,the inverter will control the battery discharge to power the load.

System Topology Diagram



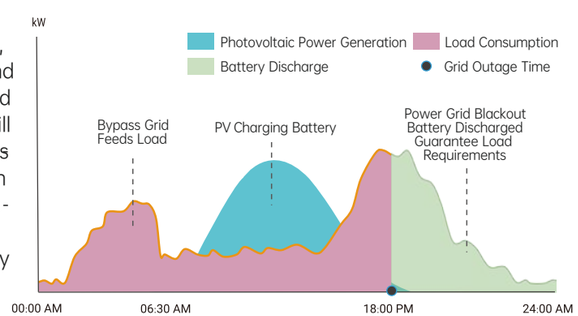
Single phase parallel system diagram (Max. 10 units)

Parallel Connection System Diagram (n≤10)



Emergency Backup Power

The default mode is the load powered by the grid, batteries can be charged by photovoltaic system and grid,and discharge to meet load demand during grid outage.In order to ensure that the power supply will not be interrupted during a power outage, it is neces sary to estimate the length of the power outage in advance and understand the total household elec- tricity consumption, especially the demand for high-power loads, so as to design a suitable energy storage system.



Solar module configuration scheme of on/off grid Hybrid Energy Storage system

Product Model	HS030ELS		HS040ELS		HS050ELS / ELSP	
Component Model	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV
Open-circuit voltage-Voc(V)	37.2	49.85	37.2	49.85	37.2	49.85
Max power point voltage-Vmp(V)	30.67	42.18	30.67	42.18	30.67	42.18
Max power-Pmax(W)	410	550	410	550	410	550
Max power point current(A)	13.37	13.04	13.37	13.04	13.37	13.04
Recommended no. of components in series (string)	3	2	3	2	3	2
-25℃ Ambient PV array open circuit voltage	127.79	112.9	127.79	112.9	127.79	112.9
The max power point voltage of the PV array-Vmp(V)	92.01	84.36	92.01	84.36	92.01	84.36
The max power per string of the PV array-Pmax(W)	1230	1100	1230	1100	1230	1100
Recommended no. of components in parallel (parallel)	2	3	3	4	4	4
PV array input max power-Pmax(W)	2460	3300	3690	4400	4920	4400
PV array max power point current(A)	26.74	39.12	40.11	52.16	53.5	52.16
PV array short-circuit current-Isc (A)	27.72	41.97	41.58	55.96	55.1	55.96
Total no. of access components (blocks)	6	6	9	8	12	8
Min area required for PV module laying (m²)	13	17	20	22	26	22

Product Model	HS1033EH48L		HS1045EH48L		HS1055EH48L/EH48P	
Component Model	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV
Open-circuit voltage-Voc(V)	37.2	49.85	37.2	49.85	37.2	49.85
Max power point voltage-Vmp(V)	30.67	42.18	30.67	42.18	30.67	42.18
Max power-Pmax(W)	410	550	410	550	410	550
Max power point current(A)	13.37	13.04	13.37	13.04	13.37	13.04
Recommended no. of components in series (string)	8	6	11	8	12	9
-25℃ Ambient PV array circuit voltage	340.8	338.6	468.6	451.5	511.2	507.9
The max power point voltage of the PV array-Vmp(V)	245.4	253.08	337.4	337.44	368.0	379.62
The max power per string of the PV array-Pmax(W)	3280	3300	4510	4400	4920	4950
Recommended no. of components in parallel (parallel)	1	1	1	1	1	1
PV array input max power-Pmax(W)	3280	3300	4510	4400	4920	4950
PV array max power point current(A)	13.4	13.04	13.4	13.04	13.4	13.04
PV array short-circuit current-Isc (A)	13.86	13.99	13.86	13.99	13.86	13.99
Total no. of access components (blocks)	8	6	11	8	12	9
Min area required for PV module laying (m²)	18	17	24	22	26	25

Product Model	HS1085EH48L		HS1105EH48L		HS1105EH48P		HS1120EH48L	
Component Model	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV
Open-circuit voltage-Voc(V)	37.2	49.85	37.2	49.85	37.2	49.85	37.2	49.85
Max power point voltage-Vmp(V)	30.67	42.18	30.67	42.18	30.67	42.18	30.67	42.18
Max power-Pmax(W)	410	550	410	550	410	550	410	550
Max power point current(A)	13.37	13.04	13.37	13.04	13.37	13.04	13.37	13.04
Recommended no. of components in series (string)	13	10	13	10	13	10	13	10
-25℃ Ambient PV array open circuit voltage	553.8	564.3	553.8	564.3	553.8	564.3	553.8	564.3
The max power point voltage of the PV array-Vmp(V)	398.71	421.8	398.71	421.8	398.71	421.8	398.71	421.8
The max power per string of the PV array-Pmax(W)	5330	5500	5330	5500	5330	5500	5330	5500
Recommended no. of components in parallel (parallel)	2	2	2	2	2	2	2	2
PV array input max power-Pmax(W)	10660	11000	10660	11000	10660	11000	10660	11000
PV array max power point current(A)	13.37	13.04	13.37	13.04	13.37	13.04	13.37	13.04
PV array short-circuit current-Isc (A)	13.86	13.99	13.86	13.99	13.86	13.99	13.86	13.99
Total no. of access components (blocks)	26	20	26	20	26	20	26	20
Min area required for PV module laying (m²)	58.5	56	58.5	56	58.5	56	58.5	56

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

ON/OFF GRID HYBRID INVERTER

PV High Vol 2.2kW~3.3kW/24V&48V

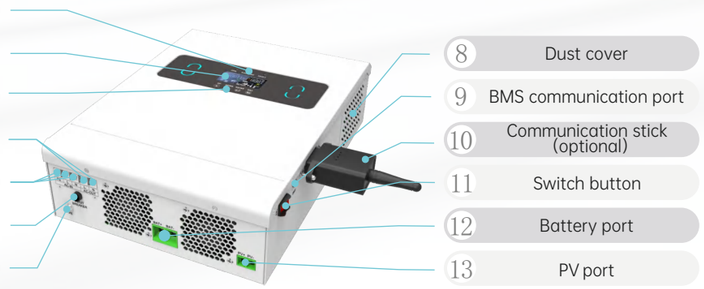
Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- The maximum power of the PV is twice the rated power. It supports full-power charging and full-power load operation
- It has the function of connecting to the power grid, which effectively improves the energy utilization efficiency
- It is equipped with a dimensional upgrade driving function, enabling a larger load power capacity and support for a wider variety of loads.
- It adopts an advanced inverter architecture, which can reliably suppress leakage current and ensure electrical safety.
- It can provide bypass output even without a battery, ensuring continuous power supply to critical loads.
- It is compatible with lead-acid batteries, lithium batteries, gel batteries, etc.
- It has a battery activation function.
- It supports a 24V battery input.

Product Appearance



HS1022EH24L ~ HS1033EH48L Parameters

MODEL	HS1022EH24L	HS1022EH48L	HS1033EH24L	HS1033EH48L
Battery Voltage	24Vdc	48Vdc	24Vdc	48Vdc
Battery Type	Lead-acid, lithium batteries, gel batteries, etc			
Output				
Rated Output Power	2400VA/2200W		3600VA/3300W	
Parallel Function	N/A			
Rated Output Voltage	230Vac ±4%			
Rated Output Frequency	50/60Hz ±0.3(Adaptive)			
Output Waveform	Pure sine wave			
Max Efficiency(Peak)	93.8%			
Rated Current	9.6A		14.3A	
Transfer Time	10ms(Typical value)			
PV Input				
Rated Power	3600W			
MPPT Voltage Range	90~500Vdc			
Max Input Voltage	500Vdc			
Max Charging Current	100A	60A	100A	60A
Mains/ Generator Input				
Max Charging Current	60A	30A	60A	30A
AC Input Voltage Range (UPS mode)	170~280Vac,±2%			
Frequency Range	(47-55Hz) ±0.3 / (57-65Hz) ±0.3			
Battery Input				
Voltage Range	20~33Vdc	40~60Vdc	20~33Vdc	40~60Vdc
Max Charging Current	100A	60A	100A	60A
Default Charging Current	30A			
General Parameters				
Dimension. W*D*H(mm)	372*269*100			
Installation Method	Wall-mounted			
Weight (kg)	7.2			
Communication Mode	RS485，Optional WIFI/4G			
Protection function	Over/Under Voltage Protection、Over/Under Frequency Protection、AC Output Short Circuit Protection、AC Output Overload Protection、High/Low Temp Protection			
Operating Environment				
Operating Ambient Temperature	-25℃~60℃(> 45℃ Derating)			
Storage Ambient Temperature	-20°C~60°C			
Humidity	5%~95% Non-condensation			
Altitude	4000m(> 2000m Derating)			
Protection Degree	IP20 (For indoor use only)			
Certifications				
Certification	CE 、RoHS			
Certifications standard	IEC/EN 61000-6-1/3 、EN 62920 、IEC 62109-1、IEC 62109-2、IEC 62321			

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

ON/OFF GRID HYBRID INVERTER

PV High Vol 4.5kW~5.5kW/48V

Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- The maximum power of the PV is twice the rated power. It supports full-power charging and full-power load operation
- It has the function of connecting to the power grid, which effectively improves the energy utilization efficiency
- It is equipped with a dimensional upgrade driving function, enabling a larger load power capacity and support for a wider variety of loads.
- It adopts an advanced inverter architecture, which can reliably suppress leakage current and ensure electrical safety.
- The Max Supports up to 10 parallel machines, and three-phase group grid.
- It can provide bypass output even without a battery, ensuring continuous power supply to critical loads.
- It supports remote data viewing and remote power ON/OFF.
- It has a battery activation function.
- It is compatible with lead-acid batteries, lithium batteries, gel batteries, etc.

Product Appearance

HS1045EH48L ~ HS1055EH48L&HS1055EH48P Parameters

MODEL	HS1045EH48L	HS1055EH48L	HS1055EH48P
Battery Voltage	48Vdc		
Battery Type	Lead-acid, lithium batteries, gel batteries, etc		
Output			
Rated Output Power	5000VA/4500W	6000VA/5500W	6000VA/5500W
Parallel Function	N/A	N/A	Yes, up to 10 units
Rated Output Voltage	230Vac ±4%		
Rated Output Frequency	50/60Hz ±0.3(Adaptive)		
Output Waveform	Pure sine wave		
Max Efficiency(Peak)	93.8%		
Rated Current	19.6A	23.9A	23.9A
Transfer Time	10ms(Typical value)		
PV Input			
Rated Power	4500W	5500W	5500W
MPPT Voltage Range	90~500Vdc		
Max Input Voltage	500Vdc		
Max Charging Current	80A	100A	100A
Mains/ Generator Input			
Max Charging Current	60A		
AC Input Voltage Range (UPS mode)	170~280Vac,±2%		
Frequency Range	(47-55Hz) ±0.3 / (57-65Hz) ±0.3		
Battery Input			
Voltage Range	40~60Vdc		
Max Charging Current	100A		
Default Charging Current	30A		
General Parameters			
Dimension. W*D*H(mm)	470*330*125		
Installation Method	Wall-mounted		
Weight (kg)	12		
Communication Mode	RS485/Dry contact control，Optional WIFI/4G		
Protection function	Over/Under Voltage Protection、Over/Under Frequency Protection、AC Output Short Circuit Protection、AC Output Overload Protection、High/Low Temp Protection		
Operating Environment			
Operating Ambient Temperature	-25℃~60℃(> 45℃ Derating)		
Storage Ambient Temperature	-20℃~60℃		
Humidity	5%~95% Non-condensation		
Altitude	4000m(> 2000m Derating)		
Protection Degree	IP20 (For indoor use only)		
Certifications			
Certification	CE 、RoHS		
Certifications standard	IEC/EN 61000-6-1/3 、EN 62920 、IEC 62109-1、IEC 62109-2、IEC 62321		

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

ON/OFF GRID HYBRID INVERTER

PV Low Vol 3kW~5kW/48V

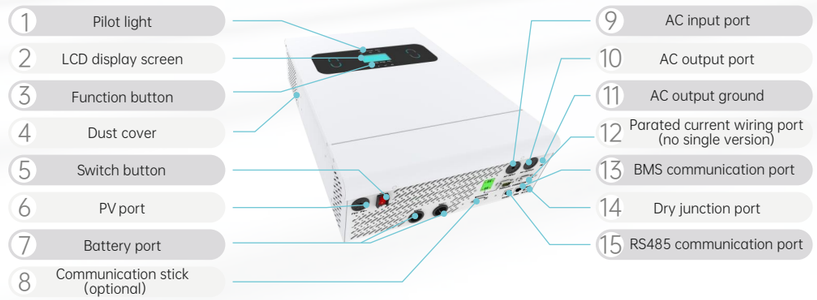
Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- It has the function of connecting to the power grid, which effectively improves the energy utilization efficiency
- It is equipped with a dimensional upgrade driving function, enabling a larger load power capacity and support for a wider variety of loads.
- It adopts an advanced inverter architecture, which can reliably suppress leakage current and ensure electrical safety.
- It can provide bypass output even without a battery, ensuring continuous power supply to critical loads.
- The Max Supports up to 10 parallel machines, and three-phase group grid.
- It is compatible with lead-acid batteries, lithium batteries, gel batteries, etc.
- It has a battery activation function.

