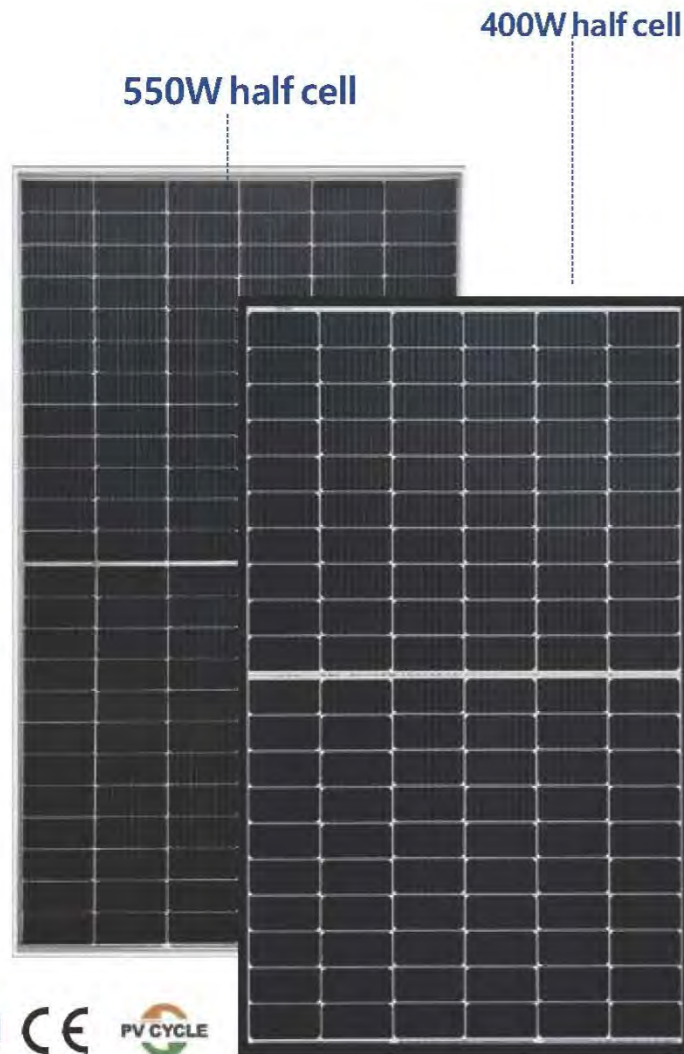


True blue



**PRODUCT
CATALOG**

ONE STOP SOLUTION PROVIDER FOR
PHOTOVOLTAIC POWER STATION



✓ HIGH EFFICIENCY
21.3%

✓ HIGH RELIABILITY
• Attenuation in the first year is less than 2.5%

✓ EXCELLENT PRODUCT APPEARANCE AND PERFORMANCE
• NO LID
• PID resistance
• Low crack risk

✓ WIDE APPLICATION SCENARIOS
• BIPV, vertical installation, snow, high humidity and strong wind and sand zone, etc



Product system certification

- ▶ While increasing 5-10W power generation, Pmax temperature coefficient can be reduced, and module hot spot effect can be effectively reduced;
- ▶ 12-year product warranty for material and processing and 25-year power warranty.

Pmax	Vmp	Imp	Voc	Isc	Kg	mm
400W	34.2V	10.92A	41.3V	11.69A	20kg	1755*1038*35mm
550W	41.8V	13.04A	49.75V	13.93A	27.3kg	2279*1134*35mm



