



NEW ENERGY NEW LIFE

PV PRODUCT CATALOG

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



2014

Established HehejinIndustrial
Led.China

Major in Solar charge controller



**2015
—
NOW**

Core agent of EPEVER and
Growatt

One of EPEVER'S largest distributors
for three consecutive years



2018

Created the PowMr
brand

Developing and designing solar
controllers



**2019
—
NOW**

Development of solar inverters
and controllers

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



**2021
—
NOW**

Research and development of
inverter chargers and supporting
lithium battery packs

Idea of PowMr everywhere...



**2022
—
NOW**

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 overseas 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



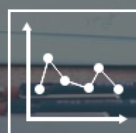
Product system
upgrade



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.
 - built-in industrial microcontroller.
 - LED display, auto memory function.
 - Fully integrated 4-stage PWM charge management.
 - Dual MOSFET reverse current protection, low heat.
 - IP57 waterproof and dustproof rating.
 - 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.
 - built-in industrial microcontroller.
 - Supports LED display and automatic memory function.
 - Fully 4-stage PWM charge management.
 - Dual MOSFET reverse current protection, low heat protection.
 - IP68 waterproof and dustproof rating.
 - 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

Plug-and-play



- Compact and lightweight design for easy handling.
- Integrated presets for efficient charging of various battery types.
- Compatible with 12V/24V systems for versatile use.
- Quick plug-and-play wiring for easy installation.
- "One-Key" battery setup for instant charging initiation.
- Maximum Power Point Tracking (MPPT) for maximum solar power utilization.
- Durable and safe operation with multiple protections.



Model	POW-LTW-15A
Photovoltaic Input Parameters	
Max. Open Circuit Voltage of PV Array	
12V System	30V
24V System	60V
Maximum Input Power:	
12V System	180W
24V System	360W
Input Voltage Range:	
12V System	<30V
24V System	<60V
Battery Charging Parameters	
Charging Technology	MPPT
Charging Algorithm	3 Stages
Nominal System Voltage	12V/24V
Rated Charging Current	15A
Conversion Efficiency	≤ 98%
Max. Power Point Tracking Efficiency	>99%
Self-Consumption	12V 20mA, 24V 25mA
Environmental Parameters	
Operating Temperature Range	-35°C ~+75°C
Humidity Range	≤ 95% Non-condensing
Altitude	<3000m
General Parameters	
Protection Level	IP32
Dimensions (excluding built-in wiring)	129x78x30mm
Net Weight	237g

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, 20V~80V
For 24V System	1440W, 37V~105V
For 36V System	2100W, 50V~160V
For 48V System	2800W, 72V~160V
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

MPPT Solar Controller

New Product Release



- MPPT charging current up to 80A/100A.
- Suitable for 12V/24V/36V/48V energy storage systems.
- Can charge lead-acid batteries or lithium batteries.
- Charging efficiency up to 97%.
- MPP tracking efficiency up to 99%.
- Supports up to 12 parallel connections.
- Three-stage charging for safety and efficiency.
- Built-in multiple protections to ensure safe operation.
- Integrated fan and heat sink for effective cooling.
- Built-in lithium battery activation function.

Model	POW-M80-PRO		POW-M100-PRO	
Solar Input Parameters				
Max. Open Circuit Voltage of PV Array	160V			
Max. Input Power:				
	For 12V System		960W	1200W
	For 24V System		1920W	2400W
	For 36V System		2880W	3600W
	For 48V System		3840W	4800W
PV Input Voltage Range:				
	For 12V System		20V~80V	
	For 24V System		37V~105V	
	For 36V System		50V~160V	
	For 48V System		72V~160V	
Battery Charging Parameters				
Charging Technology	MPPT			
Charging Algorithm	3 stages			
Nominal System Voltage	12V/24V/36V/48V			
Battery Voltage Range	9~60V			
Rated Charging Current	80A		100A	
Conversion Efficiency	≤ 98%			
Max. Power Point Tracking Efficiency	>99%			
Temperature Compensation	-3mV/°C /2V （default）			
Self-consumption	44mA/12V; 26mA/24V; 18mA/36V; 12mA/48V			
Environmental Parameters				
Operating Temperature Range	-35°C ~+45°C			
Humidity Range	≤ 95%, Non-condensing			
Altitude	<3000m			
General Parameters				
Protection Level	IP32			
Dimensions	260x180x75mm		315x195x80mm	
Net Weight	2kg		2.7kg	

HVM

Solar Inverter

1KW/1.5KW Output



- Supports pure sine wave inversion and bypass output.
- Max. output power up to 1500W.
- MPP tracking range between 20~150Vdc.
- Supports grid charging and solar charging.
- Max. charging current up to 80A.
- Built-in dust cover.
- Air-cooled forced heat dissipation.
- Built-in multiple protection functions.