Product Appearance



HS030ELS~HS050ELS/HS050ELSP Parameters

MODEL	HS030ELS	HS040ELS	HS050ELS	HS050ELSP
Battery Voltage	48Vdc			
Battery Type	Lead-acid, lithium batteries, gel batteries, etc			
Output				
Rated Output Power	3000VA/3000W	4000VA/4000W	5000VA/5000W	5000VA/5000W
Parallel Function	N/A	N/A	N/A	Yes, up to 10 units
Rated Output Voltage	230Vac ±4%			
Rated Output Frequency	50/60Hz ±0.3(Adaptive)			
Output Waveform	Pure sine wave			
Efficiency(Peak)	93.8%			
Rated Current	13A	18A	22A	22A
Transfer Time	10ms(Typical value)			
PV Input				
Rated Power	3200W	4500W	4500W	4500W
MPPT Voltage Range	60~115Vdc			
Max Input Voltage	145Vdc			
Max Charging Current	60A	80A	80A	80A
PV Countercurrent Protection	Yes			
Mains/ Generator Input				
Max Charging Current	30A	60A	60A	60A
AC Input Voltage Range (UPS mode)	170~280Vac,±2%			
Frequency Range	(47-55Hz) ±0.3 / (57-65Hz) ±0.3			
Battery Input				
Voltage Range	40~60Vdc			
Max Charging Current	90A	140A	140A	140A
Default Charging Current	30A	30A	30A	30A
General Parameters				
Dimension. W*D*H(mm)	470*330*125			
Installation Method	Wall-mounted			
Weight (kg)	12			
Communication Mode	RS485/Dry contact control，Optional WIFI/GPRS/4G			
Protection function	Over/Under Voltage Protection、Over/Under Frequency Protection、AC Output Short Circuit Protection、AC Output Overload Protection、High/Low Temp Protection			
Operating Environment				
Operating Ambient Temperature	-25℃~60℃(> 45℃ Derating)			
Storage Ambient Temperature	-20°C~60°C			
Humidity	5%~95% Non-condensation			
Altitude	4000m(> 2000m Derating)			
Protection Degree	IP20 (For indoor use only)			
Certifications				
Certification	CE 、RoHS			
Certifications standard	IEC/EN 61000-6-1/3 、IEC 62109-1、IEC 62109-2、IEC 62321			

Specifications are subject to change v.ithout advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

ON/OFF GRID HYBRID INVERTER

E 8.5kW~12kW/48V

Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- It supports a max PV input voltage of 530V.
- The maximum power of the PV is twice the rated power. It supports full-power charging and full-power load operation
- Choose between a 65K-color HD touch screen and a segmented code screen. Supports global language customization
- It has an independent generator interface and is compatible with intelligent loads.
- It is possible to set the charging and discharging time periods according to the time-of-use electricity price.
- It has two-level anti-backflow function to protect the power grid from being affected and impacted.
- Bypass output is available even without a battery, ensuring that critical loads remain powered without interruption.
- The Max Supports up to 10 parallel machines, and three-phase group grid.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.

Product Appearance

HS1085EH48L ~ HS1120EH48L Parameters

MODEL	HS1085EH48L	HS1105EH48L	HS1105EH48P	HS1120EH48L
Battery Voltage	48Vdc			
Battery Type	Lead-acid, lithium batteries, gel batteries, etc			
Output				
Rated Output Power	8500VA/8500W	10500VA/10500W	10500VA/10500W	12000VA/12000W
Parallel Function	N/A	N/A	Yes, up to 10 units	N/A
Rated Output Voltage	220/230Vac			
Rated Output Frequency	50/60Hz (± 5), intelligent adaptive / setting			
Output Waveform	Pure sine wave			
Max Efficiency(Peak)	92%			
Rated Current	36.9A	45.6A	45.6A	52.1A
Transfer Time	10ms(Typical value)			
PV Input				
Rated Power	6000W+6000W	7500W+7500W		
MPPT Voltage Range	370Vdc(90~500V)			
Max Input Voltage	500Vdc			
Max Charging Current	180A	200A	200A	200A
Number of MPPT / Strings per MPPT	2/1+1			
Mains/ Generator Input				
Max Charging Current	100A	120A	120A	120A
AC Input Voltage Range (UPS mode)	170~280Vac,±2%			
Rated Frequency	50 / 60Hz			
Battery Input				
Voltage Range	40~60V			
Max Charging Current	180A	200A	200A	200A
General Parameters				
Dimension. W*D*H(mm)	605*425*140			
Installation Method	Wall-mounted			
Weight (kg)	24			
Communication Mode	Standard: RS485 / CAN, Optional 4G / WIFI			
Protection function	Over/Under Voltage Protection、Over/Under Frequency Protection、AC Output Short Circuit Protection、AC Output Overload Protection、High/Low Temp Protection、PV Reverse Connection Alarm			
Operating Environment				
Operating Ambient Temperature	-25℃~60℃(> 45℃ Derating)			
Storage Ambient Temperature	-20°C~60°C			
Humidity	0%~95%			
Altitude	< 2000m			
Protection Degree	IP20 (For indoor use only)			
Certifications				
Certification	CE 、RoHS			
Certifications standard	IEC/EN 61000-6-1/3 、IEC/EN 61000-3-11/12、EN 62920 、IEC 62109-1、IEC 62109-2、IEC 62321			

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

SPLIT-PHASE ON/OFF GRID HYBRID INVERTER

U 8.5kW~12kW/48V

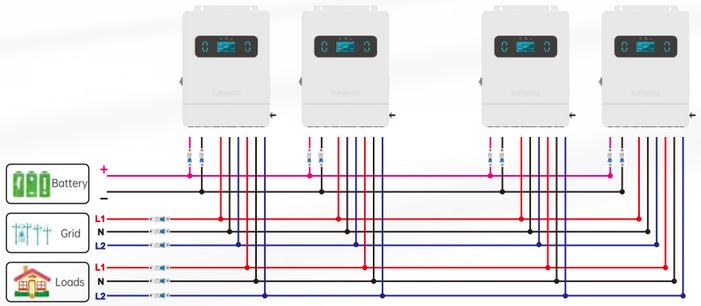
Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- The maximum power of the PV is twice the rated power. It supports full-power charging and full-power load operation
- Choose between a 65K-color HD touch screen and a segmented code screen. Supports global language customization
- It is possible to set the charging and discharging time periods according to the time-of-use electricity price.
- It has the function of connecting to the power grid, which effectively improves the energy utilization efficiency
- It is equipped with a dimensional upgrade driving function, enabling a larger load power capacity and support for a wider variety of loads.
- It adopts an advanced inverter architecture, which can reliably suppress leakage current and ensure electrical safety.
- It can provide bypass output even without a battery, ensuring continuous power supply to critical loads.
- It is compatible with lead-acid batteries, lithium batteries, gel batteries, etc.
- It has a battery activation function.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.

Parallel Connection System Diagram (n≤10)



HS2085UH48L~HS2120UH48L Parameters

MODEL	HS2085UH48L	HS2105UH48L/P	HS2114UH48L/P	HS2120UH48L
Battery Voltage	40~60Vdc			
Battery Type	Lead-acid, lithium batteries, gel batteries, etc			
Output				
Rated Output Power	8500W	10500W	11400W	12000W
Parallel Function	N/A	L:N/A ; P: Yes, up to 10 units	L:N/A ; P: Yes, up to 10 units	N/A
Rated Output Voltage	120/240Vac			
Rated Output Frequency	50/60Hz Intelligent adaptive/configurable			
Output Waveform	Pure sine wave			
Max Efficiency(Peak)	92%			
Rated Current	35.4A	43.7A	47.5A	50.0A
Transfer Time	10ms(Typical value)			
PV Input				
Rated Power	6000W+6000W	7500W+7500W	7500W+7500W	7500W+7500W
MPPT Voltage Range	90~500Vdc			
Max Input Voltage	500Vdc			
Max Charging Current	180A± 5A	200A± 5A	200A± 5A	200A± 5A
Number of MPPT / Strings per MPPT	2/1+1			
Mains/ Generator Input				
Max Charging Current	100A	120A	120A	120A
Nominal input voltage	120Vac~240Vac			
AC Input Voltage Range	90Vac (L~N) ~140Vac (L~N) ,180Vac (L~L) ~280Vac (L~L)			
Frequency Range	(47-55Hz) ±0.3 / (57-65Hz) ±0.3			
Battery Input				
Voltage Range	40~60Vdc			
Max Charging Current	180±5A	200±5A	200±5A	200±5A
Default Charging Current	60A			
General Parameters				
Dimension. W*D*H(mm)	620*140*465			
Installation Method	Wall-mounted			
Weight (kg)	26			
Communication Mode	RS485/CAN Optional WIFI/4G			
Protection function	Over/Under Voltage Protection、Over/Under Frequency Protection、AC Output Short Circuit Protection、AC Output Overload Protection、High/Low Temp Protection、PV Reverse Connection Alarm			
Operating Environment				
Operating Ambient Temperature	-25℃~60℃(> 45℃ Derating)			
Storage Ambient Temperature	-20℃~60℃			
Humidity	5%~95% Non-condensation			
Altitude	4000m(> 2000m Derating)			
Protection Degree	IP20 (For indoor use only)			
Certifications				
Certification	FCC、UL			
Certifications standard	FCC 47 CFR Part 15、UL1741、TSCA、CA65			

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

THREE PHASE ON/OFF GRID HYBRID

E 8.5kW~12kW/48V

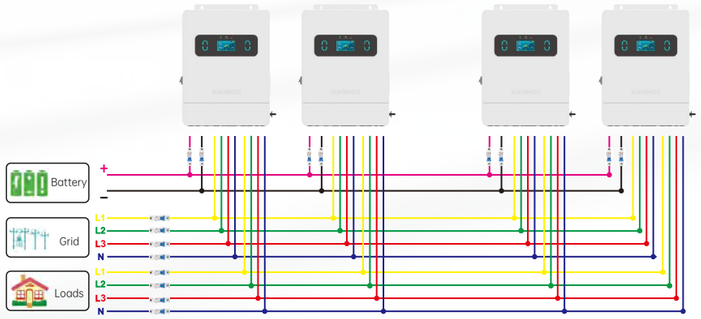
Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- The maximum power of the PV is twice the rated power. It supports full-power charging and full-power load operation
- Choose between a 65K-color HD touch screen and a segmented code screen. Supports global language customization
- It is possible to set the charging and discharging time periods according to the time-of-use electricity price.
- It has the function of connecting to the power grid, which effectively improves the energy utilization efficiency
- It is equipped with a dimensional upgrade driving function, enabling a larger load power capacity and support for a wider variety of loads.
- It adopts an advanced inverter architecture, which can reliably suppress leakage current and ensure electrical safety.
- It can provide bypass output even without a battery, ensuring continuous power supply to critical loads.
- The Max Supports up to 10 parallel machines
- It has a battery activation function.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.

Parallel Connection System Diagram (n≤10)



HS3085EH48L~HS3120EH48L Parameters

MODEL	HS3085EH48L	HS3105EH48L/P	HS3120EH48L
Battery Voltage	40～60Vdc		
Battery Type	Lead-acid, lithium batteries, gel batteries, etc		
Output			
Rated Output Power	8500W	10500W	12000W
Parallel Function	N/A	L:N/A ； P: Yes, up to 10 units	N/A
Rated Output Voltage	220/380Vac ±4%, 230/400Vac ±4%		
Rated Output Frequency	50/60Hz Intelligent adaptive/configurable		
Output Waveform	Pure sine wave		
Max Efficiency(Peak)	92%		
Rated Current	12.3A	15.2A	17.3A
Transfer Time	10ms(Typical value)		
PV Input			
Rated Power	6500W+6500W	7500W+7500W	7500W+7500W
MPPT Voltage Range	120~850Vdc		
Number of MPPT / Strings per MPPT	2/1+1		
Max Input Voltage	1000Vdc		
Max Charging Current	180±5A	200±5A	200±5A
Mains/ Generator Input			
Max Charging Current	100±5A	120±5A	120±5A
AC Input Voltage Range	phase voltage：170Vac~280Vac,line voltage：305Vac~485Vac		
Rated Frequency	50 / 60Hz		
Battery Input			
Voltage Range	40~60Vdc		
Max Charging Current	180±5A	200±5A	200±5A
General Parameters			
Dimension. W*D*H(mm)	625*140*478		
Installation Method	Wall-mounted		
Weight (kg)	24		
Communication Mode	RS485/CAN Optional WIFI/4G		
Protection function	Over/Under Voltage Protection、Over/Under Frequency Protection、AC Output Short Circuit Protection、AC Output Overload Protection、High/Low Temp Protection、PV Reverse Connection Alarm		
Operating Environment			
Operating Ambient Temperature	-25℃~60℃(> 45℃ Derating)		
Storage Ambient Temperature	-20°C~60°C		
Humidity	5%~95% Non-condensation		
Altitude	4000m(> 2000m Derating)		
Protection Degree	IP20 (For indoor use only)		
Certifications			
Certification	CE 、RoHS		
Certifications standard	IEC/EN 61000-6-1/3 、IEC/EN 61000-3-11/12、EN 62920 、IEC 62109-1、IEC 62109-2、IEC 62321		

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

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

PV Low Vol 5kW 5H-20H/51.2V

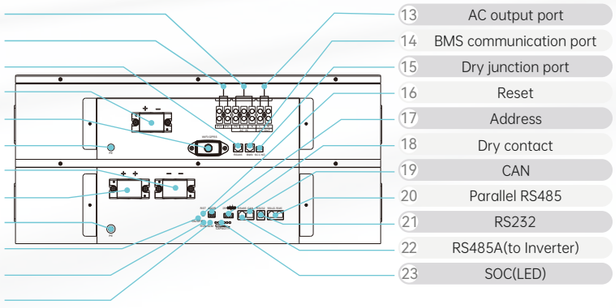
Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- The maximum power of the PV is twice the rated power.
- It can provide bypass output even without a battery, ensuring continuous power supply to critical loads.
- It has the function of connecting to the power grid, which effectively improves the energy utilization efficiency
- It is equipped with a dimensional upgrade driving function, enabling a larger load power capacity and support for a wider variety of loads.
- It adopts an advanced inverter architecture, which can reliably suppress leakage current and ensure electrical safety.
- Modular stacking design, plug and play, convenient installation.
- Modular battery pack, supporting battery expansion, up to 76.8kWh.
- It has a battery activation function.