Application scenario



yacht



vehicle roof



bike shed



bus station



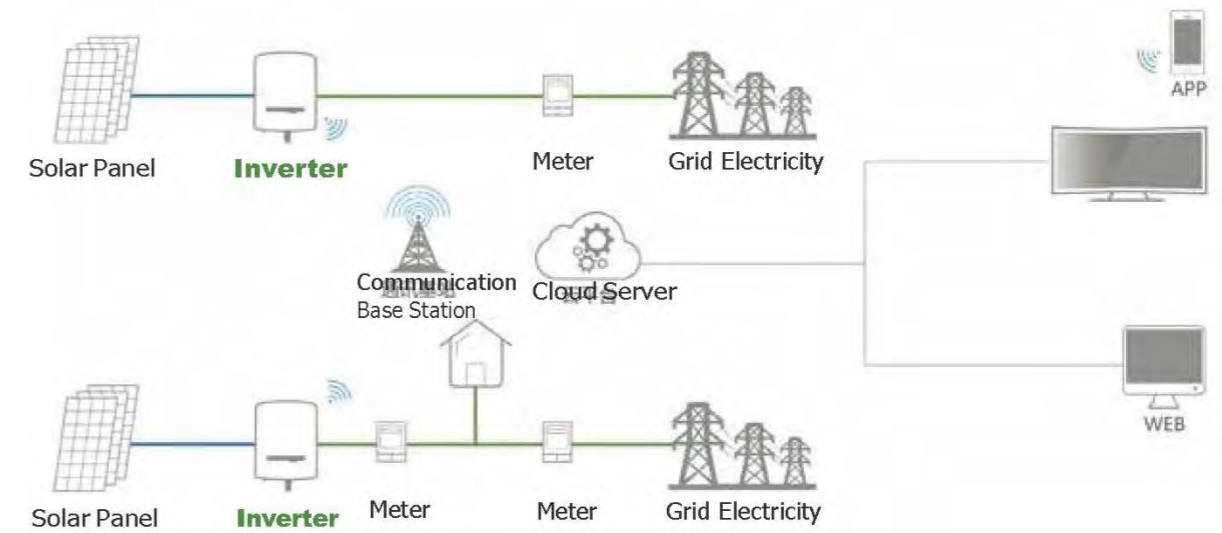
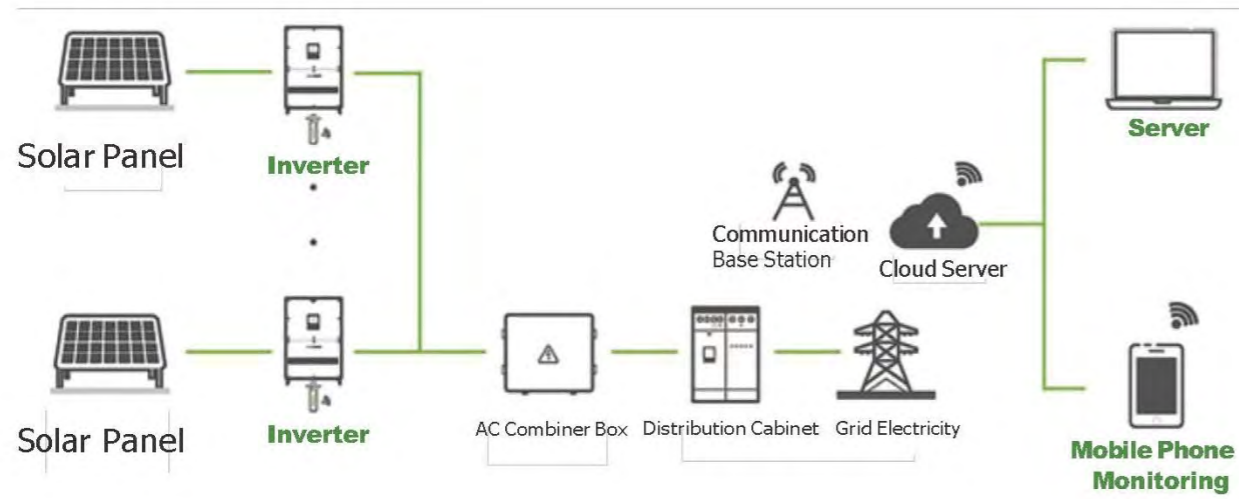
house roof

