



NEW ENERGY NEW LIFE

PV PRODUCT MANUAL

2024





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SERVICE EVERYWHERE

Offer convenient service for all over the world

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E-catalog 2024



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COMPANY PROFILE

Shenzhen Hehejin Industrial Co., Ltd. is a Global Solar Energy Innovative Application Company. Over the past 10 years, we have provided related products and services to more than 150 countries around the world, and committed to pushing solar products to more application fields and scenarios. We always maintain close cooperated relationship with the world's new energy leading companies and actively participate in the coordinated development of solar energy industry. We advocate new energy life, promote the development of new energy ecological technology and protect the natural environment, so as to achieve common progress between human beings and nature.



CORE VALUE

As we know, Solar energy is a kind of environmental protection, safety, pollution-free new energy. Not only is it pollution-free, it's far cleaner than conventional energy, it's not dangerous as well. So based on this concept, PowMr slogan was born: New Energy New Life!

We aim to develop smaller, smarter and more stable products. All our efforts are to provide customers with more perfect services, and let customers have better senses of experience. We hope to make customers could buy everywhere as well as get service everywhere.

COMPANY HISTORY



Established HehejinIndustrial
Led.China
Major in Solar charge controller



Core agent of EPEVER and
Growatt

One of EPEVER'S largest distributors
for three consecutive years



Created the PowMr brand
Developing and designing solar controllers



Development of solar inverters and controllers

Designed and developed the 60A MPPT solar controller with the first sales volume in the whole markets



Research and development of
inverter chargers and supporting
lithium battery packs
Idea of PowMr everywhere...



Solar off-grid system selected
matched by PowMr professional
technical engineer.

smaller safer smarter

CERTIFICATE:CE ROHS FCC ETL EMC



WHY POWMR



10

More than 10 years experience of solar related industry



150+

More than 2 million people in over 180 countries are using our products



5+

Over 5 oversea warehouse in the world and will build up more in next 3 years



30+

Cooperating with 30+ industry leading companies



Service Center



Question answer



System design



Installation
Instructions



Product system
upgrade



Perfect warranty



Market
development
support



Technical
support for
bidding projects

EXCELLENT SERVICE

We provide comprehensive pre-sales support and after-sales service

At your service





CATALOG



Solar Controller



Solar Inverter



Inverter



Battery



Solar Panel



Accessories

MINI Solar Controller

Waterproof IP57



-
- Offer OEM ODM service.
 - Build-in industrial microcontroller.
 - LED display, auto memory function.
 - Fully 4-stage PWM charge management.
 - Dual MOSFET reverse current protection, low heat.
 - Protection Waterproof IP57.
 - Open circuit protection.



Controller Model	3A-6V	3A-6V-S	3A-12V	3A-12V-S
Load work mode	Load working 24h	Load working with light control: (Start work after sunset, stop working before sunrise)	Load working 24h	Load working with light+time control: (Start work only 8hs after sunset then stop work)
Rated charge current	3A			
Rated discharge current	3A			
Max PV input power	DC18W		DC36W	
Nominal system voltage	6V		12V	
Selectable battery types	Sealed lead acid, Gel, Flooded battery			
Temperature range	-10℃ ~40℃			
Dimensions	60x25x18mm			
Net weight	33g			
Controller Model	5A-12V	5A-12V-S	5A-12V-ST	
Load work mode	Load working 24hs	Load working with light control: (Start work after sunset, stop working before sunrise.)	Load working with light+time control: (Start work only 8hs after sunset then stop work)	
Rated charge current	5A			
Rated discharge current	5A			
Max PV input voltage (VOC)	DC22V			
Nominal system voltage	12V			
Selectable battery types	Sealed lead acid, Gel, Flooded battery			
Voltage drop of charging circuit	<0.2V			
Voltage drop of discharge circuit	<0.25V			
Equalization voltage	14.8V			
Bulk charging voltage	14.5V			
Boost charging voltage	14.2V			
Float charging voltage	13.8V			
Low voltage reconnect voltage	12.6V			
Low voltage disconnect voltage	11.2V			
Self-consumption	<10mA			
Temperature range	-35~+60 ℃			
Dimensions	60x25x18mm			
Net weight	50g			

MINI Solar Controller

Waterproof IP68



-
- Offer OEM ODM service.
 - Build-in industrial microcontroller.
 - LED display, auto memory function.
 - Fully 4-stage PWM charge management.
 - Dual MOSFET reverse current protection, low heat protection.
 - Protection Waterproof IP68 Shortcircuit protection.
 - Open circuit protection.
 - Overload protection.



Controller Model	10A-12V	10A-12V-3S	10A-12V-4S
Load working mode	Load working 24h		
Rated charge current	10A		
Rated discharge current	10A		
Max PV input voltage	<50V		
Max PV input power	120W		
Nominal system voltage	12/24V		
Selectable battery types	Lead acid	LiCoMnNiO ₂ 3 strings	LiFePO ₄ 4 strings
Equalization voltage	14.4V	-	-
Boost voltage	14.2V	-	-
Float voltage	13.8V	12.6V	14.4V
Low voltage reconnect voltage	12.6V	10.5V	12.0V
Low voltage disconnect voltage	11.2V	9.0V	10.0V
Self-consumption	<10mA		
Temperature range	-20°C ~60°C		
Dimensions	82x45x21mm	82x58x21mm	
Net weight	120g	135g	150g

MPPT Solar Controller

Boost Voltage charging



-
- Boost Voltage Charging Controller.
 - Integrated charge presets, support lithium battery and lead-acid battery
 - Compatible with 24V/36V/48V/60V/72V system voltage.
 - 3-stage charge algorithm.
 - Multiple built-in protections are incorporated to ensure safe and stable operation.
 - Natural air cooling for silent operation.
 - Built-in Lithium battery activation function.



Model	POW-Boost 10A		
PV Input			
PV Input Voltage	15~25V	25~48V	48~60V
PV Input Power	≤ 150W	≤ 250W	≤ 400W
System Voltage	24/36/48/60/72V	48/60/72V	60/72V
Charging Mode			
Charging technology	MPPT		
Charge Algorithm	3-Stage		
Self-consumption	<2W		
Nominal System Voltage	24V/36V/48V/60V/72V		
Battery Voltage Range	20~88V		
Environment			
Operating Temperature Range	-35℃ ~+65℃		
Humidity Range	≤ 95%		
General Specification			
Protection Class	IP32		
Dimension	140*85*50mm		
Net weight	305g		

MPPT Solar Controller

20A-40A



- The efficiency of MPPT technology no less than 99.5%.
- Peak conversion efficiency up to 97%.
- Support lithium and lead acid battery types.
- Compatible with 12V/24V system voltage.
- Communication supports peripheral connection such as PC.
- Wide operation temperature -20~55°C suitable for various application.