Inverter Model	POW-HVM1K-12V		POW-HVM1.5K-24V	
AC Input				
Input Voltage Waveform	Sinusoidal (Utility or generator)			
Nominal Input Voltage	230Vac			
Max AC Input Voltage	300Vac			
Nominal Input Frequency	50Hz/60Hz			
Efficiency	>95% (Rated R load, battery fully charged)			
Switching Time	10ms			
AC Output (Off-grid)				
Rated Output Power	1000VA/1000W		1500VA/1500W	
Output Voltage Regulation	230Vac±5%			
Output Frequency	50Hz			
Peak Efficiency	94%			
Overload Protection	3s@ ≥ 150% Load; 5s@100%~150% Load			
Surge Capacity	2*rated power for 5 seconds			
No Load Power Consumption	<28W			
Battery Parameters				
Battery Type	Lithium and Lead Acid Battery, support user define			
System Voltage	12V		24V	
AC Charging & Solar Charging Mode				
Charging Algorithm	3 stages			
Max. AC Charging Current	40Amp (@VI/P=230Vac)			
Max. PV Array Power	600W		1200W	
PV Array Max. Power Point Tracking Range	20~150Vdc		30~150Vdc	
Max. PV Array Open Circuit Voltage	150Vdc			
Max. Charging Current (AC+PV)	80Amp			
General Parameters				
Operating Temperature Range	-10℃ ~50℃			
Storage Temperature	-15℃ ~60℃			
Dimensions	286x240x91mm			
Net Weight	3kg		3.5kg	

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.
- 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

RELAB-E Solar Inverter

220Vac Low Frequency
Inverter



-
- 3/5/10KW Pure Sine Wave Output.
 - Low frequency inverter suitable for various UPS application scenarios.
 - Suitable for lithium batteries or lead-acid battery energy storage systems.
 - Solar charging current up to 120A.
 - Intelligent energy-saving function with Eco mode.
 - Built-in multiple protection functions.

Inverter Model	POW-RELAB 3KE	POW-RELAB 5KE	POW-RELAB 10KE
AC Input			
Input Voltage Waveform	Sinusoidal (Utility or generator)		
Nominal Input Voltage	220Vac		
Input Voltage Range	154~265Vac		
Nominal Input Frequency	50Hz/60Hz		
Switching Time	≤ 10ms (UPS); ≤ 20ms (APL)		
AC Output (Off-grid)			
Rated Output Power	3000W	5000W	10000W
Peak Power	9000W	15000W	30000W
Output Frequency	50Hz/60Hz		
Peak Efficiency	>98%		
Battery Parameters			
Battery Type	Lithium and Lead Acid Battery, support user define		
System Voltage	24V	48V	
AC Charging & Solar Charging Mode			
Charging Algorithm	3 stages		
Max. AC Charging Current	38A	29A	60A
Max. PV Array Power	1600W	6400W	6400W
PV Array Max. Power Point Tracking Range	30~150Vdc	60~150Vdc	
Max. PV Array Open Circuit Voltage	150Vdc		
Max. Charging Current (AC+PV)	60Amp	120Amp	
General Parameters			
Operating Temperature	-10° C to 50° C		
Storage Temperature	-15° C to 50° C		
Dimensions	465*310*135mm	545*400*200mm	
Net Weight	19kg	27.4kg	51kg

RELAB-U

Solar Inverter

110Vac Low Frequency
Inverter



-
- 3/5/10KW Pure Sine Wave Output.
 - Low frequency inverter suitable for various UPS application scenarios.
 - Suitable for lithium batteries or lead-acid battery energy storage systems.
 - Solar charging current up to 120A.
 - Intelligent energy-saving function with Eco mode.
 - Built-in multiple protection functions.