Product Appearance



HS1050EL48L-5H ~ HS1050EL48L-20H Parameters

MODEL	HS1050EL48L-5H	HS1050EL48L-10H	HS1050EL48L-15H	HS1050EL48L-20H
Output				
Rated Output Power	5500VA/5000W			
Rated Output Voltage	230Vac ±4%			
Rated Output Frequency	50/60Hz ±0.3(Adaptive)			
Output Waveform	Pure sine wave			
Efficiency(Peak)	93.8%			
Rated Current	22A			
Transfer Time	10ms(Typical value)			
Mains/ Generator Input				
Rated Input Voltage	220/230Vac			
Frequency Range	(47-55Hz) ±0.3 / (57-65Hz) ±0.3			
Max Charging Current	60A			
AC Input Voltage Range (UPS mode)	170Vac~280Vac ±2%			
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	6000 cycles to 80+% capacity			
PV Input				
Rated Power	4500W			
Max PV Open-circuit Voltage	145Vdc			
MPPT Voltage Range	60~115Vdc			
Max PV Input Current	50A			
Max PV Charing Current	80A			
General Parameters				
Dimension. W*D*H(mm)	650*460*410	650*460*560	650*460*710	650*460*860
Weight (kg)	76kg	124kg	172kg	219kg
Communication Mode	RS485/Dry contact control, Optional WIFI/GPRS/4G			
Protection function	Over/Under Voltage Protection、Over/Under Frequency Protection、AC Output Short Circuit Protection、AC Output Overload Protection、High/Low Temp Protection、PV Reverse Connection Alarm			
Operating Environment				
Operating Ambient Temperature	-25℃~60℃(> 45℃ Derating)			
Humidity	5%~95% Non-condensation			
Operating Environment	Indoor			
Certifications				
Certification	CE 、RoHS			
Certifications standard	IEC/EN 61000-6-1/3 、EN 62920 、IEC 62109-1、IEC 62109-2、IEC 62321			
Transport certification	UN38.3、MSDS			

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

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

PV High Vol 5.5kW 5H-20H/51.2V

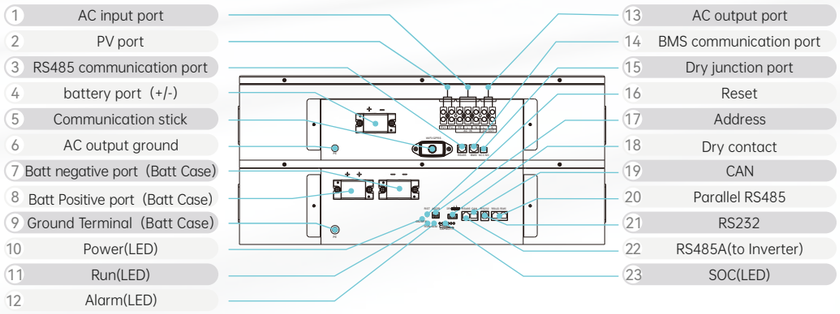
Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- The maximum power of the PV is twice the rated power.
- It can provide bypass output even without a battery, ensuring continuous power supply to critical loads.
- It has the function of connecting to the power grid, which effectively improves the energy utilization efficiency
- It is equipped with a dimensional upgrade driving function, enabling a larger load power capacity and support for a wider variety of loads.
- It adopts an advanced inverter architecture, which can reliably suppress leakage current and ensure electrical safety.
- Modular stacking design, plug and play, convenient installation.
- Modular battery pack, supporting battery expansion, up to 76.8kWh.
- It has a battery activation function.

Product Appearance



HS1055EH48L-5H ~ HS1055EH48L-20H Parameters

MODEL	HS1055EH48L-5H	HS1055EH48L-10H	HS1055EH48L-15H	HS1055EH48L-20H
Output				
Rated Output Power	5500VA/5000W			
Rated Output Voltage	230Vac ±4%			
Rated Output Frequency	50/60Hz ±0.3(Adaptive)			
Output Waveform	Pure sine wave			
Efficiency(Peak)	93.8%			
Rated Current	22A			
Transfer Time	10ms(Typical value)			
Mains/ Generator Input				
Rated Input Voltage	220/230Vac			
Frequency Range	(47-55Hz) ±0.3 / (57-65Hz) ±0.3			
Max Charging Current	60A			
AC Input Voltage Range (UPS mode)	170Vac~280Vac ±2%			
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	6000 cycles to 80+% capacity			
PV Input				
Rated Power	5500W			
Max PV Open-circuit Voltage	500Vdc			
MPPT Voltage Range	90~500Vdc			
Max PV Input Current	20A			
Max PV Charing Current	100A			
General Parameters				
Dimension. W*D*H(mm)	650*460*410	650*460*560	650*460*710	650*460*860
Weight (kg)	76kg	124kg	172kg	219kg
Communication Mode	RS485/Dry contact control, Optional WIFI/GPRS/4G			
Protection function	Over/Under Voltage Protection、Over/Under Frequency Protection、AC Output Short Circuit Protection、AC Output Overload Protection、High/Low Temp Protection、PV Reverse Connection Alarm			
Operating Environment				
Operating Ambient Temperature	-25℃~60℃(> 45℃ Derating)			
Humidity	5%~95% Non-condensation			
Operating Environment	Indoor			
Certifications				
Certification	CE 、RoHS			
Certifications standard	IEC/EN 61000-6-1/3 、EN 62920 、IEC 62109-1、IEC 62109-2、IEC 62321			
Transport certification	UN38.3、MSDS			

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

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

NO PV 5.5kW 5H-20H/51.2V

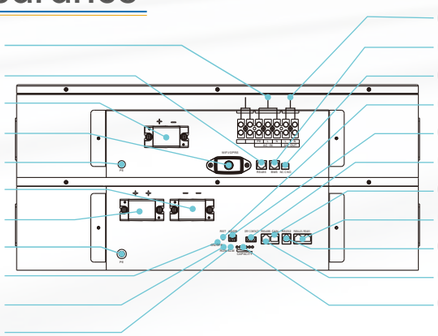
Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- It can provide bypass output even without a battery, ensuring continuous power supply to critical loads.
- It has the function of connecting to the power grid, which effectively improves the energy utilization efficiency
- It is equipped with a dimensional upgrade driving function, enabling a larger load power capacity and support for a wider variety of loads.
- It adopts an advanced inverter architecture, which can reliably suppress leakage current and ensure electrical safety.
- Modular stacking design, plug and play, convenient installation.
- Modular battery pack, supporting battery expansion, up to 76.8kWh.
- It has a battery activation function.

Product Appearance



1	AC input port	12	AC output port
2	RS485 communication port	13	BMS communication port
3	battery port (+/-)	14	Dry junction port
4	Communication stick	15	Reset
5	AC output ground	16	Address
6	Batt negative port (Batt Case)	17	Dry contact
7	Batt Positive port (Batt Case)	18	CAN
8	Ground Terminal (Batt Case)	19	Parallel RS485
9	Power(LED)	20	RS232
10	Run(LED)	21	RS485A(to Inverter)
11	Alarm(LED)	22	SOC(LED)

HS1055EN48L-5H ~ HS1055EN48L-20H Parameters

MODEL	HS1055EN48L-5H	HS1055EN48L-10H	HS1055EN48L-15H	HS1055EN48L-20H
Output				
Rated Output Power	5500VA/5000W			
Rated Output Voltage	230Vac ±4%			
Rated Output Frequency	50/60Hz ±0.3(Adaptive)			
Output Waveform	Pure sine wave			
Efficiency(Peak)	93.8%			
Rated Current	22A			
Transfer Time	10ms(Typical value)			
Mains/ Generator Input				
Rated Input Voltage	220/230Vac			
Frequency Range	(47-55Hz) ±0.3 / (57-65Hz) ±0.3			
Max Charging Current	60A			
AC Input Voltage Range (UPS mode)	170Vac~280Vac±2%			
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	6000 cycles to 80+% capacity			
General Parameters				
Dimension. W*D*H(mm)	650*460*410	650*460*560	650*460*710	650*460*860
Weight (kg)	76kg	124kg	172kg	219kg
Communication Mode	RS485/Dry contact control, Optional WIFI/GPRS/4G			
Protection function	Over/Under Voltage Protection、Over/Under Frequency Protection、AC Output Short Circuit Protection、AC Output Overload Protection、High/Low Temp Protection			
Operating Environment				
Operating Ambient Temperature	-25℃~60℃(> 45℃ Derating)			
Humidity	5%~95% Non-condensation			
Operating Environment	Indoor			
Certifications				
Certification	CE 、RoHS			
Certifications standard	IEC/EN 61000-6-1/3 、EN 62920 、IEC 62109-1、IEC 62109-2、IEC 62321			
Transport certification	UN38.3、MSDS			

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

ON/OFF GRID HYBRID INVERTER

E 3kW-6kW/48V

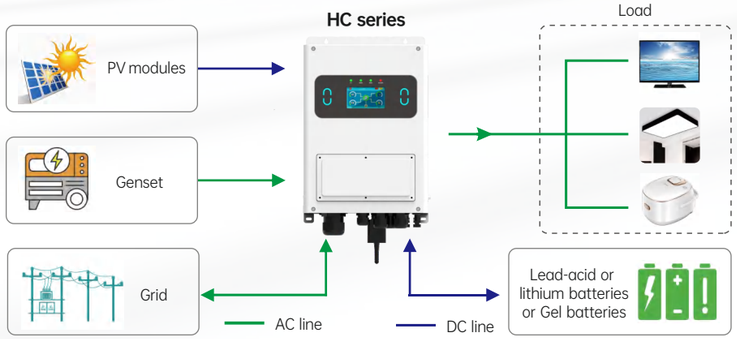
Application Scenarios

Scenarios of no power, lack of power, power instability area, no motor and other impact load scene

Product Highlights

- The PV power can reach up to twice the rated power, and it simultaneously supports full-power charging and load operation.
- It adopts three - stage charge - discharge conversion, which results in low current ripple and prolongs the service life of the battery.
- It is equipped with a multi-functional generator interface, enabling intelligent switching and control, thus saving additional investment.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP65 protection rating, it can be installed outdoors.

Application System Diagram



HC1030EH48L~HC1060EH48L Parameters

MODEL	HC1030EH48L	HC1040EH48L	HC1050EH48L	HC1060EH48L
PV Input				
Max PV Input Power	6000W	4000W+4000W	5000W+5000W	6000W+6000W
Max PV Input Voltage	500Vdc			
PV Input Startup voltage	90Vdc			
MPPT Input Voltage	120-425Vdc			
MPPT Full Load Voltage Range	335-425Vdc	235-425Vdc	295-425Vdc	350-425Vdc
PV Max Input Current	18A	18A+18A		
PV Short-circuit Current	26A			
Number of MPPT / Strings per MPPT	1/1	2/1+1		
AC Output				
Rated Output Voltage	220V/230Vac			
Output Frequency Range	50/60Hz(±5), Intelligent adaptive/Settable			
Rated Off-grid current	13A	17.4A	21.8A	26.1A
Max off-grid Power	3000W	4000W	5000W	6000W
Grid Type	Single Phase, L+N+PE			
Output Power Factor	> 0.99 @ Rated power (Adjustable 0.8 leading-0.8 lagging)			
THDi	< 3%			
Transfer Time	< 10ms			
Off-grid Overload Capability	101%-110% 30s, >110% 10s			
Battery Input				
Battery Type	Lead-acid, lithium batteries, gel batteries, etc			
Battery Voltage	48Vdc(40V~60V)			
Max Discharge Current	75A	100A	110A	120A
Max Charging Current	60A	100A	110A	120A
Max Discharge Power	3000W	4000W	5000W	6000W
Max Charging Power	3000W	4000W	5000W	6000W
AC Input				
Max. Input Power to Battery	3000W	4000W	5000W	6000W
Rated Input Voltage	150-290Vac (140-310V Optional)			
Rated Input Frequency	50/60Hz(±5), Intelligent adaptive/Settable			
Grid Input Current	15A	17.4A	21.8A	26.1A
Efficiency				
Max PV Conversion Efficiency	97.6%			
European Efficiency	96.5%			
MPPT Efficiency	> 99%			
General Parameters				
Display	Touch Screen+LED			
Communication Mode	RS485/CAN，GPRS/WIFI/Bluetooth/4G/LAN (Optional)			
Protection function	Grid/battery over- and undervoltage protection、Grid over- and underfrequency protection、Output short circuit/overload protection、PV reverse connection alarm、Battery charge and discharge overcurrent protection、Insulation impedance protection、Ground fault protection			
Noise (dB)	< 55			
Cooling	Intelligent fan (IP68)			
Operating Ambient Temperature	-40°C~60°C(> 45°C Derating)			
Humidity	0~100%			
Altitude	3000m (>2000m Derating)			
Protection Degree	IP65			
Installation Method	Wall-mounted			
Dimension. W*D*H(mm)	320*170*440			
Gross Weight (kg)	12	14	14.5	15
Warranty	5 years standard			
Certifications				
Certification standard	IEC/EN 61000-6-1/3 、IEC/EN 61000-3-11/12、EN 62920 、IEC 62109-1、IEC 62109-2、IEC 62321			

Specifications are subject to change without advance notice.

Six-in-One Integrated Power Supply for Rvs

2000W
DC output power

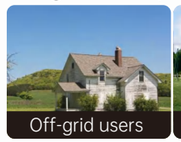
6000W
AC output power

6Psc
Integrated module

4Psc
Charging mode

Application Scenarios

Off-grid users, RV travel、camping


Off-grid users


RV/Camping

Product Highlights

- Integrating six modules for intelligent power generation, storage & consumption management to deliver uninterrupted electricity.
- Parallel AC/DC Power Delivery Architecture Enables Universal Device Compatibility Across Diverse Operational Scenarios
- Multiple Energy Replenishment Methods: Vehicle Generator Charging, PV Charging, Charging Pile Charging, Mains Electricity Charging
- Ultimate energy utilization with simultaneous PV and driving generator charging, enjoying beautiful journey scenery.
- 65K-color HD intelligent touch screen for real-time monitoring of power generation, storage and consumption status of the system.
- With dimensionality-upgrading drive function, applicable to various electrical appliances, featuring super-strong load adaptability.
- Easy to install, highly integrated, space-saving.
- Compatible with lead-acid batteries, lithium batteries, gel batteries, etc.