Controller Model	POW-Keeper1220	POW-Keeper1230	POW-Keeper1240
Rated charging current	20A	30A	40A
System rated voltage	12/24V		
Voltage range of the battery	8~32V		
Max. open voltage of PV module	60V	75V	100V
Battery type	User-define, Sealed, Flooded, GEL, LiFePO4		
Equalized charging voltage	Maintenance-free lead acid battery 14.6V GEL: No; Lead acid flooded battery: 14.8V		
Absorption charging voltage	Maintenance-free lead acid battery 14.4V GEL: 14.2; Lead acid flooded battery: 14.6V		
Floating charging voltage	Maintenance-free lead acid battery GEL, Lead acid flooded battery: 13.8V		
Low voltage reconnection	Maintenance-free lead acid battery GEL, Lead acid flooded battery: 12.6V		
Low voltage disconnection	Maintenance-free lead acid battery GEL, Lead acid flooded battery: 10.8V		
Static loss	$\leq 9.2\text{mA}$ 12V; $\leq 11.7\text{mA}$ 24V		
High voltage disconnection	16V (24V x 2)		
Duration of absorption charging	2 Hours		
Light control voltage	5V		
Charge loop voltage drop	$\leq 0.29\text{V}$		
LCD Temperature	$-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$		
Operating Temperature	$-20^{\circ}\text{C} \sim +55^{\circ}\text{C}$ (To run at full rated current continuously)		
Working humidity	$\leq 95\%$ No condensation		
Protection class	IP30		
Dimension	123*178*48mm	135*195*55mm	150*220*67mm

Pstar Series Solar Controller

30A/60A/80A Charging



-
- Compatible with lithium-ion and lead-acid battery.
 - Compatible with 12V/24V/36V/48V system voltage.
 - A variety of protection functions to extend the battery life.
 - Natural air cooling heat dissipation to silent operation.
 - The LCD enables real-time monitoring and parameter configuration.
 - Small size, light weight, easy and quick installation.
 - 2 USB ports with output of 5V and 2A.



Controller Model	Pstar-30A	Pstar-60A	Pstar-80A
PV Input			
Max Open Voltage of PV Module	100V		
Max. Input Power:			
For 12V system	≤ 360W	≤ 720W	≤ 960W
For 24V system	≤ 720W	≤ 1440W	≤ 1920W
For 36V system	≤ 1080W	≤ 2160W	≤ 2880W
For 48V system	≤ 1440W	≤ 2880W	≤ 3840W
Charge Specification			
Charge Algorithm	3-Stages		
Battery Type	Lithium and Lead Acid Battery, support user define		
Nominal System Voltage	12V/24V/36V/48V		
Rated Charging Current	30A	60A	80A
Self-consumption	≤ 20mA		
Output Specification			
Rated Output Current	20A	35A	50A
USB Interface	5V/2A*2		
Environmental Specification			
Operating Temperature Range	-20℃ ~+55℃		
Humidity Range	≤ 90%, Non-condensing		
General Specification			
Dimension	187x94x49mm	187x132x60mm	187x132x60mm
Net weight	0.49kg	0.77kg	0.79kg

MPPT Solar Controller

Bestsellers



-
- Intelligent Maximum Power Point Tracking technology.
 - Suitable for sealed lead acid, vented, Gel, and Lithium battery types.
 - Backlight LCD displays function.
 - With exact fault reference code for fixing.
 - Silent operation since cooling is via natural convection.
 - Back panel aluminum design for heat sink.



Controller Model	POW-M60-PRO
Charge specification	
Charging mode	MPPT
Charging Algorithm	3-Stage
Selectable battery type	Vented/ Sealed/ Gel/ NiCd/ Lithium battery, support user define
System type	DC12V/24V/36V/48V
Rated charging current	60A
PV utilization	≤ 98%
Input specification	
Max Open Voltage of PV Module	160V
Max. Input Power:	
For 12V system	720W 20-80Vdc;
For 24V system	1440W 37-105Vdc;
For 36V system	2100W 50-160Vdc;
For 48V system	2800W 72-160Vdc;
Output specification	
Rated output current	6A
Max. DC output current	8A
Max. capacitive load capacity	10000μF
General Specification	
Temperature protection	80°C
Operating temperature	-35°C ~45°C
Humidity	≤ 95%, Non-condensing
Acoustic noise	≤ 40dB
Dimension	230x165x72mm
Net weight	1.33kg

MPPT Solar Controller

New Arrival



- Supports connection to both lead-acid and lithium batteries.
- Compatible with 12V/24V/36V/48V system voltages.
- Segmented charging algorithm to enhance battery performance.
- Maximum MPPT charging current of up to 60A.
- MPP tracking efficiency of up to 99% and peak conversion efficiency of up to 98%.
- Large LCD display screen design.
- Built-in terminal blocks to save approximately 60% of installation time.
- Built-in lithium battery activation function to address lithium battery protection.

Controller Model	POW-M60-MAX
Charge Specification	
Charging mode	MPPT
Charging Algorithm	3-Stage
Selectable battery type	Vented/ Sealed/ Gel/ NiCd/ Lithium battery, support user define
System type	DC12V/24V/36V/48V Auto detect
Rated charging current	60A
PV utilization	≤ 98%
Input Specification	
Max Open Voltage of PV Module	160V
Max. Input Power:	
For 12V system	720W 20-80Vdc;
For 24V system	1440W 37-105Vdc;
For 36V system	2100W 50-160Vdc;
For 48V system	2800W 72-160Vdc;
Output Specification	
Rated output current	25A
Max. DC output current	30A
Max. capacitive load capacity	10000μF
General Specification	
Temperature protection	80°C
Operating temperature	-35°C ~45°C
Humidity	≤ 95%, Non-condensing
Acoustic noise	≤ 40dB
Dimension	230x165x72mm
Net weight	1.45kg

MPPT Solar Controller

New Arrival



-
- Integrated charging presets.
 - Compatible with 12V/24V/36V/48V system voltages.
 - 3-stage charging algorithm.
 - Maximum power point tracking (MPPT) technology.
 - High-efficiency charging.
 - Supports up to 12 units in parallel.
 - Built-in multiple electronic protections.
 - External temperature probe configuration.
 - Forced Air Cooling.

Model	HHJ60-PRO
Solar Input Parameters	
Max. Solar Array Open-Circuit Voltage	160V
Maximum Input Power:	
For 12V System	720W
For 24V System	1440W
For 36V System	2100W
For 48V System	2800W
Battery Charging Parameters	
Charging Technology	MPPT
System Voltage	12V/24V/36V/48V (Auto detect)
Charging Algorithm	3 stages
Overcharge Protection Voltage	60V
Charging Limit Current	61A
Maximum Efficiency	≥ 98.1%
Solar Utilization Rate	≥ 99%
Load Terminal Output	
Rated Output Current	6A
Maximum DC Output Current	8A
Protection	
Temperature Protection	75°C / 167 °F
Fan Start Temperature	>45°C / 104 °F
Fan Shutdown Temperature	<40°C / 95 °F
General Specification	
Dimensions	215x130x85mm / 8.46x5.12x3.35in
Net Weight	12V/24V/36V/48V (Auto detect)
Electromagnetic Compatibility	990g / 2.18lb
Protection Level	IP21
Operating Temperature	-20°C ~ +55°C / -4 °F ~ 131 °F
Storage Temperature	-40°C ~ +75°C / -40 °F ~ 167 °F

HVM

Solar Inverter

Max. 80A Charging



- Higher output power up to 3000W.
- 30~400 Vdc wide voltage range for photovoltaic access.
- Compatible with lithium-ion and lead-acid battery.
- Maximum charging current can reach 80Amp.
- Support remote monitoring over Wi-Fi and GPRS.
- Durable finish with high anti-corrosion.
- Built-in effective forced air cooling.
- No load automatic loss less than 35W.