Electrical Data

	50W	100W	150W	200W	300W	360W	400W
Optimum power [Pmax]	50W	100W	150W	200W	300W	360W	400W
Power Error	±5%						
Nominal Voltage	18V						
Service Life	5 years						
Operating voltage [Vmp]	18±0.1V						
Operating current [Imp]	2.7A±0.5A	5.5A±0.5A	8.3A±0.5A	11A±0.5A	16.6A±0.5A	20A±0.5A	22.2A±0.5A
Short-circuit current [Isc]	3.14A±0.5A	6.04A±0.5A	9.14A±0.5A	11.74A±0.5A	17.14A±0.5A	20.98A±0.5A	22.98A±0.5A
Open circuit voltage [Voc]	21.6V±0.8V						
Temperature coefficient voltage	(0.065±0.015)%/°C						
Temperature coefficient current	-(160±10)mA/°C						
Temperature coefficient power	-(0.5±0.05)%/°C						
Maximum system voltage	1000V						

Components & Mechanical Data

	50W	100W	150W	200W	300W	360W	400W
Size	640*540*2mm	1030*520*2mm	1130*680*2mm	1520*680*2mm	1520*1010*2mm	1950*980*2mm	2020*1010*2mm
Cell type	125 Chamfered Single Crystal Cell	161.7 Chamfered Single Crystal Cell	161.75 Chamfered Single Crystal Cell	161.75 Chamfered Single Crystal Cell	161.75 Chamfered Single Crystal Cell	156.75 Chamfered Single Crystal Cell	161.75 Chamfered Single Crystal Cell
Conversion rate	22.8%	22.8%	22.8%	22.8%	23%	23%	23%





OFF GRID SYSTEM

Off Grid Hybrid Inverter operate without Battery



Main Features:

1. High efficiency pure sine wave inverter(PF=1);Wide PV input range (120V dc -500V dc) 80A MPPT SCC; Intelligent 3 stage 60AAC battery charger.
2. Surges to 2X continuous power for 5 seconds for motor loads.
3. Intelligent functionality enables utility and solar input prioritization.
4. Wide utility input range (90V ac ~280Vac) for unreliable grid even in the most challenging environments.
5. Field serviceable with replacement boards and spare parts.
6. Monitor, troubleshoot, or communication with USB/RS 232.
7. System configures quickly into compact, wall-mounted system.
8. This series inverters can work without batteries when there is the sun.

Solar System Connection



HY VMII

This is a multi functional inverter/charger, combining functions of inverter, solar charger and battery charger to offer uninterruptible power support in portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

Technical Specifications:

Model	HY3222VMII	HY3522VMII	HY5032VMII	HY5532VMII
RATED POWER	3200VA/3200W	3500VA/3500W	5000VA/5000W	5500VA/5500W
INPUT				
Voltage	230 VAC			
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)			
Frequency Range	50 Hz/60 Hz (Auto sensing)			
OUTPUT				
AC Voltage Regulation (Batt. Mode)	230 VAC ± 5%			
Surge Power	6000VA	7000VA	10000VA	11000VA
Efficiency (Peak)	90%-93%			
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)			
Waveform	Pure sine wave			
BATTERY				
Battery Voltage	24 VDC		48 VDC	
Floating Charge Voltage	27 VDC		54 VDC	
Overcharge Protection	33 VDC		63 VDC	
SOLAR CHARGER & AC CHARGER				
Max. PV Array Open Circuit Voltage	500VDC		500VDC	
Max. PV Array Power	120-450VDC		120-450VDC	
MPP Range @operating Voltage	4000 W		5000 W	
Max. Solar Charge Current	80 A	100 A	80 A	100 A
Max. AC Charge Current	60 A		60 A	
Max. Charge Current	100 A		100 A	
PHYSICAL				
Dimension, D x W x H (mm)	115 x 300x 400			
Net Weight (kgs)	9		10	
Communication Interface	USB/RS232/RS485/Bluetooth/Dry-contact			
ENVIRONMENT				
Humidity	5% to 95% Relative Humidity (Non-condensing)			
Operating Temperature	-10° C to 50° C			
Storage Temperature	-15° C to 60° C			

Approximate Back-Up Time Table:

Model	Load (VA)	Backup Time @24Vdc 100Ah(min)	Backup Time @24Vdc 200Ah(min)
3.2KVA	300	359	880
	1500	54	131
	3000	22	54
Model	Load (VA)	Backup Time @48Vdc 100Ah(min)	Backup Time @48Vdc 200Ah(min)
5KVA	500	490	1030
	2500	72	172
	5000	32	72

Note: Product specifications are subject to change without further notice.