HS1060CL48L Parameters

MODEL	HS1060CL48L
AC output	
Rated power	6000W
Peak power	10000W
Rated voltage	230Va.c.
Output frequency	50Hz/60Hz
Max output current	26A
DC output	
Rated power	2000W
Rated voltage	13.8Vdc
Max output current	145A
PV output	
Max PV Input Power	1500W
Max PV open-circuit voltage	150Vd.c.
MPPT voltage range	13-145Vd.c.
Max PV input current	30A
Max conversion efficiency	98.1%
Input of DC generator	
Max Input Power	5000W
Rated Input voltage	60Vd.c.
Input voltage range	40-90Vd.c.
Max output current	85A
Input of AC charging pile	
Rated Input voltage	230Va.c.
Input voltage range	160~280Va.c.
Input frequency	50Hz/60Hz
Max output Power	6000W
Mains input	
Rated Input voltage	230Va.c.
Input voltage range	160~280Va.c.
Input frequency	50Hz/60Hz
Max output current	10A
Battery input	
Rated input voltage	51.2V
Battery input voltage range	40-60Vd.c.
Battery type	Lead-acid/lithium batteries
Max input current	200A
Typical efficiency	≧93%
General parameters	
Display mode	Touch screen
Communication mode	CAN/RS485
Cooling method	Intelligent air cooling
Operating ambient temperature	-25~60℃(> 45℃ Derating)
Relative humidity	5%~95%(Non-condensation)
Operating altitude	≤2000m
Protection class	Ip20(Indoor)
Dimensions*D*H(mm)	538*120*485
Weight(kg)	18.3
Noise(dB)	65

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

HYBRID ENERGY STORAGE SYSTEM SOLUTIONS

Overview

HB series hybrid energy storage inverters can meet the needs of photovoltaic and energy storage systems at the same time, with both on-grid and off-grid functions.It can also complete the two-way intelligent con - trol of electric energy and realize highly autonomous energy scheduling.This series provides a variety of working modes,improve the energy independence of users, effectively save electricity costs, and ensure stable electricity consumption.

Function Introduction

Improve the efficiency of self-generation and self-consumption

The system can give priority to the local load during the day PV power generation, and the excess power will charge the battery. At night, the battery is discharged for local loads, and the highest spontaneous self-consumption rate can reach to 95% .

Custom peak-valley adjustment

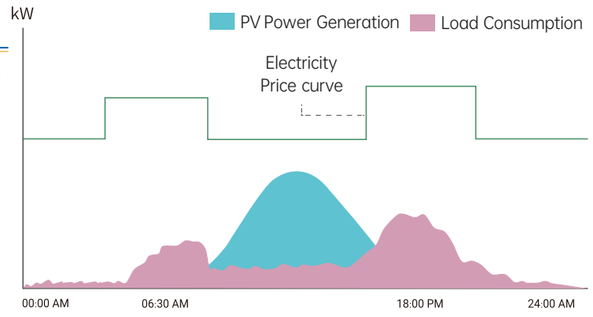
it can set the time to charge and discharge the battery according to the peak-valley electricity price: charging the battery when the electricity price is low, and discharg - ing the battery for local load when the electricity price is high.

Power supply to important loads

When the power grid is cut off, the system can switch to important loads in millisec - onds to continuously supply power to ensure the important loads uninterrupted

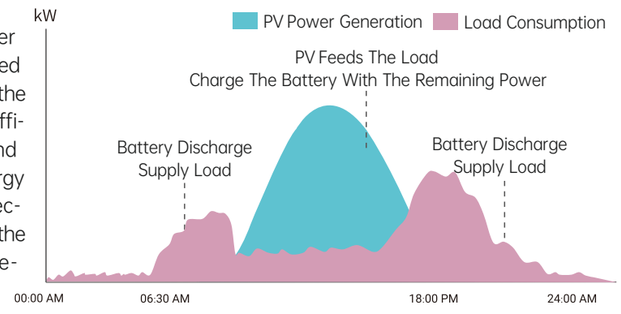
Time-of-use Electricity Prices

If the energy storage system is installed to avoid high electricity prices during peak hours, then the system design needs to be based on the local electricity price time - sharing strategy, and the battery capaci ty needs to be higher than the electricity demand (kWh) during peak hours. A nd the power supply capacity of the energy storage system is higher than the total daily electricity power (kW) .



Self-powered&Self-used

When the photovoltaic system has sufficient power generation, the generated electric energy is prioritized to supply the load, and the excess part is stored in the battery, and when the photovoltaic system has insuffi- cient power generation, it will meet the load demand through battery discharge, so the design of the energy storage system pays attention to the total daily elec- tricity consumption of the household to ensure that the photovoltaic power generation can meet the house- hold electricity demand.



Solar Module Configuration Scheme Of single-phase Hybrid Energy Storage System

Product Model	HB1030EH024/048		HB1036EH048		HB1046EH048		HB1050EH048	
Component Model	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV
Open-circuit voltage-Voc(V)	37.2	49.85	37.2	49.85	37.2	49.85	37.2	49.85
Max power point voltage-Vmp(V)	30.67	42.18	30.67	42.18	30.67	42.18	30.67	42.18
Max power-Pmax(W)	410	550	410	550	410	550	410	550
Max power point current(A)	13.37	13.04	13.37	13.04	13.37	13.04	13.37	13.04
Recommended no. of components in series (string)	10	7	6	4	7	5	8	6
-25℃ Ambient PV array open circuit voltage	426.0	395.0	255.6	225.7	298.20	282.2	340.78	338.6
The max power point voltage of the PV array-Vmp(V)	306.7	295.26	184.0	168.72	214.70	210.9	245.36	253.08
The max power per string of the PV array-Pmax(W)	4100	3850	2460	2200	2870	2750	3280	3300
Recommended no. of components in parallel (parallel)	1	1	2	2	2	2	2	2
PV array input max power-Pmax(W)	4100	3850	4920	4400	5740	5500	6560	6600
PV array max power point current(A)	13.37	13.04	26.74	26.08	26.74	26.08	26.74	26.08
PV array short-circuit current-Isc (A)	13.86	13.99	27.72	27.98	27.72	27.98	27.72	27.98
Total no. of access components (blocks)	10	7	12	8	14	10	16	12
Min area required for PV module laying (m^2)	22	20	26	22	31	28	35	33

Solar Module Configuration Scheme Of Split-phase Hybrid Energy Storage System

Product Model	HB2050UH048		HB2060UH048		HB2076UH048		HB2080UH048	
Component Model	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV
Open-circuit voltage-Voc(V)	37.2	49.85	37.2	49.85	37.2	49.85	37.2	49.85
Max power point voltage-Vmp(V)	30.67	42.18	30.67	42.18	30.67	42.18	30.67	42.18
Max power-Pmax(W)	410	550	410	550	410	550	410	550
Max power point current(A)	13.37	13.04	13.37	13.04	13.37	13.04	13.37	13.04
Recommended no. of components in series (string)	8	6	9	7	8	6	8	6
-25℃ Ambient PV array open circuit voltage	340.8	338.6	383.4	395.0	340.8	338.6	340.78	338.6
The max power point voltage of the PV array-Vmp(V)	245.4	253.08	276.0	295.26	245.4	253.08	245.36	253.08
The max power per string of the PV array-Pmax(W)	3280	3300	3690	3850	3280	3300	3280	3300
Recommended no. of components in parallel (parallel)	2	2	2	2	3	3	3	3
PV array input max power-Pmax(W)	6560	6600	7380	7700	9840	9900	9840	9900
PV array max power point current(A)	26.74	26.08	26.74	26.08	40.1	39.12	40.1	39.12
PV array short-circuit current-Isc (A)	27.72	27.98	27.72	27.98	41.6	41.97	41.6	41.97
Total no. of access components (blocks)	16	12	18	14	24	18	24	18
Min area required for PV module laying (m^2)	35	33	40	39	52	50	52	50

Solar Module Configuration Scheme Of Three-phase Hybrid Energy Storage System

Product Model	HB3060EH600		HB3080EH600		HB3100EH600		HB3120EH600	
Component Model	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV	XNM10-108HV	XNM10-144HV
Open-circuit voltage-Voc(V)	37.2	49.85	37.2	49.85	37.2	49.85	37.2	49.85
Max power point voltage-Vmp(V)	30.67	42.18	30.67	42.18	30.67	42.18	30.67	42.18
Max power-Pmax(W)	410	550	410	550	410	550	410	550
Max power point current(A)	13.37	13.04	13.37	13.04	13.37	13.04	13.37	13.04
Recommended no. of components in series (string)	22	16	15	11	18	14	22	16
-25℃ Ambient PV array open circuit voltage	937.1	901.3	638.91	619.63	766.69	788.62	937.1	901.3
The max power point voltage of the PV array-Vmp(V)	674.74	674.88	460.05	463.98	552.06	590.52	674.74	674.88
The max power per string of the PV array-Pmax(W)	9020	8800	6150	6050	7380	7700	9020	8800
Recommended no. of components in parallel (parallel)	1	1	2	2	2	2	2	2
PV array input max power-Pmax(W)	9020	8800	12300	12100	14760	15400	18040	17600
PV array max power point current(A)	13.37	13.04	26.74	26.08	26.74	26.08	26.74	26.08
PV array short-circuit current-Isc (A)	13.86	13.99	27.72	27.98	27.72	27.98	27.72	27.98
Total no. of access components (blocks)	22	16	30	22	36	28	44	32
Min area required for PV module laying (m^2)	43	41	59	57	70	72	86	83

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

SINGLE-PHASE HYBRID SOLAR INVERTER

E 3kW~8kW/48V

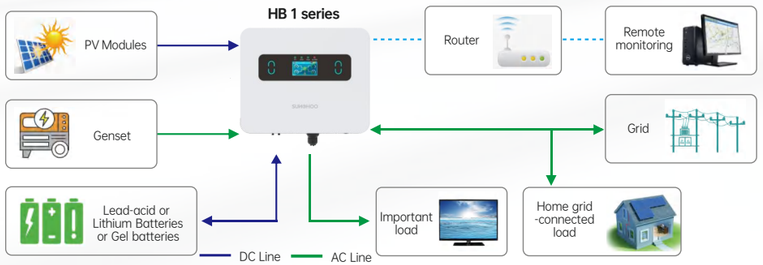
Application Scenarios

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

Product Highlights

- It has the function of soft start when closing the battery switch, which can eliminate the starting inrush current, protecting both the machine and the battery.
- The PV power can reach up to twice the rated power, and it simultaneously supports full-power grid connection as well as charging and energy storage.
- It adopts three - stage charge - discharge conversion, which results in low current ripple and prolongs the service life of the battery.
- The Maximum Supports up to 15 parallel machines,Meet users' capacity expansion needs.
- It is equipped with a multi-functional generator interface, enabling intelligent switching and control, thus saving additional investment.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP66 protection rating, it can be installed outdoors.

Application System Diagram



HB1030EH048 ~ HB1080EH048 Parameters

MODEL	HB1030 EH048	HB1036 EH048	HB1040 EH048	HB1046 EH048	HB1050 EH048	HB1055 EH048	HB1060 EH048	HB1080 EH048
PV Input								
Max PV Input Power	6000W	7200W	8000W	9200W	10000W	11000W	12000W	16000W
Max PV Input Voltage	550Vdc							
PV Input Startup voltage	90Vdc							
MPPT Input Voltage	370Vdc(90~550V)							
MPPT Full Load Voltage Range	210~550Vdc	250~550Vdc	140~550Vdc	160~550Vdc	175~550Vdc	195~550Vdc	210~550Vdc	280~550Vdc
PV Max Input Current	15A		15A+15A					
PV Short-circuit Current	20A		20A+20A					
Number of MPPT / Strings per MPPT	1/1		2/1+1					
AC Output								
Rated Output Voltage/Frequency	220Vac/230Vac/240Vac，50Hz/60Hz							
Grid Voltage Range	Local grid standard mode / Custom mode: 90Vac~280Vac (configurable)							
Rated Output Frequency	45Hz~55Hz,55Hz~65Hz，Intelligent adaptive							
Rated grid-connected current	13A	15.6A	17.4A	20A	21.7A	23.9A	26A	34.8A
Max off-grid current	13.7A	16.4A	18.3A	21A	22.8A	25A	27.4A	38.2A
Rated Grid-connected Active Power	3000W	3600W	4000W	4600W	5000W	5500W	6000W	8000W
Rated Grid-connected Apparent Power	3000VA	3600VA	4000VA	4600VA	5000VA	5500VA	6000VA	8000VA
Max Off-grid Power	3150W	3780W	4200W	4830W	5250W	5775W	6300W	8400W
DC Component	< 0.5% In							
Grid Type	Single-phase，L+N+PE							
Output Power Factor	1 （Adjustable 0.8 leading~0.8 lagging）							
THDi	< 3%							
THDu	< 2%(Linear load)							
Transfer Time	< 10ms(Typical value)							
Off-grid Overload Capability	< 105%Long-term work , 106%-120% 3min , >120% 10S							
Battery Input								
Battery Type	Lead-acid, lithium batteries, gel batteries, etc							
Battery Voltage	48Vdc(40V~60V)							
Max Discharge Current	70A	90A	100A	115A	120A	120A	120A	150A
Max Charging Current	70A	90A	100A	100A	100A	100A	100A	150A
Max Discharge Power	3000W	3600W	4000W	4600W	5000W	5500W	6000W	8000W
Max Charging Power	3000W	3600W	4000W	4600W	5000W	5500W	6000W	8000W
Efficiency								
Max PV Conversion Efficiency	97.6%							
European Efficiency	97.0%							
MPPT Efficiency	> 99%							
General Parameters								
Display	Touch Screen+LED							
Communication Mode	Standard： RS485/CAN/DRM，Optional 4G/WIFI/GPRS							
Protection function	Over/Under Volt Prot、Over/Under Freq Prot、AC Out SC/OL Prot、Anti-Island Prot、Batt Chg/Dchg OC Prot、Leakage Curr Prot、Insul Imped Prot、Grd Fault Prot、PV Rev Conn Alarm							
Surge Protection	DC Type II / AC Type III							
Noise (dB)	< 30							< 58
Cooling	Natural convection							Intelligent fan
Operating Ambient Temperature	-25℃ ~ 60℃(> 45℃ Derating)							
Humidity	0~100%							
Altitude	3000m (>2000m Derating)							
Electricity Consumption At Night	15W							
Protection Degree	IP66							
Installation Method	Wall-mounted							
Dimension. W*D*H(mm)	505*188*413							
Gross Weight (kg)	20			24.5				25
Warranty	5 years standard/10 years optional							
Certifications								
Certification standard	IEC 62109-2 2011，IEC 62109-1 2010，EN/IEC 50549-10, VDE-4105，EC 60529:1989/AMD:2013，GB/T 4208-2017 EN/IEC 61000-6-3:2021, EN 61000-3-12:2011, EN/IEC 61000-3-12:2019, EN/IEC 61000-6-1:2019, RoHS							