Inverter Model	POW-HVM2H-12V-N	POW-HVM3.2H-24V-N
AC Input		
Input Voltage Waveform	Sinusoidal (Utility or generator)	
Nominal Input Voltage	230Vac	
Max AC Input Voltage	300Vac	
Nominal Input Frequency	50/60Hz (Auto detection)	
Efficiency	>95% (Rated R load, battery full charged)	
Transfer Time	10ms typical (UPS); 20ms typical (Appliances)	
AC Output (Buck-Up)		
Rated Output Power	2000VA/1600W	3200VA/3000W
Output Voltage Regulation	230Vac±5% Single phase	
Output Frequency	50Hz	
Peak Efficiency	94%	
Overload Protection	5s@ ≥ 150% load; 10s@100%~150%load	
Surge Capacity	2*rated power for 5 seconds	
No Load Power Consumption	<25W	<35W
Battery Specification		
Battery Type	Lithium and Lead Acid Battery, support user define	
System Voltage	12V	24V
AC Charge & PV Charge Mode		
Charging Algorithm	3-Stages	
Max AC Charging Current	60Amp (@VI/P=230Vac)	
Max. PV Array Power	2000W	3000W
PV Array MPPT Voltage Range	30~400Vdc	
Max. PV Array Open Circuit Voltage	400Vdc	
Max Charging Current (AC+PV)	80Amp	
General Specification		
Operation Temperature Range	-10℃ ~50℃	
Storage Temperature	-15℃ ~60℃	
Dimension	357x273x95mm	
Net Weight	4.6kg	4.8kg

LVM Solar Inverter

110/120VAC



- 90~140Vac AC input voltage range.
- 120~500Vdc wide voltage range for PV access.
- Higher output power up to 5000W, output power factor of 1.0.
- Max. charging current up to 80A.
- The efficiency MPPT technology no less than 99.9%.
- Support WIFI/GPRS communication module.
- Compatible with 24/48V lithium-ion and lead-acid battery.
- Intelligent variable speed fan to efficiently dissipate heat.
- Automatically enters power saving mode.

Inverter Model	POW-LVM3K -24V-H	POW-LVM5K-48V-N
AC Input		
Input Voltage Waveform	Sinusoidal (Utility or generator)	
Nominal Input Voltage	110/120Vac	
Input Voltage Range	90Vac~140Vac	
Nominal Input Frequency	50/60Hz (Auto detection)	
Efficiency	>95%	
Transfer Time	10ms typical	
Max. Bypass Overload Current	40A	63A
AC Output (Back-Up)		
Rated Output Power	3000VA/3000W	5000VA/5000W
Output Voltage Regulation	120Vac Single phase	
Output Frequency	50Hz±0.3Hz; 60Hz±0.3Hz	
Efficiency	>92%	>90%
Overload Protection	5s@>125% load; 10s@110%~125% load; 5mins@102%~110% load	
Surge Capacity	2*rated power for 5 seconds	
Enable Power Saving Mode	Load ≤ 50W	
Battery Specification		
Battery Type	Lithium and Lead Acid Battery, support user define	
System Voltage	24V	48V
Charging Voltage Range	20~33Vdc	40~60Vdc
AC Charge & PV Charge Mode		
Charging Algorithm	3-Stages	
Max. AC Charging Current	40Amp	
Max. PV Array Power	4000W	5500W
PV Array MPPT Voltage Range	120~400Vdc	120~450Vdc
Max. PV Array Open Circuit Voltage	450Vdc	500Vdc
Max. PV Charging Current	80Amp	
General Specification		
Operation Temperature	-10℃ ~55℃	
Storage Temperature	-25℃ ~60℃	
Communication Interface	USB/RS485(WIFI/GPRS)/Dry node control	
Dimension	378x280x103mm	426x322x126mm
Net Weight	8kg	11.5kg

HVM

Solar Inverter

Max. 120A Charging



- Higher output power up to 6200W.
- 90~500Vdc wide voltage range for photovoltaic access.
- On-grid and off-grid pure sine wave inverter.
- Compatible with lithium-ion and lead-acid battery.
- Maximum charging current can reach 120Amp.
- Support remote monitoring over Wi-Fi and GPRS.
- Double load output to ensure the load power supply is stable and safe.

Inverter Model	POW-HVM4.2M-24V-N	POW-HVM6.2M-48V-N
AC Input		
Input Voltage Waveform	Sinusoidal (Utility or generator)	
Nominal Input Voltage	230Vac	
Max AC Input Voltage	300Vac	
Nominal Input Frequency	50/60Hz (Auto detection)	
Efficiency	>95% (Rated R load, battery full charged)	
Transfer Time	10ms typical (UPS); 20ms typical (Appliances)	
AC Output (Buck-Up)		
Rated Output Power	4200W	6200W
Output Voltage Regulation	230Vac±5% Single phase	
Output Frequency	50Hz	
Peak Efficiency	93%	
Battery Specification		
Battery Type	Lithium and Lead Acid Battery, support user define	
System Voltage	24V	48V
AC Charge & PV Charge Mode		
Max AC Charging Current	100Amp (@VI/P=230Vac)	
Max. PV Array Power	6200W	6500W
PV Array MPPT Voltage Range	60-450V	90-500V
Max. PV Array Open Circuit Voltage	500Vdc	
Max Charging Current (AC+PV)	120Amp	
AC Output (On-Grid)		
Nominal Output Voltage	220/230/240Vac	
Feed-in Grid Voltage	195~253Vac	
Feed-in Grid Frequency	49~51±1Hz/59~61±1Hz	
Nominal Output Current	18.2A	26.9A
General Specification		
Operation Temperature Range	-10℃ ~50℃	
Dimension	110x334x423mm	
Net Weight	9.5kg	10kg

HVM Solar Inverter

Max. 150A Charging



-
- 55~450Vdc wide voltage range for PV access.
 - Built-in 150A MPPT (Max. PV) solar charger.
 - Anti-dusk kit for harsh environment. (Optional).
 - Built-in lithium battery automatic activation.
 - Unique glass top cover design.
 - Compatible with 24V/48V lithium-ion and lead-acid battery.
 - Higher output power up 4500W/6500W, output power factor of 1.0.
 - No derating when the AC input Voltage is greater than 170V.
 - Max. solar charging efficiency up to 98%.



Inverter Model	POW-HVM4.5K-24V	POW-HVM6.5K-48V
AC Input		
Input Voltage Waveform	Sinusoidal (Utility or generator)	
Nominal Input Voltage	230Vac	
Max. AC Input Voltage	300Vac	
Nominal Input Frequency	50/60Hz (Auto detection)	
Efficiency	>95% (Rated R load, battery full charged)	
Transfer Time	10ms typical (UPS); 20ms typical (Appliances)	
AC Output (Back-Up)		
Rated Output Power	4500VA/4500W	6500VA/6500W
Output Voltage Regulation	230Vac±5% Single phase	
Output Frequency	50Hz or 60Hz	
Peak Efficiency	94%	
Overload Protection	5s@ ≥ 150% load; 10s@110%~150% load	
Surge Capacity	2*rated power for 5 seconds	
No Load Power Consumption	<35W	<50W
Battery Specification		
Battery Type	Lithium and Lead Acid Battery, support user define	
System Voltage	24V	48V
AC Charge & PV Charge Mode		
Charging Algorithm	3-Stages	
Max. AC Charging Current	80Amp (@VI/P=230Vac)	
Max. PV Array Power	6000W	6500W
PV Array MPPT Voltage Range	55~450Vdc	
Max. PV Array Open Circuit Voltage	450Vdc	
Max. Charging Current (AC+PV)	150A	130A
Efficiency	98%	
Standby Power Consumption	2W	
General Specification		
Operation Temperature Range	0℃ ~55℃	
Storage Temperature	-15℃ ~60℃	
Dimension	468x318x159mm	
Net Weight	7.5kg	8.5kg

SunSmart Solar Inverter

110/120V AC Output.