VM IV series off-grid solar inverter 3.6/5.6kW

VM IV is the fourth-generation off-grid inverter with rich new functions. In addition to enhanced charging power, VM IV also comes with a built-in Wi-Fi function, mobile monitoring can be carried out through mobile applications. Data can be accessed and recorded in the inverter, which is convenient for tracking the operation status of the inverter. USB On-The-Go function for easy rewriting of internal parameters, data downloads, and software updates. Battery independent design enhances this inverter to operate without battery connected.



Main Features:

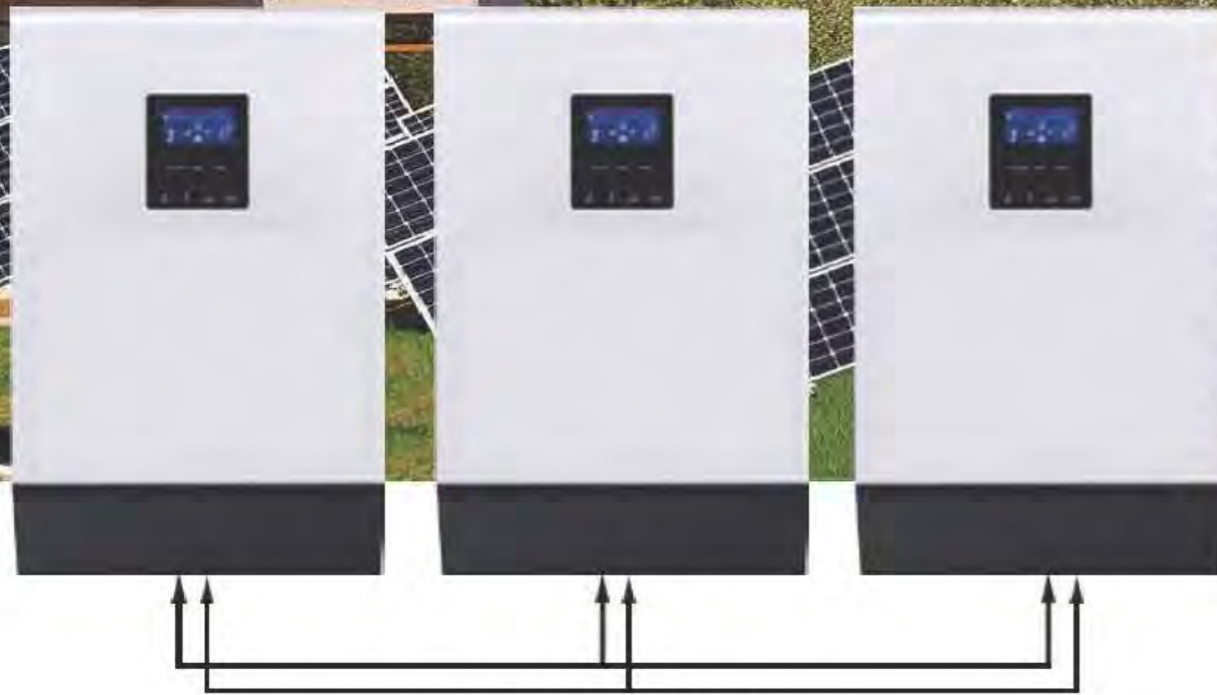
1. Customizable status LED ring with RGB lights.
2. Touchable button with large 4.3" colored LCD. Built-in Wi-Fi for mobile monitoring (Android/iOS App available).
3. Supports USB On-the-Go function. Data log events stored in the inverter.
4. Reserved communication port (RS485, CAN-BUS or RS232) for BMS.
5. Battery independent design. Battery equalization extends life-cycle.
6. User-friendly LCD operation.
7. Enhanced charging power.
8. Built-in anti-dust kit.