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

SINGLE-PHASE HYBRID SOLAR INVERTER

E 10kW~12kW/48V

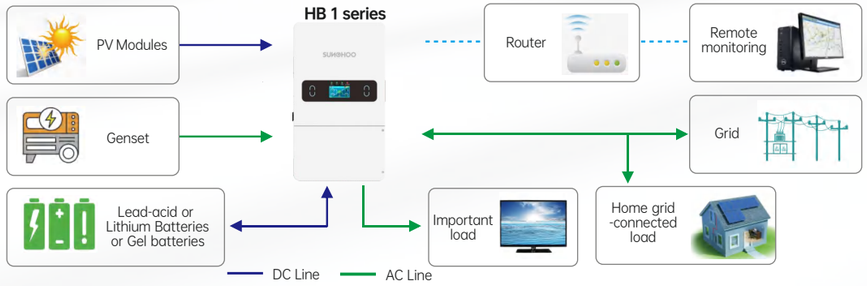
Application Scenarios

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

Product Highlights

- It has the function of soft start when closing the battery switch, which can eliminate the starting inrush current, protecting both the machine and the battery.
- The PV power can reach up to twice the rated power, and it simultaneously supports full-power grid connection as well as charging and energy storage.
- It adopts three - stage charge - discharge conversion, which results in low current ripple and prolongs the service life of the battery.
- The Maximum Supports up to 12 parallel machines,Meet users' capacity expansion needs.
- It is equipped with a multi-functional generator interface, enabling intelligent switching and control, thus saving additional investment.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP66 protection rating, it can be installed outdoors.

Application System Diagram



HB1100EH048 ~ HB1120EH048 Parameters

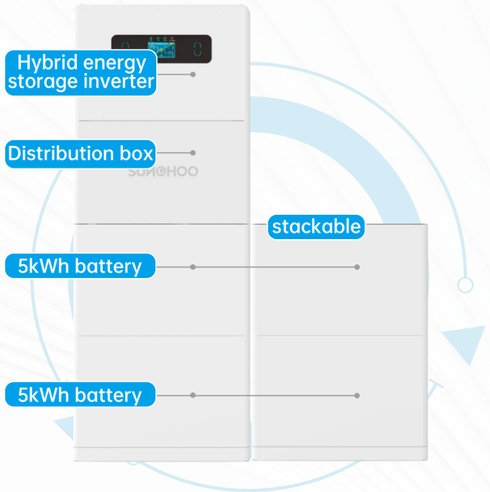
MODEL	HB1100EH048	HB1114EH048	HB1120EH048
PV Input			
Max PV Input Power	20000W	22800W	24000W
Max PV Input Voltage	550Vdc		
PV Input Starting Voltage	90Vdc		
MPPT Input Voltage	370Vdc(90~550V)		
MPPT Full Load Voltage Range	150~425Vdc		
PV Max Input Current	30A+30A		
PV Short-circuit Current	34A+34A		
Number of MPPT / Strings per MPPT	2/2+2		
AC Output			
Rated Output Voltage	220/230Vac（single phase）		
Grid Voltage Range	Local grid standard mode / Custom mode: 90Vac~280Vac (configurable)		
Output Frequency Range	50/60Hz(±5)，Intelligent adaptive/Settable		
Rated grid-connected current	43.5A/45.5A	49.5A/51.8A	52.1A/54.5A
Max off-grid current	45.6A/47.7A	52A/54.4A	54.7A/57.3A
Rated Grid-connected Active Power	10000W	11400W	12000W
Rated Grid-connected Apparent Power	10000VA	11400VA	12000VA
Max Off-grid Power	10500W	11970W	12600W
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	<105%Long-term work，106%-120% 3min，>120% 10S		
Battery Input			
Battery Type	Lead-acid, lithium batteries, gel batteries, etc		
Charging Mode	3-section type/Equilibrium/Self-adaption BMS		
Battery Voltage	48Vdc(40~60V)		
Max Discharge Current	210A	250A	
Max Charging Current	210A(1~210Adjustable)	250A(1~250Adjustable)	
Max Charge/Discharge Power	10000W	11400W	12000W
Efficiency			
Max PV Conversion Efficiency	97.6%		
European Efficiency	97.0%		
MPPT Efficiency	> 99%		
General Parameters			
Display	Touch Screen+LED		
Communication Mode	Standard：RS485/CAN/DRM，Optional 4G/WIFI/GPRS		
Protection function	Over/Under Volt Prot、Over/Under Freq Prot、AC Out SC/OL Prot、Anti-Island Prot、Batt Chg/Dchg OC Prot、Leakage Curr Prot、Insul Imped Prot、Grd Fault Prot、PV Rev Conn Alarm		
Surge Protection	DC Type II / AC Type III		
Noise (dB)	< 45		
Cooling	Intelligent fan		
Operating Ambient Temperature	-25℃ ~ 60℃(> 45℃ Derating)		
Humidity	0~100%		
Altitude	4000m (>2000m Derating)		
Electricity Consumption At Night	15W		
Protection Degree	IP66		
Installation Method	Wall-mounted		
Dimension. W*D*H(mm)	835*246*474		
Weight (kg)	35.6		
Warranty	5 years standard/10 years optional		
Certifications			
Certification standard	IEC 62109-2 2011，IEC 62109-1 2010，EN/IEC 50549-10,EC 60529:1989/AMD:2013，GB/T 4208-2017 EN/IEC 61000-6-3:2021, EN 61000-3-12:2011, EN/IEC 61000-3-12:2019, EN/IEC 61000-6-1:2019, RoHS		

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

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

E 5kW 5H-20H/51.2V



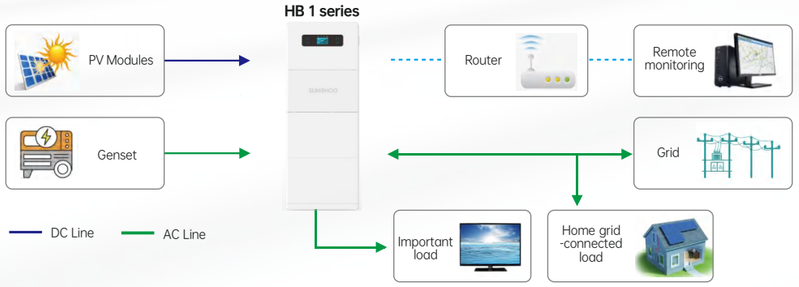
Application Scenarios

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

Product Highlights

- It has the function of soft start when closing the battery switch, which can eliminate the starting inrush current, protecting both the machine and the battery.
- The PV power can reach up to twice the rated power, and it simultaneously supports full-power grid connection as well as charging and energy storage.
- It adopts three - stage charge - discharge conversion, which results in low current ripple and prolongs the service life of the battery.
- Modular stacking design, plug and play, convenient installation.
- Modular battery pack, supporting battery expansion, up to 76.8kWh.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP66 protection rating, it can be installed outdoors.

Application System Diagram



HB1050EH48-5H ~ HB1050EH48-20H Parameters

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,3.2V	2*100Ah,3.2V	3*100Ah,3.2V	4*100Ah,3.2V
Max Charing/Discharing Current	100A			
Designed Life-span	6000 cycles to 80+% capacity			
PV Input				
Max PV Input Power	10kW			
Max PV Open-circuit Voltage	550Vdc			
MPPT Input Voltage	200~550Vdc			
Max PV Input Current	15A+15A			
Number of MPPT / Strings per MPPT	2/1+1			
Effciency				
Max PV Conversion Efficiency	97.6%			
European Efficiency	97.0%			
MPPT Efficiency	> 99%			
General Parameters				
Dimension. W*D*H(mm)	640*196*1240	640*196*1640	640*196*1640	640*196*1640
Weight (kg)	80kg	120kg	160kg	200kg
Communication Mode	RS485/CAN/DRM, Optional 4G/WIFI/GPRS			
Protection function	Over/Under Volt Prot、Over/Under Freq Prot、AC Out SC/OL Prot、Anti-Island Prot、Batt Chg/Dchg OC Prot、Leakage Curr Prot、Insul Imped Prot、Grd Fault Prot、PV Rev Conn Alarm			
Display	Touch Screen+LED			
Surge Protection	DC Type II / AC Type III			
Operating Ambient Temperature	-25°C ~ 60°C(> 45°C Derating)			
Humidity	0~100%			
Protection Degree	IP66			
Certifications				
Certification standard	IEC 62109-2 2011, IEC 62109-1 2010, EN/IEC 50549-10, VDE-4105, EC 60529:1989/AMD:2013, GB/T 4208-2017 EN/IEC 61000-6-3:2021, EN 61000-3-12:2011, EN/IEC 61000-3-12:2019, EN/IEC 61000-6-1:2019, RoHS, UN38.3, MSDS			

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

SPLIT-PHASE HYBRID SOLAR INVERTER

U 5kW~12kW/48V

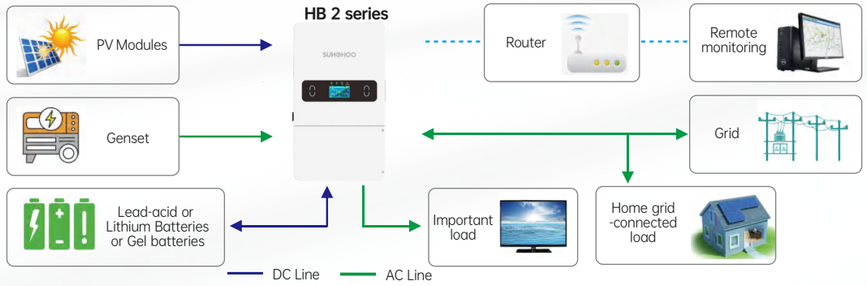
Application Scenarios

North American household or light commercial hybrid energy storage system is applicable to newly installed installed or modified photooltaic energy storage system with AC 120V/208V/240V

Product Highlights

- It has the function of soft start when closing the battery switch, which can eliminate the starting inrush current, protecting both the machine and the battery.
- The PV power can reach up to twice the rated power, and it simultaneously supports full-power grid connection as well as charging and energy storage.
- It adopts three - stage charge - discharge conversion, which results in low current ripple and prolongs the service life of the battery.
- The Maximum Supports up to 12 parallel machines,Meet users' capacity expansion needs.
- It is equipped with a multi-functional generator interface, enabling intelligent switching and control, thus saving additional investment.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP66 protection rating, it can be installed outdoors.

Application System Diagram



HB2050UH048 ~ HB2120UH048 Parameters

MODEL	HB2050 UH048	HB2060 UH048	HB2076 UH048	HB2080 UH048	HB2100 UH048	HB2114 UH048	HB2120 UH048
PV Input							
Max PV Input Power	10000W	12000W	15200W	16000W	20000W	22800W	24000W
Max PV Input Voltage	550Vdc						
PV Input Starting Voltage	90Vdc						
MPPT Input Voltage	370Vdc(90~550V)						
MPPT Full Load Voltage Range	170~550Vdc	210~550Vdc	175~550Vdc	185~550Vdc	175~550Vdc	200~550Vdc	210~550Vdc
PV Max Input Current	15A+15A		30A+15A		30A+30A		
PV Short-circuit Current	17A+17A		34A+17A		34A+34A		
Number of MPPT / Strings per MPPT	2/1+1		2/2+1		2/2+2		
AC Output							
Rated Output Voltage	120/240Vac（Split Phase）, 208Vac（2/3phase）, 220/230Vac（single phase）						
Grid Voltage Range	Local grid standard mode / Custom mode: 90Vac~280Vac (configurable)						
Output Frequency Range	50/60Hz(±5)，Intelligent adaptive/Settable						
Rated Output Current	20.8A/24A	25A/28.8A	31.6A/36.5A	33.3A/38.5A	41.7A/48.1A	47.5A/54.8A	50A/57.7A
Max Grid-connected Current	22.9A/26.4A	27.5A/31.7A	34.8A/40.2A	36.7A/42.3A	45.9A/53A	52.3A/60.3A	55A/63.5A
Rated Grid-connected Power	5000W	6000W	7600W	8000W	10000W	11400W	12000W
Max Grid-connected Viewing Power	5500VA	6600VA	8360VA	8800VA	11000VA	12540VA	13200VA
Max Grid-connected Active Power	5500W	6600W	8360W	8800W	11000W	12540W	13200W
DC Component	< 0.5% In						
Grid Type	Split Phase;2/3 Phase;Single Phase						
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	<110%Long-term work，110%-125% 3min , >125% 10S						
Battery Input							
Battery Type	Lead-acid, lithium batteries, gel batteries, etc						
Charging Mode	3-section type/Equilibrium/Self-adaption BMS						
Battery Voltage	48Vdc(40~60V)						
Max Discharge Current	120A	135A	170A	170A	210A	250A	
Max Charging Current	120A(1~120Adjustable)	135A(1~135Adjustable)	170A(1~170Adjustable)	170A(1~170Adjustable)	210A(1~210Adjustable)	250A(1~250Adjustable)	
Max Charge/Discharge Power	5000W	6000W	7600W	8000W	10000W	11400W	12000W
Efficiency							
Max PV Conversion Efficiency	97.6%						
European Efficiency	97.0%						
MPPT Efficiency	> 99%						
General Parameters							
Display	Touch Screen+LED						
Communication Mode	Standard：RS485/CAN/DRM，Optional 4G/WIFI/GPRS						
Protection function	Over/Under Volt Prot、Over/Under Freq Prot、AC Out SC/OL Prot、Anti-Island Prot、Batt Chg/Dchg OC Prot、Leakage Curr Prot、Insul Imped Prot、Grd Fault Prot、PV Rev Conn Alarm						
Surge Protection	DC Type II / AC Type III						
Noise (dB)	< 45						
Cooling	Intelligent fan						
Operating Ambient Temperature	-25°C ~ 60°C(> 45°C Derating)						
Humidity	0~100%						
Altitude	4000m (>2000m Derating)						
Electricity Consumption At Night	15W						
Protection Degree	IP66						
Installation Method	Wall-mounted						
Dimension. W*D*H(mm)	835*246*474						
Weight (kg)	42						
Warranty	5 years standard/10 years optional						
Certifications							
Certification	FCC、UL						
Certifications standard	FCC 47 CFR Part 15、UL1741、TSCA、CA65						