- On-grid and off-grid pure sine wave inverter.
- Compatible to both residential single & split phase equipment.
- Supports parallel connection of up to 6 units
- Higher input DC current up to 22A.
- (90~140Vac) $\pm 2\%$ AC input voltage range.
- 120~500Vdc wide voltage range for PV access.
- Higher output power up to 5000W.
- PV charging current up to 100A.
- The efficiency MPPT technology no less than 99.9%.
- Power saving mode available to reduce no-load loss.



Inverter Model	POW-SunSmart SP5K
Parallel	
Permitted Parallel Number	1~6
AC Input	
Input Voltage Waveform	Sinusoidal (Utility or generator)
Nominal Input Voltage	110/120Vac
Input Voltage Range	(90~140Vac)±2%
Nominal Input Frequency	50/60Hz (Auto detection)
AC Output (Back-Up)	
Rated Output Power	5000VA/5000W
Output Voltage Regulation	120Vac Single phase or 208/240Vac Split phase
Output Frequency	50/60Hz
Max. Efficiency	>92%
Battery Specification	
Battery Type	Lithium and Lead Acid Battery, support user define
System Voltage	48V
AC Charge & PV Charge Mode	
Max. AC Charging Current	40Amp
Max. PV Array Power	5500W
PV Array MPPT Voltage Range	120~450Vdc
Max. PV Array Open Circuit Voltage	500Vdc
Max. Charging Current (AC+PV)	100Amp
Max. PV Input Current	22Amp
AC Output (On-Grid)	
Nominal Output Power	5000W
Feed-in Grid Voltage Range	120Vac
Feed-in Grid Frequency	50Hz/60Hz
General Specification	
Operation Temperature	-10°C ~55°C
Communication Interface	RS485 (WIFI/GPRS) / USB / Dry contact
Dimension	446.9x350x133mm
Net Weight	14kg

HVM Solar Inverter

Support 12 unit parallel



-
- 5500W Power Output, 230V AC Output.
 - Max. 500V PV input voltage.
 - Max. 100A PV Charge, 60A AC charge.
 - Parallel Support Up to 12 units.
 - 48V Lead acid, Lithium battery.
 - USB/RS232/RS485(WIFI)/Dry contact control communication port.
 - 50Hz/60Hz Auto frequency range.



Inverter Model	POW-HVM5.5K-48V-LIP
Parallel	
Permitted Parallel Number	1~12
AC Input	
Input Voltage Waveform	Sinusoidal (Utility or generator)
Nominal Input Voltage	230Vac
Max AC Input Voltage	300Vac
Nominal Input Frequency	50/60Hz (Auto detection)
Efficiency	>95% (Rated R load, battery full charged)
AC Output (Back-Up)	
Rated Output Power	5.5KVA/5.5KW
Output Voltage Regulation	230Vac±5% Single phase/three phase
Output Frequency	50Hz or 60Hz
Peak Efficiency	94%
Battery Specification	
Battery Type	Lithium and Lead Acid Battery, support user define
System Voltage	48V
AC Charge & PV Charge Mode	
Charging Algorithm	3-Stages
Max. AC Charging Current	60Amp
Max. PV Array Power	5500W
PV MPPT Voltage Range	120~450Vdc
Max. PV Array Open Circuit Voltage	500Vdc
Max. Charging Current (AC+PV)	100Amp
Max. Input Current	18A
General Specification	
Operation Temperature	-10°C ~50°C
Storage Temperature	-15°C ~60°C
Humidity	5%~95% Relative Humidity (Non condensing)
Communication Interface	USB/RS232/RS485/Dry node control
Dimension	448x295x105mm
Net Weight	9.9kg

Hybrid Solar Inverter

8.2KW/10.2KW AC Output



- On-grid and off-grid pure sine wave inverter.
- 90~500Vdc wide voltage range for PV access.
- 2 PV input, Max. solar input power up to 10200W.
- Higher output power up to 10200W.
- Compatible with 48V lithium-ion and lead-acid battery.
- Max. charging current can reach 160Amp.
- Maximum grid-tie conversion efficiency of 98%.
- Effective forced air cooling, with air speed adjustable.

Inverter Model	POW-HVM8.2M	POW-HVM10.2M
AC Input		
Input Voltage Waveform	Sinusoidal (Utility or generator)	
Nominal Input Voltage	230Vac	
Max. AC Input Voltage	300Vac	
Nominal Input Frequency	50/60Hz (Auto detection)	
AC Output (Back-Up)		
Rated Output Power	8.2KW	10.2KW
Output Voltage Regulation	230Vac±5% Single phase	
Output Frequency	50Hz	
Peak Efficiency	93%	
No Load Power Consumption	70W	75W
Battery Specification		
Battery Type	Lithium and Lead Acid Battery, support user define	
System Voltage	48V	
AC Charge & PV Charge Mode		
Max. AC Charging Current	140Amp	140Amp
Max. PV Array Power	8200W	10200W
PV MPPT Voltage Range	90~500Vdc	
Max. PV Array Open Circuit Voltage	500Vdc	
Max. Charging Current (AC+PV)	160Amp	160Amp
AC Output (On-Grid)		
Nominal Output Voltage	220/230/240Vac	
Feed-in Grid Voltage	195~253Vac	
Feed-in Grid Frequency	49~51±1Hz/59~61±1Hz	
Nominal Output Current	35.6A	44.3A
General Specification		
Operation Temperature	-10℃ ~50℃	
Communication Interface	RS232 (WiFi)	
Dimension	537x390x130mm	
Net Weight	14.2kg	14.5kg

SunSmart Solar Inverter

10KW 120Vac AC Output



- Supports up to 6 parallel units.
- 90~140Vac AC input voltage range.
- 125~500Vdc wide voltage range for PV access.
- Higher input DC current up to 22A in a single circuit.
- Compatible to both residential single phase & split phase equipment.
- Higher output power up to 10000W.
- 2 MPP Tracker, dual MPPT with 99.9% efficiency.
- Compatible with 48V lithium-ion and lead-acid battery.
- Compliance with IEC and UL grid standards.
- Higher MPPT charging current up to 200A.
- Energy saving mode function to reduce no-load energy losses.

Inverter Model	POW-SunSmart 10K
AC Input	
Input Voltage Waveform	Sinusoidal (Utility or generator)
Nominal Input Voltage	120Vac
Input Voltage Range	90~140Vac
Nominal Input Frequency	50/60Hz
Transfer Time	10ms typical
Max. Bypass Overload Current	63A
AC Output (Back-Up)	
Rated Output Power	10000W
Output Voltage Regulation	120Vac/240Vac Single phase/Split phase
Output Frequency	50/60Hz
Max. Battery Inverter Efficiency	92%
Overload Protection	5s@ ≥ 125% load; 10s@110%~125%load; 5mins@102%~110%load
Load Capacity of Motors	6HP
Battery Specification	
Battery Type	Lithium and Lead Acid Battery, support user define
System Voltage	48V
Charging Voltage Range	40~60V
AC Charge & PV Charge Mode	
Charging Algorithm	3-Stages
Max. AC Charging Current	120Amp
Max. PV Array Power	11000W
PV Array MPPT Voltage Range	125~425Vdc
Max. PV Array Open Circuit Voltage	500Vdc
Max. Charging Current (AC+PV)	200Amp
General Specification	
Operation Temperature Range	-10°C ~55°C , >45°C derated (-14~131 °F ; 113 °F derated)
Communication interface	RS485 (WIFI/GPRS) / CAN / USB / Dry contact
Dimension	620x445x130mm (2x1.5x0.4ft)
Net Weight	27kg (59.5lb)

SunSmart Solar Inverter

Max. 200A Charging



- IP65 waterproof and dustproof for various working conditions.
- On-grid and off-grid pure sine wave inverter.
- Support both Split Phase 208/240Vac and Single Phase 230Vac.
- Built-in AC coupled function.
- Built-in Wi-Fi for mobile monitoring (APP is available).
- Accepts second input power source, generator input compatible.
- Optional external CT sensor to guarantee 100% self-consumption.
- Built-in communication port for BMS (RS485).
- 2 MPP trackers, dual MPPT with 15A Max. input current.
- Parallel operation up to 6 units.