Technical Specifications:

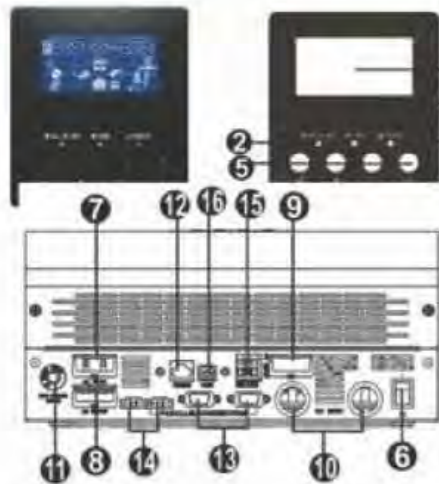
Model	VM IV 3600	VM IV 5600
Rated Power	3600VA/3600W	5600VA/5600W
INPUT		
Voltage	230 VAC	230 VAC
Select-able Voltage Range	170-280VAC (For Personal Computers) 90-280VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt.Mode)	230 VAC ± 5%	
Surge Power	7200VA	11200VA
Efficiency (Peak)	90%-93%	
Transfer Time	15ms(For Personal Computers), 20ms(For Home Appliances)	
Waveform	Pure sine wave	
BATTERY		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
SOLAR CHARGER & AC CHARGER		
Solar charger type	MPPT	MPPT
Max PV Array Power	4000W	6000W
MPP Range @operating Voltage	120-450VDC	
Max PV Array Open Circuit Voltage	500VDC	
Max Solar Charge Current	120A	120A
Max AC Charge Current	100A	100A
Max Charge Current	120A	120A
PHYSICAL		
Dimension, D x W x H (mm)	119 x 313 x 422	
Net Weight (kgs)	10	12
Communication Interface	USB/RS232/RS485/WIFI/Dry-contact	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	- 10°C to 50°C	
Storage Temperature	- 15°C to 60°C	

3 Phases Off Grid Solar Hybrid Inverter



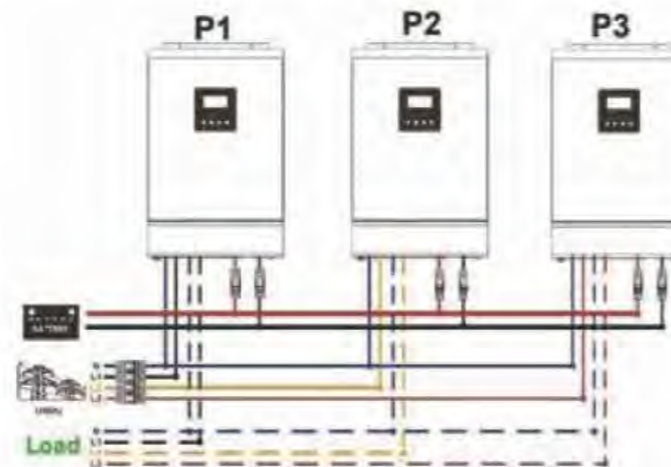
15KVA=5KVA x 3pcs Parallel

LCD Display Information



1. LCD Display
2. Status indicator
3. Charging indicator
4. Fault indicator
5. Function buttons
6. Power on/off switch
7. AC input
8. AC output
9. PV input
10. Battery input
11. Circuit breaker
12. RS232 communication port
13. Parallel communication cable (only for parallel model)
14. Current sharing cable (only for parallel model)
15. Dry contact
16. USB communication port

Parallel Connection



Technical Specifications:

Model	3PMKS15KW	3PMKS30KW	3PMKS45KW	
Rated power	15KW	30KW	45KW	
Input	voltage			
	380VAC/230VAC			
	selectable voltage range			
294-420VAC (for 3 phases)				
90-280VAC (for single phase)				
Frequency range				
50Hz/60Hz (auto sensing)				
Output	AC voltage regulation (Batt.mode)			
	Three Phases 380VAC ± 5%			
	/single phases 230VAC ± 5%			
	Surge power (5 seconds)	30000VA	60000VA	90000VA
	efficiency (peak)	93%		
transfer time	10ms (for personal computers); 20ms (for home appliances)			
waveform	pure sine wave			
Battery & AC charger	battery voltage			
	48VDC			
	floating charge voltage			
	54VDC			
	overcharge protection			
	62VDC			
	maximum charge current			
	60A per way			
	MAX PV array power	4500W*3	4500W*6	4500W*9
	MPPT range @ operating voltage	120-430V		
maximum PV array open circuit voltage	450VDC			
MPPT charging current	80A*3	80A*6	5000W*9	
maximum efficiency	98%			
Physical	standby power consumption	2W*3	2W*6	2W*9
	Dimension, D*W*H (mm)	155*295*455*3	155*295*455*6	155*295*455*9
operating Environment	Net weight (kgs)			
	39KG			
	78KG			
	117KG			
humidity				
5%-95% relative humidity (non-condensing)				
operating temperature				
0°C -55°C				
storage temperature				
-15°C -60°C				

120V/240V SPLIT PHASE OFF GRID SOLAR INVERTER



Features:

1. Versatile AC output modes: single phase 120v, split phase 240v, and 3-phase 208V
2. Pure sine wave output 5KW/48VDC
3. Dual MPPT Input up to 160A max charge
4. Max PV input power up to 8KW(4KW*2)
5. Utility charging up to 60A Max.
6. Max total system charging up to 220A
7. Parallel operation up to 3 units max
8. Genset starter dry contact
9. Programmable parameters
10. Ideal for Off-Grid or Grid-backup application
11. Easy to install
12. FREE monitoring software
13. LCD Display + LCD indicators
14. USB, RS232 communication interface.

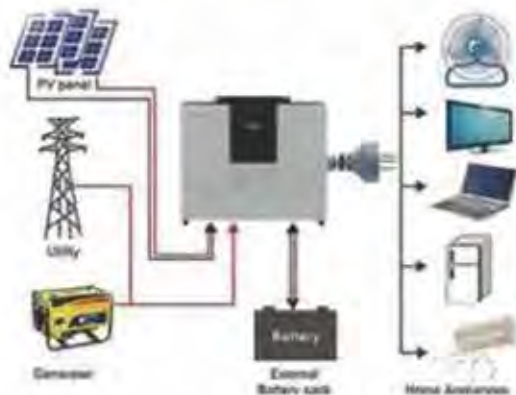


Technical Specifications:

MODEL	LV 5032US
Continuous Output	5000VA/5000W
System DC Volt	48VDC
AC Input Voltage	110/120VAC (Phase-Neutral)
Maximum Parallel	Up to 3 units
PV INPUT/SOLAR CHARGING	
Max PV Input Power	8000W(4000W each input)
Max PV input Volt	145V(open circuit Voc)
MPPT Range	60-110VDC
Number of PV Input	2
Max Charging Current	160A (80Ax2)
OUTPUT MODE	
Output Waveform	Pure Sine Wave
AC Output Mode	120V L-N/240V L1-L2 /208V L1-L2 3-Phase
Frequency	50 / 60 Hz, auto-sensing
Max Bypass Current	40A
Max Efficiency	> 90%
Max Utility Charging	60A
Max Utility + Solar Charging	220A
Max Bulk/Float Charge	58.4V
ENVIRONMENTAL / MECHANICAL SPECIFICATIONS	
Communication Port	USB / RS232/Dry Contact
Operating Temp.	0 ~50°C
Dimension, D x W x H(mm)	623*610*130mm
Net Weight	30KG

Product specifications are subject to change without further notice.

OFF-GRID SYSTEM



Lithium Energy Storage Battery

BMS Protection



Product introduction

The lithium energy storage battery use long working life LiFe PO4 battery, and high performance BMS to protect and manage the battery system, it has wider usage and longer life than traditional battery.