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

THREE-PHASE HYBRID SOLAR INVERTER

Batt Low Volt 5kW~15.5kW/48V

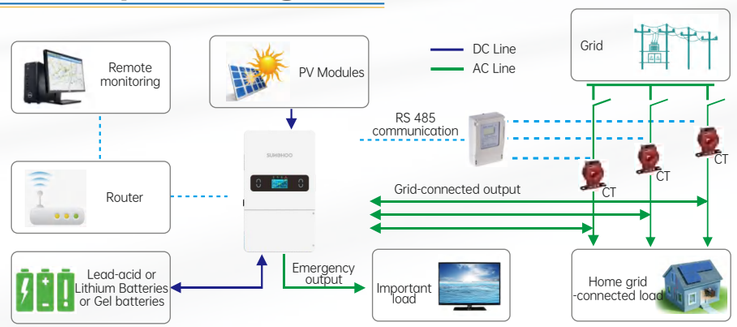
Application Scenarios

Household or light commercial three-phase hybrid energy storage system,is applicable to newly installed or modified photovoltaic energy storage system, AC 380V/400V

Product Highlights

- It has the function of soft start when closing the battery switch, which can eliminate the starting inrush current, protecting both the machine and the battery.
- The PV power can reach up to twice the rated power, and it simultaneously supports full-power grid connection as well as charging and energy storage.
- It adopts three - stage charge - discharge conversion, which results in low current ripple and prolongs the service life of the battery.
- The Maximum Supports up to 15 parallel machines,Meet users' capacity expansion needs.
- It is equipped with a multi-functional generator interface, enabling intelligent switching and control, thus saving additional investment.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP66 protection rating, it can be installed outdoors.

Application System Diagram



HB3050EH048~HB3155EH048 Parameters

MODEL	HB3050EH048	HB3060EH048	HB3085EH048	HB3105EH048	HB3125EH048	HB3155EH048
PV Input						
Max PV Input Power	10000W	12000W	17000W	21000W	25000W	31000W
Max PV Input Voltage	1000Vdc					
PV Input Starting Voltage	120Vdc					
MPPT Input Voltage	120~850Vdc					
MPPT Full Load Voltage Range	175~850Vdc	210~850Vdc	300~850Vdc	245~850Vdc	295~850Vdc	272~850Vdc
PV Max Input Current	15A+15A			30A+15A		30A+30A
PV Short-circuit Current	17A+17A			34A+17A		34A+34A
Number of MPPT / Strings per MPPT	2/1+1			2/2+1		2/2+2
AC Output						
Rated Output Voltage	220/380Vac, 230/400Vac					
Grid Voltage Range	Local grid standard mode / Custom mode: 90Vac~280Vac (configurable)					
Output Frequency Range	50/60Hz(±5), Intelligent adaptive/Settable					
Max Output Current	8A	9.5A	13.5A	16.7A	19.9A	24.7A
Rated Grid-connected Current	7.2/7.6A	8.7/9.1A	12.9/12.3A	15.9/15.2A	18.9/18.1A	23.5/22.5A
Rated Grid-connected Power	5000W	6000W	8500W	10500W	12500W	15500W
Max Grid-connected Viewing Power	5250VA	6300VA	8925VA	11025VA	13125VA	16275VA
Max Grid-connected Active Power	5250W	6300W	8925W	11025W	13125W	16275W
DC Component	< 0.5% In					
Grid Type	Three-phase, 3L+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	<105%Long-term work, 105%-120% 1min , >120% 10S					
Battery Input						
Battery Type	Lead-acid, lithium batteries, gel batteries, etc					
Charging Mode	3-section Type/Equilibrium/Self-adaption BMS					
Battery Voltage range	40~60V					
Max Discharge/Charging Current	120A	145A	180A	220A	250A	280A
Rated Discharge/Charging Current	5000W	6000W	8500W	10500W	12500W	15500W
Efficiency						
Max PV Conversion Efficiency	97.6%					
European Efficiency	97.0%					
MPPT Efficiency	> 99%					
General Parameters						
Display	Touch Screen+LED					
Communication Mode	Standard: RS485/CAN/DRM, Optional 4G/WIFI/GPRS					
Protection function	Over/Under Volt Prot、Over/Under Freq Prot、AC Out SC/OL Prot、Anti-Island Prot、Batt Chg/Dchg OC Prot、Leakage Curr Prot、Insul Imped Prot、Grd Fault Prot、PV Rev Conn Alarm					
Surge Protection	DC Type II / AC Type III					
Noise (dB)	< 55					
Cooling	Intelligent forced air cooling					
Operating Ambient Temperature	-25°C ~ 60°C(> 45°C Derating)					
Humidity	0~100%					
Altitude	4000m (>2000m Derating)					
Protection Degree	IP66					
Installation Method	Wall-mounted					
Dimension. W*D*H(mm)	835*246*474					
Weight (kg)	34	35	38	40	42	
Warranty	5 years standard/10 years optional					
Certifications						
Certification standard	IEC 62109-2 2011, IEC 62109-1 2010, EN/IEC 50549-10, VDE-4105, EC 60529:1989/AMD:2013, GB/T 4208-2017 EN/IEC 61000-6-3:2021, EN 61000-3-12:2011, EN/IEC 61000-3-12:2019, EN/IEC 61000-6-1:2019, RoHS					

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

THREE-PHASE HYBRID SOLAR INVERTER

E 8.5kW~15.5kW/125~600V

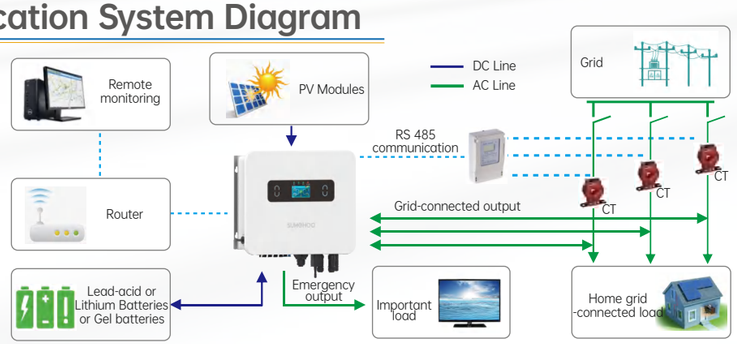
Application Scenarios

Household or light commercial three-phase hybrid energy storage system,is applicable to newly installed or modified photovoltaic energy storage system, AC 380V/400V

Product Highlights

- It has the function of soft start when closing the battery switch, which can eliminate the starting inrush current, protecting both the machine and the battery.
- The PV power can reach up to twice the rated power, and it simultaneously supports full-power grid connection as well as charging and energy storage.
- It adopts three - stage charge - discharge conversion, which results in low current ripple and prolongs the service life of the battery.
- The Maximum Supports up to 15 parallel machines,Meet users' capacity expansion needs.
- It is equipped with a multi-functional generator interface, enabling intelligent switching and control, thus saving additional investment.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP66 protection rating, it can be installed outdoors.

Application System Diagram



HB3085EH600~HB3155EH600 Parameters

MODEL	HB3085EH600	HB3105EH600	HB3125EH600	HB3155EH600
PV Input				
Max PV Input Power	17000W	21000W	25000W	31000W
Max PV Input Voltage	1000Vdc			
PV Input Starting Voltage	120Vdc			
MPPT Input Voltage	120~850Vdc			
MPPT Full Load Voltage Range	320~850Vdc	400~850Vdc	320~850Vdc	400~850Vdc
PV Max Input Current	15A+15A		30A+15A	30A+30A
PV Short-circuit Current	17A+17A		34A+17A	34A+34A
Number of MPPT / Strings per MPPT	2/1+1		2/2+1	2/2+2
AC Output				
Rated Output Voltage	220/380Vac, 230/400Vac			
Grid Voltage Range	Local grid standard mode / Custom mode: 90Vac~280Vac (configurable)			
Output Frequency Range	50/60Hz(±5), Intelligent adaptive/Settable			
Rated Output Current	12.3A	15.2A	18.2A	22.4A
Max Grid-connected Current	14.2A	17.5A	20.8A	25.8A
Rated Grid-connected Power	8500W	10500W	12500W	15500W
Max Grid-connected Viewing Power	9350VA	11550VA	13750VA	17050VA
Max Grid-connected Active Power	9350W	11550W	13750W	17050W
DC Component	< 0.5% In			
Grid Type	Three-phase, 3L+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	<110%Long-term work, 110%-120% 1min , >120% 10S			
Battery Input				
Battery Type	Lead-acid, lithium batteries, gel batteries, etc			
Charging Mode	3-section Type/Equilibrium/Self-adaption BMS			
Battery Voltage	125~600V			
Max Discharge/Charging Current	50A			
Rated Discharge/Charging Current	40A			
Efficiency				
Max PV Conversion Efficiency	97.6%		98.2%	
European Efficiency	97.0%		97.5%	
MPPT Efficiency	> 99%			
General Parameters				
Display	Touch Screen+LED			
Communication Mode	Standard: RS485/CAN/DRM, Optional 4G/WIFI/GPRS			
Protection function	Over/Under Volt Prot、Over/Under Freq Prot、AC Out SC/OL Prot、Anti-Island Prot、Batt Chg/Dchg OC Prot、Leakage Curr Prot、Insul Imped Prot、Grd Fault Prot、PV Rev Conn Alarm			
Surge Protection	DC Type II / AC Type III			
Noise (dB)	< 30			
Cooling	Intelligent forced air cooling			
Operating Ambient Temperature	-25°C ~ 60°C(> 45°C Derating)			
Humidity	0~100%			
Altitude	4000m (>2000m Derating)			
Electricity Consumption At Night	15W			
Protection Degree	IP66			
Installation Method	Wall-mounted			
Dimension. W*D*H(mm)	590*200*488			
Weight (kg)	33			
Warranty	5 years standard/10 years optional			
Certifications				
Certification standard	IEC 62109-2 2011, IEC 62109-1 2010, EN/IEC 50549-10, VDE-4105, EC 60529:1989/AMD:2013, GB/T 4208-2017 EN/IEC 61000-6-3:2021, EN 61000-3-12:2011, EN/IEC 61000-3-12:2019, EN/IEC 61000-6-1:2019, RoHS			

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

THREE-PHASE HYBRID SOLAR INVERTER

E 20.5kW~30.5kW/120~600V

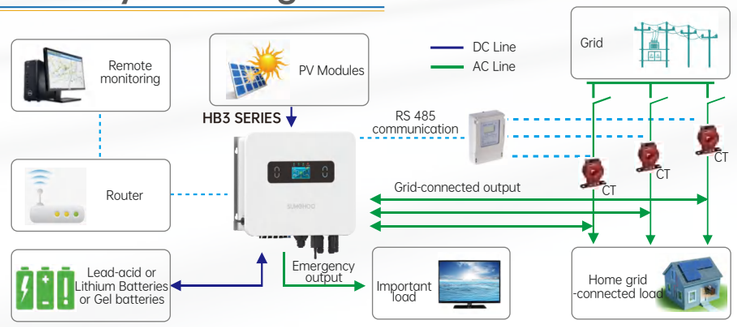
Application Scenarios

Household or light commercial three-phase hybrid energy storage system,is applicable to newly installed or modified photovoltaic energy storage system, AC 380V/400V

Product Highlights

- It has the function of soft start when closing the battery switch, which can eliminate the starting inrush current, protecting both the machine and the battery.
- The PV power can reach up to twice the rated power, and it simultaneously supports full-power grid connection as well as charging and energy storage.
- It adopts three - stage charge - discharge conversion, which results in low current ripple and prolongs the service life of the battery.
- The Maximum Supports up to 15 parallel machines,Meet users' capacity expansion needs.
- It is equipped with a multi-functional generator interface, enabling intelligent switching and control, thus saving additional investment.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP66 protection rating, it can be installed outdoors.