Inverter Model	POW-SunSmart LV12K
Permitted Parallel Number	1~6
AC Input	
Nominal Input Voltage	85Vac (per phase)/90Vac (per phase)
Acceptable Voltage Range	85~140Vac (per phase)
Nominal Input Frequency	50Hz/60Hz (Auto sensing)
AC Output (Back-Up)	
Rated Output Power	10000VA/10000W
Nominal Output Voltage	120Vac (P-N), 208Vac (P-P), 240Vac (P-P)
Efficiency (DC to AC)	91%
Battery Specification	
Battery Type	Lithium and Lead Acid Battery, support user define
Nominal DC Voltage	40~62 VDC
System Voltage	48V
AC Charge & PV Charge Mode	
Charging Algorithm	3-Stages
Max AC Charging Current	200A
Max. PV Array Power	12000W
PV MPPT Voltage Range	120~550Vdc
Max. PV Array Open Circuit Voltage	600Vdc
Max Charging Current (AC +PV)	200A
AC Output (On-Grid)	
Nominal Output Power	10000VA/10000W
Nominal Output Voltage	120Vac (P-N), 208Vac (P-P), 240Vac (P-P)
Output Voltage Range	105.5Vac~132Vac (per phase)
Nominal Output Current	41.5 A per phase
Power Factor	0.9 lag to 0.9 lead
General Specification	
Protection Degree	IP 65
Operating Temperature	-25° C to 60° C (>45° C derating)
Communication Interface	RS232, RS485, WI-FI, USB
Dimension	215.5 x 515 x 715mm
Net Weight	45kg

Hybrid Inverter

3/3.6/4.2/5/6/8KW Output



- 97.6% Max. Efficiency.
- 15A PV input current per string, 1-2 MPP trackers.
- 30A charge/discharge current.
- 110% continuous AC output overloading.
- 130% max. back-up output overloading @60s.
- 160% DC oversizing.
- Plug & Play terminals for easy wiring.
- Power and alarm indicator.
- OLED display and App for setting and data management.
- 85-450V wide battery voltage range.
- IP65 for indoor and outdoor installation.
- Compact size and elegant appearance.

Battery Compatibility Protocol

POWMr	 PYLONTECH
 Dyness	 WATTSONIC
SOLUNA	WECO
 iPotisEdge	FEB
STELTEC	 Lithium Valley Technology

Inverter Model	SOLXPOW X1-3K	SOLXPOW X1-3.6K	SOLXPOW X1-4.2K	SOLXPOW X1-5K	SOLXPOW X1-6K	SOLXPOW X1-8K
PV Input						
Max. PV Array Power	4800W	5760W	6720W	8000W	9600W	12800W
PV Input Voltage Range	80~600V					
PV MPPT Voltage Range	100~550V					
Max. PV Input Current	15A	15A	15A/15A	15A/15A	15A/15A	15A/15A
Battery Specification						
Battery Type	Lithium Battery (with BMS)					
Battery Voltage Range	85~450V					
Max. Discharging Current	30A					
Max. Charging Current	30A					
AC Input & AC Output (On-Grid)						
Rated Output Power	3000W	3600W	4200W	5000W	6000W	8000W
Nominal Input Voltage	L/N/PE; 220/230/240V					
Nominal Frequency	50Hz/60Hz					
Max. Output Current	15A	18A	21A	25A	28.7A	36.3A
THD	<3% @Rated output power					
DCI	<0.5%In					
AC Output (Back-up)						
Rated Output Power	3000W	3600W	4200W	5000W	6000W	8000W
Nominal Input Voltage	L/N/PE; 220/230/240V					
Nominal Frequency	50Hz/60Hz					
Max. Output Current	15A	18A	21A	25A	28.7A	36.3A
Voltage Harmonic Distortion	<3% @Linear load					
General Specification						
Over Voltage Category	PV: II Main: III					
IP Class	IP65					
Parallel Operation Function	To be developed					
Dimension	534×418×210mm					
Net Weight	27.0kg					

Hybrid Inverter

4/5/6/8/10/12KW Output



- 98.2% Max. Efficiency.
- 15A PV input current per string, 2 MPP trackers.
- 110% continuous AC output overloading.
- 200% max. back-up output overloading @60s.
- 150% DC oversizing.
- Plug & Play terminals for easy wiring.
- Power and alarm indicator.
- OLED display and App for setting and data management.
- 135-750V wide battery voltage range.
- IP65 for indoor and outdoor installation.
- Compatible with Three-Phase system.

Battery Compatibility Protocol

POWMr	 PYLONTECH
 DYNESS	 WATTSOONIC
SOLUNA™	WECO
 iPotisEdge	FEB
STELTEC	 Lithium Valley technology
	SUNWODA 欣旺达

Inverter Model	SOLXPOW X2-4K	SOLXPOW X2-5K	SOLXPOW X2-6K	SOLXPOW X2-8K	SOLXPOW X2-10K	SOLXPOW X2-12K
PV Input						
Max. PV Array Power	6000W	7500W	9000W	12000W	15000W	18000W
PV Input Voltage Range	135~1000V					
PV MPPT Voltage Range	120~950V					
Max. PV Input Current	15A/15A	15A/15A	15A/15A	15A/15A	15A/15A	15A/15A
Battery Specification						
Battery Type	Lithium Battery (with BMS)					
Battery Voltage Range	135~750V					
Max. Discharging Current	25A					
Max. Charging Current	25A					
AC Input & AC Output (On-Grid)						
Rated Output Power	4000W	5000W	6000W	8000W	10000W	12000W
Nominal Input Voltage	L/N/PE; 220/230/240V					
Nominal Frequency	50Hz/60Hz					
Max. Output Current	6.7A	8.3A	10.0A	13.3A	16.5A	20.0A
THD	<3% @Rated output power					
DCI	<0.5%In					
AC Output (Back-up)						
Rated Output Power	4000W	5000W	6000W	8000W	10000W	12000W
Nominal Input Voltage	L/N/PE; 220/230/240V					
Nominal Frequency	50Hz/60Hz					
Max. Output Current	6.7A	8.3A	10.0A	13.3A	16.5A	20.0A
Voltage Harmonic Distortion	<3% @Linear load					
General Specification						
Over Voltage Category	PV: II Main: III					
IP Class	IP65					
Parallel Operation Function	To be developed					
Dimension	534×418×210mm					
Net Weight	26.0kg					

Hybrid Inverter

10/12/15/20KW Output



- 98.4% Max. Efficiency.
- 30A PV input current, 2 MPP trackers.
- 40A charge/discharge current.
- 110% continuous AC output overloading.
- 200% max. back-up output overloading @60s.
- 10ms UPS-level switching.
- Plug & Play terminals for easy wiring.
- OLED display and App for setting and data management.
- WIFI configuration via App.
- 135-750V wide battery voltage range.
- IP65 for indoor and outdoor installation.