Product features

- ※ High power, friendly interface, free combination
- ※ High quality battery cell, precise combination
- ※ BMS customization supported
- ※ IP67

Application area

- ※ Energy storag system, control system, alarm system, power system, database
- ※ Emergency lighting system, emergency power supply, UPS
- ※ Telecommunication, communication, fire fighting system



5. 12KWh Stacked Lithium Energy Storage Battery



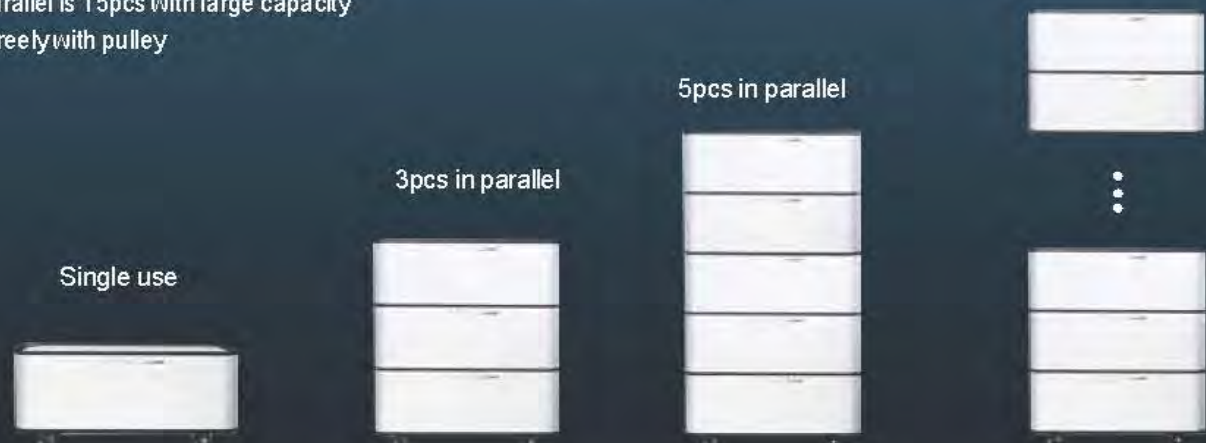
STACKED ENERGY STORAGE SYSTEM

Product introduction

The SBM stacked lithium energy storage battery use long working life LiFePO4 cell, high performance BMS to protect and manage the battery system. The max parallel is 15pcs, free combination for the capacity and meet all kinds of demand for home/industry

- ※Free combination, Stacked design, More beautiful/convenient 15pcs max in parallel
- ※Max parallel is 15pcs with large capacity
- ※Move freely with pulley

15pcs max in parallel



Inverter Products Specification



Rated Power	5000W
INPUT	
Voltage	230VAC
Selectable Voltage Range	170-280VAC(For personal computers);90-280VAC(For home appliances)
Frequency Range	50Hz/60Hz(Auto sensing)
OUTPUT	
AC Voltage Regulation(Battery Mode)	230VAC ±5%
Surge Power	11000VA
Efficiency(Peak)	Up to 93.5%
Transfer Time	10ms (For personal computers);20ms(For home appliances)
Waveform	Pure sine wave
BATTERY	
Battery Voltage	48VDC
Floating Charge Voltage	54VDC
Overcharge Protection	63VDC
Solar Charger & AC charger	
Maximum PV Array Open Circuit Voltage	500VDC
Maximum PV Array Power	5500W
MPPT Range @ Operating Voltage	120-450VDC
Maximum Solar Charger Current	80A
Maximum AC Charger Current	60A
Maximum Charger Current	80A
ENVIRONMENT	
Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	-10°C to 50°C
Storage Temperature	-15°C to 60°C

Battery Products Specification

Single module capacity	5.12KWH				
Module number	1PCS	2PCS	3PCS	4PCS	5PCS
Total capacity	5.12KWH	10.24KWH	15.36KWH	20.48KWH	25.6KWH
Standard voltage	51.2V				
Working voltage	43.2V-57.6V				
Standard discharge current	100A	200A	300A	400A	500A
Standard charge current	50A	100A	150A	200A	250A
Suggested DOD	80%				
Humidity	20%-60%				
Installation	Stacked				
IP rating	IP20				
Communication	CAN/RS485/RS232(WiFi/bluetooth/4G optional)				
Product size/unit	620*550*480mm	620*550*760mm	620*550*1040mm	620*550*1320mm	620*550*1600mm
N.W./unit	50kg	80kg	120kg	150kg	190kg