Application System Diagram



HB3205EH600~HB3305EH600 Parameters

MODEL	HB3205EH600	HB3255EH600	HB3299EH600	HB3305EH600
PV Input				
Max PV Input Power	41kW	51kW	60kW	61kW
Max PV Input Voltage	1000Vdc			
PV Input Starting Voltage	120Vdc			
MPPT Input Voltage	120~850Vdc			
MPPT Full Load Voltage Range	260~850Vdc	215~850Vdc	250~850Vdc	255~850Vdc
PV Max Input Current	30A+30A+15A	30A+30A+30A		
PV Short-circuit Current	34A+34A+17A	34A+34A+34A		
Number of MPPT / Strings per MPPT	2 / 2/2+1	3 / 2+2+2	3 / 2+2+2	3 / 2+2+2
AC Output				
Rated Output Voltage	220/380Vac,230/400Vac			
Grid Voltage Range	Local grid standard mode / Custom mode: 90Vac~280Vac (configurable)			
Output Frequency Range	50/60Hz			
Rated Output Current	31A/29.7A	38.6A/37A	45.3A/43.3A	46.2A/44.2
Max Grid-connected Current	31A/29.7A	38.6A/37A	45.3A/43.3A	46.2A/44.2
Rated Grid-connected Power	20500W	25500W	29900W	30500W
Max Grid-connected Viewing Power	22550VA	28050VA	32890VA	33550VA
Max Grid-connected Active Power	20500W	25500W	29900W	30500W
DC Component	< 0.5% In			
Grid Type	Three-phase，3L+N+PE			
Output Power Factor(cosφ)	> 0.99 @ Rated power （Adjustable 0.8 leading~0.8 lagging）			
THDi	< 3%			
THDu	< 3%(Linear load)			
Transfer Time	10ms(Typical value)			
Off-grid Overload Capability	<110%Long-term work，110%-120% 1min，>120% 10S			
Battery Input				
Battery Type	Lead-acid, lithium batteries, gel batteries, etc			
Charging Mode	3-section Type/Equilibrium/Self-adaption BMS			
Battery Voltage	120-600V			
Max Discharge Current	50A			
Max Charging Current	50A			
Efficiency				
Max PV Conversion Efficiency	98%			
European Efficiency	97.0%			
MPPT Efficiency	> 99%			
General Parameters				
Display	Touch Screen+LED			
Communication Mode	Standard：RS485/CAN，Optional 4G/WIFI/GPRS			
Protection function	Over/Under Volt Prot、Over/Under Freq Prot、AC Out SC/OL Prot、Anti-Island Prot、Batt Chg/Dchg OC Prot、Leakage Curr Prot、Insul Imped Prot、Grd Fault Prot、PV Rev Conn Alarm			
Surge Protection	DC Type II / AC Type III			
Noise (dB)	< 30			
Cooling	Intelligent fan cooling			
Operating Ambient Temperature	-35°C ~ 60°C			
Humidity	0~95%			
Altitude	4000m (>2000m Derating)			
Electricity Consumption At Night	< 15W			
Protection Degree	IP66			
Installation Method	Wall-mounted			
Dimension. W*D*H(mm)	520*220*660			
Weight (kg)	48	50	54	54
Warranty	5 years standard/10 years optional			
Certifications				
Certification standard	IEC 62109-2 2011，IEC 62109-1 2010，EN/IEC 50549-10, VDE-4105，EC 60529:1989/AMD:2013，GB/T 4208-2017 EN/IEC 61000-6-3:2021, EN 61000-3-12:2011, EN/IEC 61000-3-12:2019, EN/IEC 61000-6-1:2019, RoHS			

Specifications are subject to change without advance notice.

HOUSEHOLD ENERGY STORAGE SYSTEM

SMALL INDUSTRIAL & COMMERCIAL HYBRID SOLAR INVERTER

E 29.9kW~63.5kW/150~800V

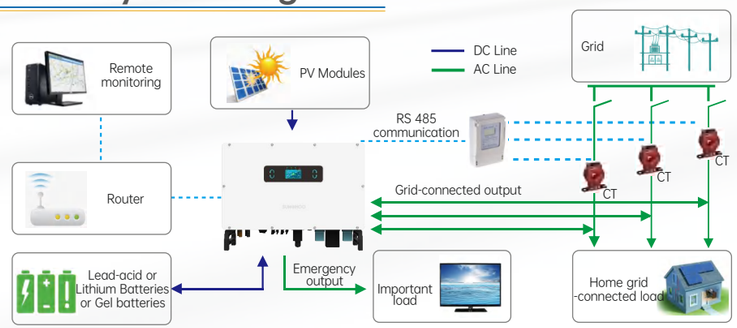
Application Scenarios

light commercial three-phase hybrid energy storage system, is applicable to newly installed or modified photovoltaic energy storage system, AC 380V/400V output

Product Highlights

- It has the function of soft start when closing the battery switch, which can eliminate the starting inrush current, protecting both the machine and the battery.
- The PV power can reach up to twice the rated power, and it simultaneously supports full-power grid connection as well as charging and energy storage.
- It adopts three - stage charge - discharge conversion, which results in low current ripple and prolongs the service life of the battery.
- The Maximum Supports up to 15 parallel machines,Meet users' capacity expansion needs.
- It is equipped with a multi-functional generator interface, enabling intelligent switching and control, thus saving additional investment.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP66 protection rating, it can be installed outdoors.

Application System Diagram



HB3299EH800~HB3635EH800 Parameters

MODEL	HB3299EH800	HB3360EH800	HB3408EH800	HB3510EH800	HB3635EH800
PV Input					
Max PV Input Power	60kW	72kW	81.6kW	102kW	127kW
Max PV Input Voltage	1000Vdc				
PV Input Starting Voltage	180Vdc				
MPPT Input Voltage	150~850Vdc				
MPPT Full Load Voltage Range	250~850Vdc	360~850Vdc	420~850Vdc	420~850Vdc	450~850Vdc
PV Max Input Current	40A+40A+40A	40A+40A+40A	40A+40A+40A+40A		
PV Short-circuit Current	60A+60A+60A	60A+60A+60A	60A+60A+60A+60A		
Number of MPPT / Strings Per MPPT	3/2+2+2	3/2+2+2	4/2+2+2+2		
AC Output					
Rated Output Volt/Freq Range	220/380Vac, 230/400Vac，50/60Hz(±5)，Intelligent adaptive/Settable				
Grid Voltage Range	Local grid standard mode / Custom mode: 90Vac~280Vac (configurable)				
Rated Output Current	45.3/43.3A	54.4/52A	61.6/58.9A	76.9/73.6A	95.9/91.7A
Max Grid-connected Current	45.3/43.3A	59.8/57.2A	67.7/64.8A	84.7/81A	95.9/91.7A
Rated Grid-connected Power	29.9kW	36kW	40.8kW	51kW	63.5kW
Max Grid-connected Viewing Power	32.89kVA	39.6kVA	44.9kVA	56.1kVA	63.5kVA
Max Grid-connected Active Power	29.9kW	36kW	40.8kW	51kW	63.5kW
DC Component	< 0.5% In				
Grid Type	Three-phase，3L+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	<110%Long-term work，110%-120% 1min，>120% 10S				
Battery Input					
Battery Type	Lead-acid, lithium batteries, gel batteries, etc				
Charging Mode	3-section Type/Equilibrium/Self-adaption BMS				
Battery Voltage	150~800V				
Max Discharge Current	70A+70A				
Max Charging Current	70A+70A				
Max Charge/Discharge Power	2				
Efficiency					
Max PV Conversion Efficiency	98%				
European Efficiency	97.6%				
PV Charging Efficiency	98.6%				
Max Battery Charging/discharging Efficiency	97.6%				
General Parameters					
Display	Touch Screen+LED				
Communication Mode	Standard：RS485/CAN/DRM，Optional 4G/WIFI/GPRS/Temperature compensation module				
Protection function	Island Protection, AC Output Overcurrent Protection, AC Short Circuit Protection, DC Reverse Connection Protection, Optional:Integrated AFCI (DC arc fault protection)				
Surge Protection	DC Type II / AC Type III				
Noise (dB)	< 65				
Cooling	Intelligent fan				
Operating Ambient Temperature	-40°C ~ 60°C(> 45°C Derating)				
Humidity	0~100%				
Altitude	4000m (>3000m Derating)				
Electricity Consumption At Night	25W				
Protection Degree	IP66				
Installation Method	Wall-mounted				
Dimension. W*D*H(mm)	850*300*535				
Weight (kg)	62				
Warranty	5 years standard/10 years optional				
Certifications					
Certification standard	IEC 62109-2 2011，IEC 62109-1 2010，EN/IEC 50549-10, VDE-4105，EC 60529:1989/AMD:2013，GB/T 4208-2017 EN/IEC 61000-6-3:2021, EN 61000-3-12:2011, EN/IEC 61000-3-12:2019, EN/IEC 61000-6-1:2019, RoHS				

Specifications are subject to change without advance notice.

ENERGY STORAGE BATTERY SOLUTION

Energy storage battery

51.2V/100Ah

N*51.2V/100Ah

Product Highlight

- With smart BMS system.
- High discharge current, strong load impact resistance.
- 3U rack-mount design with flexible expansion and easy installation.
- Grade A Lithium Iron Phosphate Battery, Superior safety and reliability.
- Possess safety protection functions such as overcharge, over-discharge, overcurrent, high temperature, and low temperature.
- RS485/CAN communication allows for real-time monitoring of battery status and setting of protection parameters

BM051S48 Parameters

MODEL	BM051S48
Battery	
Cell Material	Lithium Iron Battery
Battery Voltage	51.2V
Battery Capacity	5120Wh
Operation Voltge range	44.8~57.6V
Max Continuous Discharge Current	100A
Standard charging current	50A
Max Continuous Charge Current	100A
Battery Standard Cycle Life	5000 cycles,Depth of Discharge 70%
Protection Features	Overcharge protection、Overdischarge protection、Overcurrent protection、Shortcircuit protection、Overtemperature protection
General Parameters	
Display	LED indicator light / LED Display （Optional）
Dimension W*D*H(mm)	440*600*134
Weight(NW Kg)	43.5
Chassis installation method	Rack-mounted insert box type，3U
Terminal	M6
Cooling	Natural convection
Protection Degree	IP20
Communication	CAN/RS485（Optional）
Operating Environment	
Storage temperature	-30℃~60℃
Charging temperature	-10℃~50℃
Discharge Temperature	-20℃~50℃
Humidity	0%~95% Non-condensation
Operating Environment	Indoor
Certifications	
Certifications	UN38.3，RoHS，CE，MSDS

The battery cycle life is measured under laboratory conditions at 25℃, while the actual life span is determined by the battery temperature during actual use.
Specifications are subject to change without advance notice.

ENERGY STORAGE BATTERY SOLUTION

Energy storage battery

51.2V/230Ah

Product Highlight

- With smart BMS system.
- High discharge current, strong load impact resistance.
- 5U rack-mount design with flexible expansion and easy installation.
- Grade A Lithium Iron Phosphate Battery, Superior safety and reliability.
- Possess safety protection functions such as overcharge, over-discharge, overcurrent, high temperature, and low temperature.
- RS485/CAN communication allows for real-time monitoring of battery status and setting of protection parameters

BM120S048XN Parameters

MODEL	BM120S048XN
Battery	
Cell Material	Lithium Iron Battery
Battery Voltage	51.2V
Battery Capacity	11776Wh
Operation Voltge range	44.8~57.6V
Max Continuous Discharge Current	200A
Standard charging current	115A
Max Continuous Charge Current	200A
Battery Standard Cycle Life	4000 cycles,Depth of Discharge 80%
Protection Features	Overcharge protection、Overdischarge protection、Overcurrent protection、Shortcircuit protection、Overtemperature protection
General Parameters	
Display	LED indicator light / LED （Optional）
DimensionW*D*H(mm)	640*483*220
Weight(NW Kg)	About 88Kg
Chassis installation metho	Rack-mounted insert box type，5U
Terminal	M8
Cooling	Natural convection
Protection Degree	IP20
Communication	CAN/RS485（Optional）
Operating Environment	
Storage temperature	-30℃~60℃
Charging temperature	-10℃~50℃
Discharge Temperature	-20℃~50℃
Humidity	0%~95% Non-condensation
Operating Environment	Indoor
Certifications	
Certifications	UN38.3，RoHS，CE，MSDS

The battery cycle life is measured under laboratory conditions at 25℃, while the actual life span is determined by the battery temperature during actual use.
Specifications are subject to change without advance notice.

ENERGY STORAGE BATTERY SOLUTION

Energy storage battery

51.2V/314Ah

Product Highlight

- With smart BMS system.
- High discharge current, strong load impact resistance.
- 5U rack-mount design with flexible expansion and easy installation.
- Grade A Lithium Iron Phosphate Battery, Superior safety and reliability.
- Possess safety protection functions such as overcharge, over-discharge, overcurrent, high temperature, and low temperature.
- RS485/CAN communication allows for real-time monitoring of battery status and setting of protection parameters

BM160S048XN Parameters

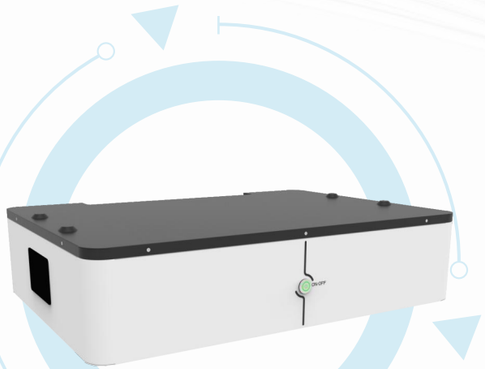
MODEL	BM160S048XN
Battery	
Cell Material	Lithium Iron Battery
Cell Rated Capacity	314Ah
Battery Voltage	51.2V
Battery Capacity	16076Wh
Operation Voltge range	44.8~57.6V
Max Continuous Discharge Current	200A
Standard charging current	157A
Max Continuous Charge Current	200A
Battery Standard Cycle Life	5000 cycles,Depth of Discharge 80%
Protection Features	Overcharge protection、Overdischarge protection、Overcurrent protection、Shortcircuit protection、Overtemperature protection
General Parameters	
Display	LED indicator light / LED （Optional）
DimensionW*D*H(mm)	483*786*223
Weight(NW Kg)	About 120Kg
Chassis installation metho	Rack-mounted insert box type，5U
Terminal	M10
Cooling	Natural convection
Protection Degree	IP20
Communication	CAN/RS485（Optional）
Operating Environment	
Storage temperature	-40℃~60℃
Charging temperature	-10℃~50℃
Discharge Temperature	-20℃~50℃
Humidity	0%~95% Non-condensation
Operating Environment	Indoor
Certifications	
Certifications	UN38.3，RoHS，CE，MSDS

The battery cycle life is measured under laboratory conditions at 25℃, while the actual life span is determined by the battery temperature during actual use.
Specifications are subject to change without advance notice.