Battery Compatibility Protocol

POWMr	 PYLONTECH
 Dyness	 WATTSONIC
SOLUNA	WECO
 iPotisEdge	FEB
STELTEC	 Lithium Valley Technology
	SUNWODA 欣旺达

Inverter Model	SOLXPOW X3-10K	SOLXPOW X3-12K	SOLXPOW X3-15K	SOLXPOW X3-20K
PV Input				
Max. PV Array Power	15000W	18000W	22500W	30000W
PV Input Voltage Range	135~1000V			
PV MPPT Voltage Range	200~950V			
Max. PV Input Current	30A/30A	30A/30A	30A/30A	30A/30A
Battery Specification				
Battery Type	Lithium Battery (with BMS)			
Battery Voltage Range	135~750V			
Max. Discharging Current	40A			
Max. Charging Current	40A			
AC Input & AC Output (On-Grid)				
Rated Output Power	10000W	12000W	15000W	20000W
Nominal Input Voltage	L/N/PE; 220/230/240V			
Nominal Frequency	50Hz/60Hz			
Max. Output Current	16.5A	20A	25A	33.5A
THD	<3% @Rated output power			
DCI	<0.5%In			
AC Output (Back-up)				
Rated Output Power	10000W	12000W	15000W	20000W
Nominal Input Voltage	L/N/PE; 220/230/240V			
Nominal Frequency	50Hz/60Hz			
Max. Output Current	16.5A	20A	25A	33.5A
Voltage Harmonic Distortion	<3% @Linear load			
General Specification				
Over Voltage Category	PV: II Main: III			
IP Class	IP65			
Parallel Operation Function	To be developed			
Dimension	534×418×210mm			
Net Weight	28.0kg			

Hybrid Inverter

25/30/36/40/50KW Output



- 98.8% Max. Efficiency.
- 30A PV input current, 4 MPP trackers.
- 100A charge/discharge current.
- 110% continuous AC output overloading.
- 120% max. back-up output overloading @60s.
- 150% DC oversizing.
- Plug & Play terminals for easy wiring.
- OLED display and App for setting and data management.
- WIFI configuration via App.
- 135-750V wide battery voltage range.
- IP65 for indoor and outdoor installation.

Battery Compatibility Protocol

Inverter Model	SOLXPOW X4-25K	SOLXPOW X4-30K	SOLXPOW X4-36K	SOLXPOW X4-40K	SOLXPOW X4-50K
PV Input					
Max. PV Array Power	37500W	45000W	54000W	60000W	75000W
PV Input Voltage Range	140~1000V				
PV MPPT Voltage Range	200~950V				
Max. PV Input Current	30A*4	30A*4	30A*4	30A*4	30A*4
Battery Specification					
Battery Type	Lithium Battery (with BMS)				
Battery Voltage Range	144~750V				
Max. Discharging Current	100A				
Max. Charging Current	100A				
AC Input & AC Output (On-Grid)					
Rated Output Power	37500W	45000W	54000W	60000W	75000W
Nominal Input Voltage	L/N/PE; 220/230/240V				
Nominal Frequency	50Hz/60Hz				
Max. Output Current	42A	50A	60A	66A	83A
THD	<3% @Rated output power				
DCI	<0.5%In				
AC Output (Back-up)					
Rated Output Power	37500W	45000W	54000W	60000W	75000W
Nominal Input Voltage	L/N/PE; 220/230/240V				
Nominal Input Frequency	50Hz/60Hz				
Max. Output Current	42A	50A	60A	66A	83A
Voltage Harmonic Distortion	<3% @Linear load				
General Specification					
Over Voltage Category	PV: II Main: III				
IP Class	IP65				
Parallel Operation Function	To be developed				
Dimension	800×620×300mm				
Net Weight	72.0kg				

Energy storage LiFePO4 Battery

30~100AH 12V



-
- Lightweight and compact.
 - Higher rated capacity up to 100AH.
 - Same battery case as the SLA battery, easily replace SLA battery.
 - Maximum of 4 in series (only 100AH model), and supports parallel connection
 - The installation is simple and user-friendly.
 - Wide operation temperature range.

Battery Model		POW-30AH-12V	POW-50AH-12V	POW-100AH-12V
Performance				
Battery Type		LiFePO4 battery		
Nominal Voltage		12.8V		
Rated Capacity		30AH (0.2C/25℃) (Min: 29Ah)	50AH (0.2C/25℃) (Min: 49Ah)	100AH (0.2C/25℃) (Min: 96Ah)
Operating Voltage Range		10V~14.6V (Typical: 12.8V)		
Charging Voltage		14.6V		
Discharging Cut-off Voltage		10V		
Max. Charging Current		15A	25A	50A
Max. Discharging Current		30A	50A	100A
Function				
Series		-	-	Maximum support for 4 sets in series
Parallel		Support		
Alarm & Protection		Over voltage, Under voltage, Over current, Short circuit etc.		
Environmental Specification				
Altitude		≤ 4000m		
Humidity		15%~85%		
Operation Temperature	Charge	0℃ ~50℃		
	Discharge	-10℃ ~60℃		
Installation		Placement		
General Specification				
Dimension		195x133x171mm	228x138x210mm	325x170x215mm
Net weight		4.5kg	6.2kg	11.5kg

Wall Mounted Lithium Battery

100AH~ 200AH



-
- Support up to 15 independent modules for parallel use.
 - A+ battery cell, precise combination.
 - Continuously out 100A high current.
 - Embedded intelligent BMS provide protection.
 - Superior quality assurance, 10 years manufacturer's warranty.
 - 80% DOD cycles for 6000 times.
 - External weak current switch reduces power consumption.
 - A full range of protection functions.

Battery Model		POW-LIO48100-15S	POW-LIO48200-15S
Capacity		≥ 4.8KWH	≥ 9.6KWH
Nominal Voltage		48V	
Charging Voltage		54.75V	
Nominal Charging Current		20A	40A
Max. Charging Current		100A	100A
Max. Discharging Current		100A	100A
Cycle Life		≥ 6000 Times @80%DOD, 25°C	
Installation		Wall-mounted battery	
Parallel		Up to 15 units in parallel	
Warranty		10 years	
Communication		RS485/CAN	
Operation Temperature	Charge	0° C ~60° C	
	Discharge	-10° C~65° C	
Dimension		440×170×510mm	440×206×670mm
Net Weight		40kg	72kg

BMS communication protocol matching

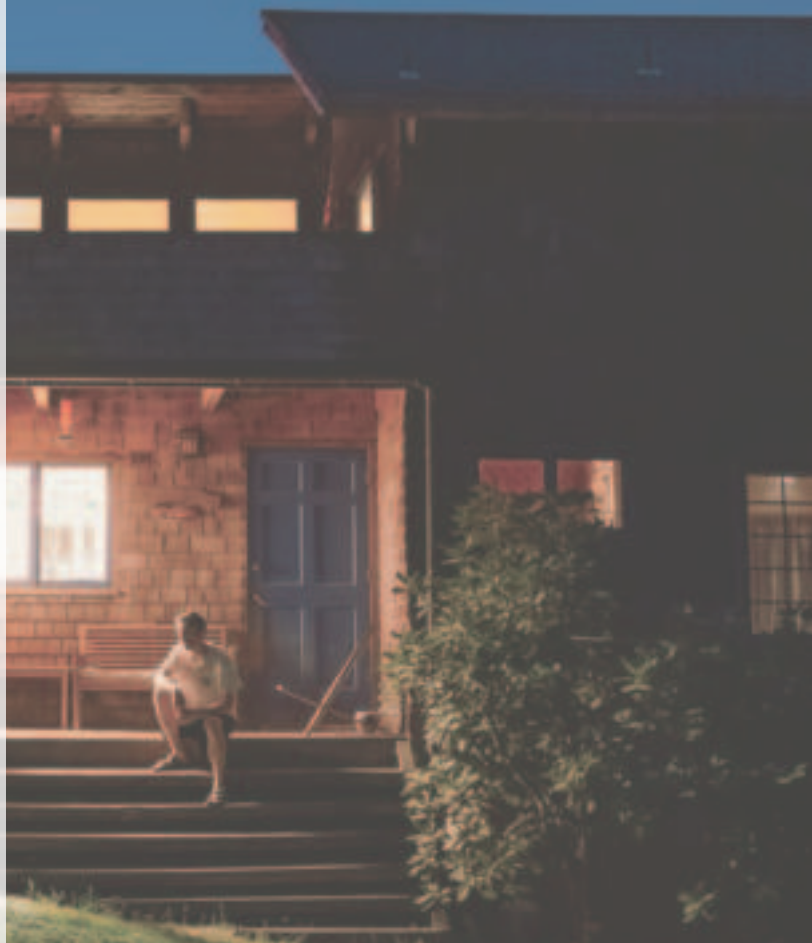
			
			
			