Product introduction

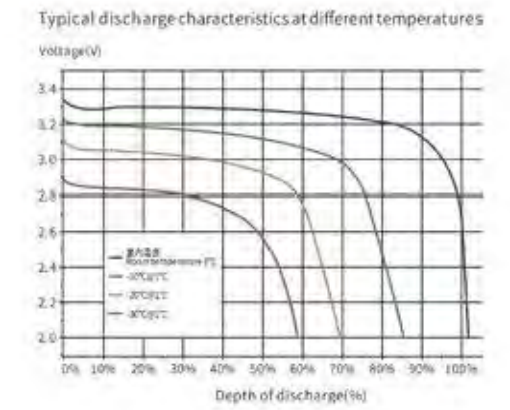
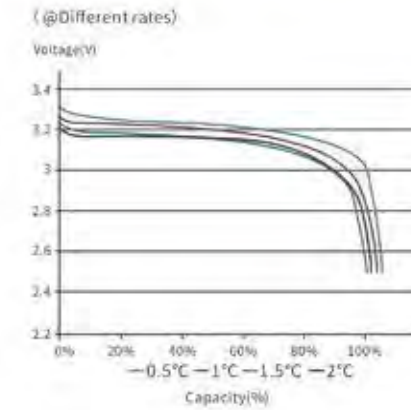
The power wall lithium energy storage battery use long working life LiFePO4 battery, wall mounted installation is more convenient and beautiful , high performance BMS to protect and manage the battery system, it has wider usage and longer life than traditional battery.



Product features

- ※ High power, friendly interface, free combination
- ※ High quality battery cell, precise combination
- ※ CAN/RS485/WIFI/4G/Blue tooth communication
- ※ BMS customization supported
- ※ Thick shell, well protection for inside cells

Performance curve



* The curves maybe different according to specific customer requirement

Products Specification

Model	100AH 48V	100AH 51.2V
Capacity	4.8KWH	5.12KWH
Standard Discharging Current	50A	50A
Max Discharging Current	100A	100A
Working Voltage	40.5-54VDC	43.2-57.6VDC
Standard Voltage	48VDC	51.2VDC
Max Charging Current	50A	50A
Max Charging Voltage	54V	57.6V
Suggested DOD Model	90%	
Humidity	20-60%	
Installation	Wall mounted installation	
IP Rating	IP20	
Max Number Of Parrallel	16	
Warranty	5 Years	
Communication	CAN/RS485/RS232(WIFI/bluetooth/4G optional)	
Product Size	558*400*228mm	
Packing Size	680*525*375mm	
Net Weight	43Kg	45Kg
Gross Weight	51.5Kg	53.5Kg

Application area

- ※ Energy storage system, control system, alarm system, power system, database
- ※ Emergency lighting system, emergency power supply, UPS
- ※ Telecommunication, communication, fire fighting system

SOLAR STREET LAMP

No electricity charge in the whole year, no power cut in rainy days



Solar charging



Automatic light after dark



Weatherproof



Extra long endurance



Intelligent remote control



Zero electricity charge throughout the year





PROJECT CASE

Industrial and commercial roof



XINJIANG 2MW ROOFTOP PHOTOVOLTAIC POWER STATION



GUANGZHOU 3MW POWER STATION PROJECT



PANYU 1.035MW POWER STATION PROJECT



DONGGUAN 1MW PHOTOVOLTAIC PROJECT



DONGGUAN 1MW PHOTOVOLTAIC PROJECT

Residential roof



Poverty alleviation power station project



SHAANXI 6.28MW POVERTY RELIEF GROUND PHOTOVOLTAIC POWER STATION



HEBEI 1.2MW POVERTY RELIEF GROUND PHOTOVOLTAIC POWER STATION



ANHUI 3.6MW POVERTY RELIEF GROUND PHOTOVOLTAIC POWER STATION



SHANXI 1.2MW POVERTY RELIEF GROUND PHOTOVOLTAIC POWER STATION