ENERGY STORAGE BATTERY SOLUTION

Energy storage battery

51.2V/100Ah



N*51.2V/100Ah

Product Highlight

- With smart BMS system.
- High discharge current, strong load impact resistance.
- Horizontal stacked design with flexible expansion and easy installation.
- Grade A Lithium Iron Phosphate Battery, Superior safety and reliability.
- Possess safety protection functions such as overcharge, over-discharge, overcurrent, high temperature, and low temperature.
- RS485/CAN communication allows for real-time monitoring of battery status and setting of protection parameters

BM051H051XN Parameters

MODEL	BM051H051XN
Battery	
Cell Material	Lithium Iron Battery
Battery Voltage	51.2V
Battery Capacity	5120Wh
Operation Voltge range	44.8~57.6V
Max Continuous Discharge Current	100A
Standard charging current	50A
Max Continuous Charge Current	100A
Battery Standard Cycle Life	5000 cycles,Depth of Discharge 70%
Protection Features	Overcharge protection、Overdischarge protection、Overcurrent protection、Shortcircuit protection、Overtemperature protection
General Parameters	
Display	LED indicator light / LED Display （Optional）
Dimension W*D*H(mm)	650*460*156
Weight(NW Kg)	44.5
Chassis installation method	Horizontal stacked chassis
Terminal	M6
Cooling	Natural convection
Protection Degree	IP20
Communication	CAN/RS485（Optional）
Operating Environment	
Storage temperature	-30℃~60℃
Charging temperature	-10℃~50℃
Discharge Temperature	-20℃~50℃
Humidity	0%~95% Non-condensation
Operating Environment	Indoor
Certifications	
Certifications	UN38.3，RoHS，CE，MSDS

The battery cycle life is measured under laboratory conditions at 25℃, while the actual life span is determined by the battery temperature during actual use.
Specifications are subject to change without advance notice.

ENERGY STORAGE BATTERY SOLUTION

Energy storage battery

51.2V/100Ah

Product Highlight

- With smart BMS system.
- High discharge current, strong load impact resistance.
- Grade A Lithium Iron Phosphate Battery, Superior safety and reliability.
- Wall-mounted installation design, space-saving, easy to install, and flexible for expansion.
- Possess safety protection functions such as overcharge, over-discharge, overcurrent, high temperature, and low temperature.
- RS485/CAN communication allows for real-time monitoring of battery status and setting of protection parameters.

BM051W48 Parameters

MODEL	BM051W48
Battery	
Cell Material	Lithium Iron Battery
Battery Voltage	51.2V
Battery Capacity	5120Wh
Operation Voltge range	44.8~57.6V
Max Continuous Discharge Current	100A
Standard charging current	50A
Max Continuous Charge Current	100A
Battery Standard Cycle Life	5000 cycles,Depth of Discharge 70%
Protection Features	Overcharge protection、Overdischarge protection、Overcurrent protection、Shortcircuit protection、Overtemperature protection
General Parameters	
Display	LED indicator light / LED Display （Optional）
Dimension W*D*H(mm)	458*605*158
Weight(NW Kg)	44
Chassis installation method	Wall-mounted
Terminal	M6
Cooling	Natural convection
Protection Degree	IP20
Communication	CAN/RS485（Optional）
Operating Environment	
Storage temperature	-30℃~60℃
Charging temperature	-10℃~50℃
Discharge Temperature	-20℃~50℃
Humidity	0%~95% Non-condensation
Operating Environment	Indoor
Certifications	
Certifications	UN38.3，RoHS，CE，MSDS

The battery cycle life is measured under laboratory conditions at 25℃, while the actual life span is determined by the battery temperature during actual use.
Specifications are subject to change without advance notice.

INDUSTRIAL & COMMERCIAL ENERGY STORAGE SYSTEM

INDUSTRIAL & COMMERCIAL ENERGY STORAGE CONVERTERS

50kW~125kW

Product Features

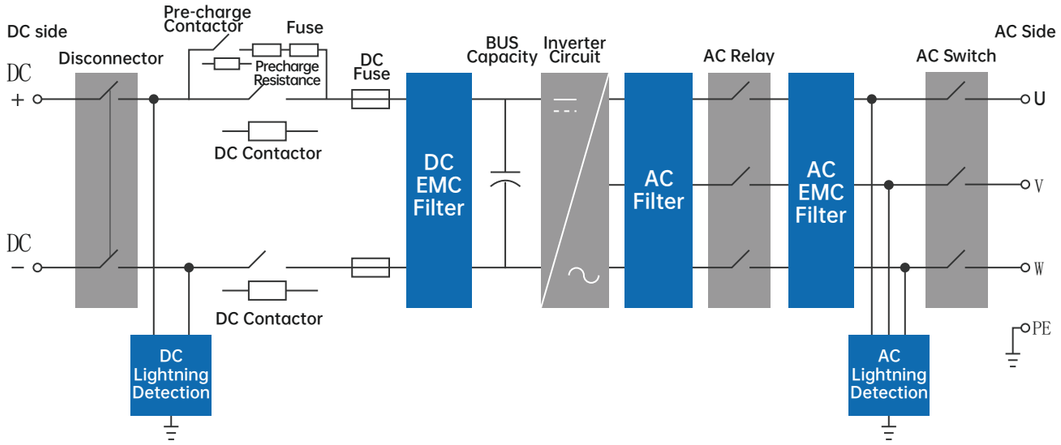
Highly Intelligent
- ◎ New three-level technology,with efficiency up to 99%
- ◎ 110% overload long-term operation
- ◎ With fault recording/remote online upgrade functions

Flexible & Simple
- ◎ Flexible, simple and convenient wall-mounted design, convenient installation
- ◎ Support multiple AC parallel operation and flexible system scheme configuration
- ◎ IP65 protection degree,designed with C5 anti- corrosion, various harsh environments can be suit

System Integration
- ◎ Highly matched and integrated with battery system, providing one-stop solution
- ◎ Highly matched and integrated with the battery system, it can provide a one-stop solution to integrate highly reliable redundant uninterruptible power supply to power the battery BMS system and ensure the stable operation of the battery system
- ◎ Built- in DC buffer circuit, battery cluster does not need to be independently configured with buffer circuit,and battery system access is simple and convenient, plug and play, safe and reliable

Grid Friendly
- ◎ It has LVRT and HVRT functions, can strongly adapt the power grid
- ◎ Power factor control, reactive power compensation function

Circuit Block Diagram



FS050CL09 ~ FS100CL15&FS125CH15 Parameters

MODEL	FS050CL09	FS100CL15	FS125CH15
DC(battery)Specification			
Max Voltage	900V	1500V	1500V
Voltage Range	250~850V	620~1450V	1070~1450V
Max Current	130A	177A	128A
On-Grid AC Specification			
Rated output power	50KW	100KW	125KW
Max Output Power	55KW	110KW	137.5KW
Rated Voltage	400V	400V	690V
Voltage Range	320~460V	340~440V	586~759V
Rated Current	72A	144A	105A
Max Output Current	80A	159A	115A
Rated Frequency	50/60Hz Intelligent adaptive/settable		
Frequency Range	45~55Hz/55~65Hz		
THDi	< 3%		
Power Factor	> 0.99 @ Rated power （Adjustable 0.8 leading~0.8 lagging）		
Off-Grid AC Specification			
Rated Voltage	400V	400V	600V
THDu	< 1.5%linear , < 4%Nonlinear		
Rated Frequency	50/60Hz Settable		
Overload Capacity	<110%Long-term work， 110%-150% 3min , >150% 10S		
Protection Features			
DC Input Protection	Fuse		
AC Output Protection	Circuit breaker		
Surge Protection	DC Type II / AC Type III		
Overtemperature Protection	Yes		
Overvoltage Protection	Yes		
Island Protection	Yes		
Ground Fault Monitoring	Yes		
General Parameters			
Max Efficiency	98%	99%	98%
Cooling	Intelligent forced air cooling		
Ambient Temperature	-30°C~60°C (> 45°C Derating)		
Humidity	0~95% Non-condensing		
Altitude	4000m (>2000m Derating)		
Noise (dB)	< 66		
Protection Degree	IP65		
Dimension. W*D*H(mm)	Wall-mounted：550*250*750	Wall-mounted：680*280*900	
Weight (kg)	75	100	
Grid-connected and Off-grid Switching	Automatic		
Multiple-machine Parallel	Support		
Display And Communication			
Display	LED indicator light		
BMS Communicat	RS485,CAN		
EMS Communication	RS485,Ethernet		
Communication Protocol	Modbus-RTU,Modbus-TCP,CAN2.0		
Standard	GB/T 34120，GB/T 34133，IEC62477-1，IEC61000-6-2，IEC61000-6-4，IEC62116		

Specifications are subject to change without advance notice.

INDUSTRIAL & COMMERCIAL ENERGY STORAGE SYSTEM

INDUSTRIAL & COMMERCIAL ENERGY STORAGE CONVERTERS

250kW~1500kW

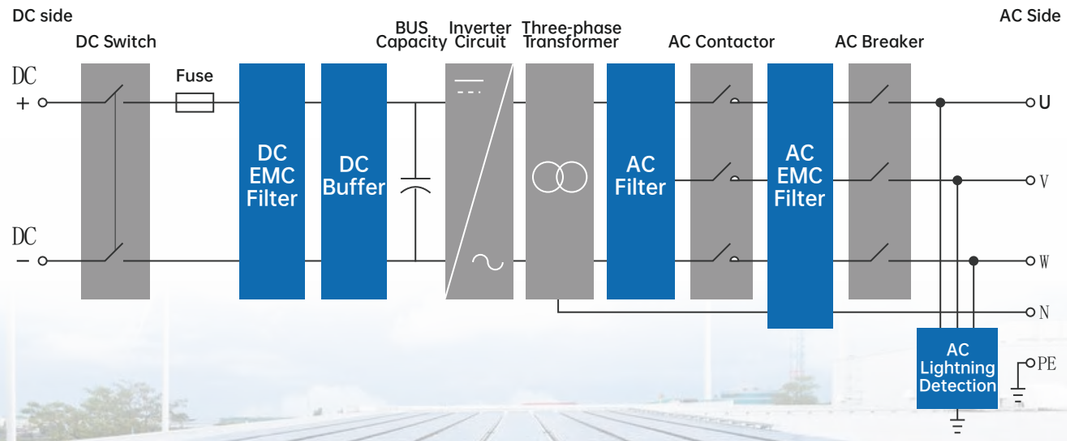
Product Features

Efficient Conversion
- Output belt isolation, safe and reliable
- With bidirectional converter and all-round battery management
- Charging has constant current charging, equal charge, floating charge mode

Grid Friendly
- Meet smart grid design specifications and accept grid dispatching
- Advanced islanding detection technology
- Reactive compensation function
- Isolated network independent operation function

Flexible System Configuration
- The battery is completely isolated from the power grid
- 12 recharge-discharge time period settings for better application on customer site
- Parallel off-grid switching time: general conditions are less than 200ms,and zero switching can be achieved when SCR is selected
- Set electricity prices in four periods (peak, flat, valley, and sharp periods) to flexibly calculate user profits

Circuit Block Diagram



* Take PCS0250C10T for instance

PCS0250C10T~PCS1500C15H Parameters

MODEL	PCS0250C10T	PCS0500C10T	PCS1250C15H	PCS1500C15H
DC (Battery) Characteristics				
Max Voltage	1000V		1500V	
Voltage Range	500~950V	500~950V	800~1450V	900~1450V
Max Current	565A	1128A	1750A	1870A
Grid-connected AC Characteristics				
Rated Output Power	250KW	500KW	1250KW	1500KW
Max Output Power	275KW	550KW	1375KW	1650KW
Rated Voltage	400V	400V	467~605V	600V
Voltage Range	340~440V	340~440V	510~660V	510~660V
Rated Current	362A	724A	1313A	1445A
Max Output Current	398A	797A	1445A	1590A
Rated Frequency	50/60Hz Intelligent adaptive/Settable			
Frequency Range	45~55Hz			
THDi	< 3%			
Power Factor	> 0.99 @ Rated power (Adjustable 0.8 leading~0.8 lagging)			
Off-grid AC Characteristics				
Rated Voltage	400V		550V	600V
THDu	< 1.5%Linear , < 4%Nonlinear		< 2%Linear , < 5%Nonlinear	
Rated Frequency	50Hz			
Overload Capacity	110% long-term, 120%1minute			
Protection Features				
DC Input Protection	Load switch + fuse			
AC Output Protection	Breakers			
Surge Protection	DC Type II / AC Type III			
Overtemperature Protection	Yes			
Overvoltage Protection	Yes			
Island Protection	Yes			
Ground Fault Monitoring	Yes			
General Parameters				
Max Efficiency	97.2%	97.5%	99%	
Cooling	Intelligent forced air cooling			
Ambient Temperature	-30°C ~ 60°C (> 45°C Derating)			
Humidity	0~95% Non-condensing			
Altitude	4000m (>2000m Derating)			
Noise (dB)	< 66			
Protection Degree	IP65			
Dimension.W*D*H(mm)	1500*1100*2200		1100*1400*2400	
Weight (kg)	1550	2150	1650	
Isolation Transformer(Transformation Ratio)	Yes(315/400)		None	
Grid-connected and Off-grid Switching	Automatic			
Multiple-machine Parallel	Support			
Display And Communication				
Display	Touch screen			
BMS Communicat	RS485,CAN			
EMS Communication	RS485,Ethernet			
Communication Protocol	Modbus-RTU,Modbus-TCP			
Standard	GB/T 34120, GB/T 34133, IEC62477-1, IEC61000-6-2, IEC61000-6-4, IEC62116			

Specifications are subject to change without advance notice.

PROJECT CASE

Sunohoo Technology keeps deepening the relevant technologies in the field of energy storage, continuing to promote the product development and system scheme design of household energy storage systems and other forms of energy storage systems, and actively promoting the application of energy storage technology in various scenarios.

CASE OF HOUSEHOLD ENERGY STORAGE SYSTEM

PROJECT CASE

Sunohoo Technology keeps deepening the relevant technologies in the field of energy storage, con - tinuing to promote the product development and system scheme design of household energy storage systems and other forms of energy storage systems, and actively promoting the application of energy storage technology in various scenarios.

CASE OF INDUSTRIAL & COMMERCIAL ENERGY STORAGE SYSTEM SOLUTIONS

CASE OF INDUSTRIAL & COMMERCIAL ENERGY STORAGE SYSTEM SOLUTIONS