			

Residential Energy Storage

Stacked LiFePO4 Battery



- Integration of A-grade Lithium Iron Phosphate battery cells.
- Module incorporates a high-precision BMS unit.
- External cold-rolled plate metal casing with internal shock-absorbing filler structure.
- High safety and reliability for household standards.
- Each battery module is 100AH, with a maximum of 16 modules in parallel.
- Stackable design, maximizing vertical space utilization.
- ≥ 6000 cycles of cycle life.
- Stackable installation, plug-and-play wiring, easy operation.



Battery Model	POW-LIO51400-16S
System Voltage	51.2V
Capacity (for 4 battery module in parallel)	400AH (4x100AH)
Constant Voltage Charging Voltage	56.8V
Float Charging Voltage	56V
Max. Discharge Cutoff Voltage	43.2V
Recommended Discharge Cutoff Voltage	46.4V
Max. Charging Current	100A
Recommended Charging Current	20A
Max. Discharge Current	100A
Recommended Discharge Current	50A
Max. Parallel Quantity	16
Communication Interface	RS232/RS485/CAN
Cycle Life	≥ 6000 Times @80%DOD, 25°C
Operating Temp	Charging: 0~60° C; Discharging: -10° C~65° C
Nominal Operation Altitude	< 3000m
Recommended Operation Environment	Indoor
Dimensions	635x500x800mm
Net Weight	206kg
Single Battery Dimensions (LxWxH)	635x500x155mm
Top Cover Dimensions (LxWxH)	635x500x80mm
Base Dimensions (LxWxH)	635x500x100mm
Single Battery Net Weight	47kg
Top Cover Net Weight	8kg
Base Net Weight	10kg

BMS communication protocol matching

Wall Mounted

LiFePO4 Battery



-
- Utilizes high-quality Grade A cells for integration.
 - Built-in 150A BMS for charging management.
 - Cycle life of ≥ 6000 times.
 - Supports remote monitoring via upper computer.
 - High stability and safety, suitable for household solar energy systems.
 - Built-in control panel for easy monitoring of data and status.

Battery Model	POW-LIO51200-150A		
System Voltage	51.2V		
Capacity	200AH		
Constant Voltage Charging Voltage	57.6V		
Float Charging Voltage	56V		
Max. Discharge Cutoff Voltage	43.2V		
Recommended Discharge Cutoff Voltage	48V		
Max. Charging Current	150A		
Recommended Charging Current	40A		
Max. Discharge Current	150A		
Recommended Discharge Current	40-120A		
Max. Parallel Connection of Batteries	16		
Communication Interface	RS232/RS485/CAN		
Cycle Life	≥ 6000 Times @80%DOD, 25℃		
Operating Temp	Charging: 0~60° C; Discharging: -10° C~65° C		
Nominal Operation Altitude	< 3000m		
Recommended Operation Environment	Indoor		
Battery Dimensions (LxWxH)	780*495*217mm		
Net Weight	94.5kg		
BMS communication protocol matching			
			
			
			
			

High-voltage

Stacked Battery



- Support 8 modules in Series.
- Modules operate independently for system safety.
- Pulley bottom, manual switch, and visual supervision interface.
- Cover all mainstream protocols.
- 4 times long static and 8 consistency screening.
- Nano-coating and self-healing technology construct the LFP channel.

Inverter Compatibility Protocols

POWMr	SOFAR SOLAR
invrt	GROWATT 古 瑞 瓦 特
MUST 美世乐	SOROTEC Power Solutions Expert
PYLONTECH	GOODWE
victron energy Power Solutions	SERMATEC
LU X POWER TEX	Valtronic Power All-in-One Power
solis	Deye

Battery Model		POW-HVT -5	POW-HVT -10	POW-HVT -15	POW-HVT -20	POW-HVT -25	POW-HVT -30
Electronic Specifications							
Rated Voltage		51.2V	102.4V	153.6V	204.8V	256V	307.2V
Rated Capacity		100Ah@25° C					
Energy		5120Wh	10240Wh	15360Wh	20480Wh	25600Wh	30720Wh
Months Self Discharge		<3%					
Charge Efficiency		99.5%@ 0.2C					
Discharge Efficiency		96-99%@ 1C					
Internal Resistance		≤ 50mΩ (Fully charged, 25° C)					
Charge Voltage		56.8V	113.6V	170.4V	227.2V	284.0V	340.8V
Standard Charge Mode		0.2C A Constant Current to 57V, then Constant Voltage 57V , until the current drops to 0.02CA, before use, rest 30 minutes (25° C±2° C, <75%RH)					
Charge Current		20A					
Maximum Charge Current		50A					
Charge Cut-off Voltage		58.4V	116.8V	175.2V	233.6V	292.0V	350.4V
Continuous Discharge Current		100A					
Maximum Pulse Current		200A (<1s)					
Discharge Cut-off Voltage		44.8V	89.6V	134.4V	179.2V	224V	268.8V
Operating Temperature Range							
Nominal Operating Temp		25° C± 3° C (77° F± 5° F)					
Discharge Temp		- 20° C~ 60° C (-4° F ~ 140° F)					
Charge Temp		0° C~ 45° C (32° F ~ 113° F)					
Storage Temp		0° C~ 40° C (32° F ~ 104° F)					
General Information							
Cycle life		4000 cycles @ 0.2C 100%D.O.D					
Water Dust Resistance		IP50					
Communicate Protocol		RS485/ CAN					
SOC		Screen/LED/PC Software					
Cells		16 Strings					
Dimensions (Single Battery Unit)		640x400x160mm (23.84x14.9x5.96inch)					
Approx. Weight	Battery	52kg (114.64lbs)±2kg					
	Controller	20kg (44.09lbs)±2kg					

24V 48V Battery Equalizer

For Lead-acid and Lithium
Battery



-
- Make the voltage of each battery consistent.
 - Suitable for a variety of battery types.
 - Improve the battery's performance and extend the battery's lifetime.
 - Automatic balance the battery voltage when it detects there is 20mV/10mV between two batteries.
 - The parallel or series connection has no effect on equalizer operation.
 - Balances the battery for 24 hours automatically.

Equalizer Model	BE24
Battery nominal voltage	2*12V
Optimizing current	0-5A
Quiescent current	<3mA
Protection	Reverse polarity protection
Low Voltage Disconnect	10V
Dimensions	70*70*27 mm
Net Weight	0.23Kg
Equalizer Model	BE48
Battery nominal voltage	4* (2.4V/3.6V/6V/9V/12V)
Optimizing current	0-10A
Quiescent current	5mA(12V) 1.2mA(2.4V)
Protection	Reverse polarity protection
Low Voltage Disconnect	18V
Dimensions	62*124*27 mm
Net Weight	0.41Kg

All-in-one Energy Storage System

Max. energy storage capacity
of 20.48kWh



- Integrated solar energy storage system
- Rated 5600W pure sine wave AC output
- Wide photovoltaic input voltage range of 120~500V
- Maximum charging current of up to 80A
- Each battery module has a capacity of 2.56 kWh, supporting up to 8 parallel connections
- A+ grade lithium iron phosphate (LiFePO4) battery cells
- Stackable installation, saving approximately 60% of installation wiring time
- LCD display for comprehensive monitoring of system status



Inverter Module	POW-ESS5S
Output	
Rated Output Power	5600W/5600VA
Max. Peak Power	10000VA
Maximum Efficiency	92%
Wave Form	PSW(Pure Sine Wave)
Rated Output Voltage	220Vac(single-phase)
Power saving mode	Yes
Solar Input	
Solar Charge Type	MPPT
Max. Solar Array Power	6000W
Max. Solar Open Circuit Voltage	500Vdc
Grid / Generator Input	
Input Voltage Range	90~280Vac
Bypass Overload Current	40A
Battery Charging	
Max. Solar Charging Current	80A
Max. Grid / Generator Charging Current	60A
General	
Dimension	135*480*330mm
Weight(Kg)	~13kg
Battery Module	POW-ESS5S
Battery Power	2.56kWh
Rated Voltage	51.2V
Rated Capacity	50Ah
Battery Type	Prismatic LFP
Cycling Life Span	≥ 6000 (80%DOD, 0.5C, 25° C)
Max.Parallel Capacity	8 units (up to 20.48kWh)
Dimension	135*480*330mm
Weight(Kg)	~25Kg
Standard	UN38.3, MSDS, UL1973, IEC62619:2017, EN IEC61000-3-2, EN IEC61000-6-1,RoHS

ACCESSORIES



98/164/230/328FT



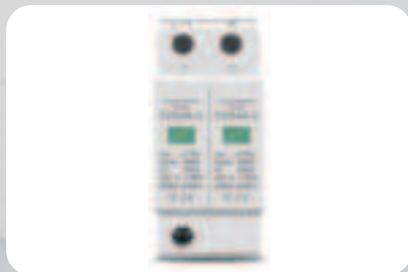
3/16/26/30/40/50FT



10/20/30/40/50FT



YRDS1EL-N32-4



TGZ40-AC275V-2P



MC4B-C2



Breaker 30-100A



Breaker 60-300A



Breaker 2P Dc/Ac 16-100A



DC Electricity Usage Monitor



AC Electricity Usage Monitor



Blade Fuse Block

Solar Connector



MC4X-BN2



MC4T-AN2



MC4T-AN3



MC4T-AN4



MC4T-AN5



MC4T-AN6



MC4Y-BN4



MC4Y-BN2



MC4Y2-B22



MC4-pliers1/2



MC4D-7



MC4D-4/6

Controller

3A-6V; 5A-12V

IP57; Lead acid battery



10A-12V

IP68; Lead acid & lithium battery



POW-Boost 10A

MPPT; 24/36/48/60/72V;
Lead acid & lithium battery



POW-KEEPER SERIES

MPPT; 12/24V;
Lead acid & lithium battery



Pstar SERIES

PWM; 12/24/36/48V;
Lead acid & lithium battery



POW-M60-PRO

MPPT; 12/24/36/48V;
Lead acid & lithium battery



POW-M60-MAX

MPPT; 12/24/36/48V;
Lead acid & lithium battery



HHJ60-PRO

MPPT; 12/24/36/48V;
Lead acid & lithium battery



Solar Charger Inverter

POW-HVM2H-24V-N
POW-HVM3.2H-24V-N

220V; Single phase; Off-grid



POW-LVM3K-24V-H
POW-LVM5K-48V-N

110V; Single phase; Off-grid



POW-HVM4.2M-48V-N
POW-HVM6.2M-48V-N

220V; Single phase;
On-grid & off-grid; 2 AC output



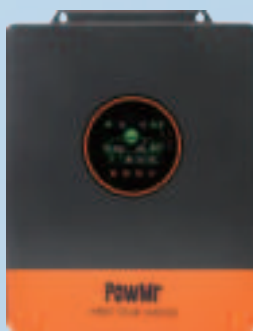
POW-HVM4.5K-24V
POW-HVM6.5K-48V

220V; Single phase; Off-grid



POW-SunSmart SP5K

110V; Single/split phase;
On-grid & off-grid; Max. parallel: 6



POW-HVM5.5K-48V-LIP

220V; Single/three phase;
off-grid; Max. parallel: 12



POW-HVM8.2M
POW-HVM10.2M

220V; Single phase; On-grid &
off-grid; 2 AC output



POW-SunSmart 10K

110V; Single/split phase;
2 MPPT; On-grid & off-grid;
Max. Parallel: 6



POW-SunSmart LV12K

110V; Single/split phase;
2 MPPT; On-grid & off-grid;
Max. parallel: 6



**SOLXPOW X1-3/3.6/
4.2/5/6/8K**

220V; Single phase; On-grid &
off-grid; 1/2 MPPT



**SOLXPOW X2-4/
5/6/8/10/12K**

220V; Three phase; On-grid &
off-grid; 2 MPPT



**SOLXPOW X3-10/
12/15/20K**

220V; Three phase; On-grid &
off-grid; 2 MPPT



**SOLXPOW X4-25/
30/36/40/50K**

220V; Three phase; On-grid &
off-grid; 4 MPPT



Battery and Battery Accessory

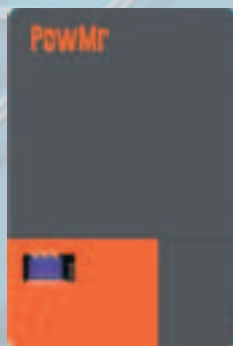
**POW-30AH-12V
POW-50AH-12V
POW-100AH-12V**

Support parallel;
Up to 4 sets in series



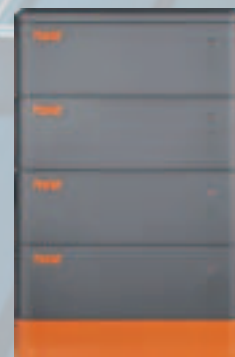
**POW-LIO48100-15S
POW-LIO48200-15S**

Up to 15 unit in parallel;
Wall-mounted



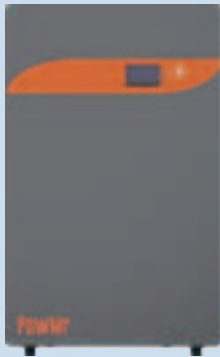
POW-LIO51400-16S

Up to 15 unit in parallel;
Stackable



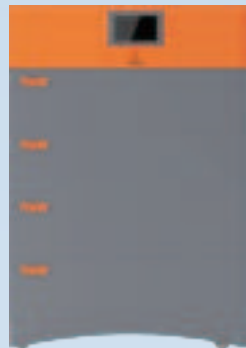
POW-LIO51200-150A

Up to 15 unit in parallel;
Wall-mounted



POW-HVT SERIES

Up to 8 unit in series;
Stackable; High-voltage



BE24 BE48

BE24: Gel/Flood/AGM;
BE48: VRLA/LFP/Ni/CD/Ni/MH



All-in-one Energy Storage System

POW-ESS5S

220V; 2.56kWh; 5600W/VA