Inverter Model	POW-RELAB 3KU	POW-RELAB 5KU	POW-RELAB 10KU
AC Input			
Input Voltage Waveform	Sinusoidal (Utility or generator)		
Nominal Input Voltage	110Vac		
Input Voltage Range	77~132Vac		
Nominal Input Frequency	50Hz/60Hz		
Switching Time	≤ 10ms (UPS); ≤ 20ms (APL)		
AC Output (Off-grid)			
Rated Output Power	3000W	5000W	10000W
Peak Power	9000W	15000W	30000W
Output Frequency	50Hz/60Hz		
Peak Efficiency	>98%		
Battery Parameters			
Battery Type	Lithium and Lead Acid Battery, support user define		
System Voltage	24V	48V	
AC Charging & Solar Charging Mode			
Charging Algorithm	3 stages		
Max. AC Charging Current	38A	29A	60A
Max. PV Array Power	1600W	6400W	6400W
PV Array Max. Power Point Tracking Range	30~150Vdc	60~150Vdc	
Max. PV Array Open Circuit Voltage	150Vdc		
Max. Charging Current (AC+PV)	60Amp	120Amp	
General Parameters			
Operating Temperature	-10° C to 50° C		
Storage Temperature	-15° C to 50° C		
Dimensions	465*310*135mm	545*400*200mm	
Net Weight	19kg	27.4kg	51kg

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 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)/Dry node control	
Dimension	378x280x103mm	426x322x126mm
Net Weight	8kg	11.5kg

LVM

Solar Inverter

120/110Vac AC Output



- 3200W/3200VA Pure Sine Wave AC Output.
- Supports connection to 24V lithium batteries and lead-acid batteries.
- 30~108Vdc PV Input Voltage Range.
- Max. 1600W PV input power limit.
- Max. 100A MPPT charging.
- Forced air-cooling for efficient heat dissipation.
- Supports external Wi-Fi communication.
- Built-in multiple protections.
- Supports energy-saving mode operation.

Inverter Model	POW-LVM3.2K-24V
AC Input	
Input Voltage Waveform	Sinusoidal (Utility or generator)
Nominal Input Voltage	110/120Vac
Input Voltage Range	90Vac~140Vac
Nominal Input Frequency	50Hz/60Hz
Efficiency	>95% (Rated R load, battery full charged)
Switching Time	10ms typical
AC Output (Off-grid)	
Rated Output Power	3200VA/3200W
Output Voltage Regulation	230Vac±5%
Output Frequency	50Hz
Peak Efficiency	92%
Overload Protection	5min@102%~110% load; 10s@110%~125% load; 10s@ > 125%±10% load
Surge Capacity	2*rated power for 5 seconds
Enable Energy-saving Mode Threshold	Load < 50W
Battery Parameters	
Battery Type	Lithium and Lead Acid Battery, support user define
System Voltage	24V
AC Charging & Solar Charging Mode	
Charging Algorithm	3 stages
Max. AC Charging Current	40Amp (@VI/P=230Vac)
Max. PV Array Power	1600W
PV Array Max. Power Point Tracking Range	30~90Vdc
Max. PV Array Open Circuit Voltage	108Vdc
Max. Charging Current (AC+PV)	100Amp
General Parameters	
Operating Temperature Range	-10°C ~55°C
Storage Temperature	-25°C ~60°C
Dimensions	378x280x103mm
Net Weight	6.8kg

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.
- 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) / USB / Dry contact
Dimension	446.9x350x133mm
Net Weight	14kg

HVM Solar Inverter

Support 12 unit parallel



- 230V 6200W pure sine wave output.
- Allows connection of lithium or lead-acid batteries at 48V.
- Max. charging current up to 120A.
- Max. connection to 6500W PV array.
- Wide MPP tracking range from 60 to 500V.
- Built-in multiple protection functions.
- Supports single-phase or three-phase operation in parallel.



Inverter Model	POW-HVM6.2K-48V-LIP
Parallel Operation	
Permissible Parallel Units	1~12
AC Input	
Input Voltage Waveform	Sinusoidal (Utility or generator)
Nominal Input Voltage	230Vac
Max. AC Input Voltage	300Vac
Nominal Input Frequency	50Hz/60Hz
Efficiency	>95% (Rated R load, battery full charged)
Output Short Circuit Protection	Line mode: Circuit breaker; Battery mode: Electronic Circuits
Switching Time	10ms typical (UPS); 20ms typical (Appliances)
AC Output (Off-grid)	
Rated Output Power	6200VA/6200W
Output Voltage Regulation	230Vac±5%
Output Frequency	50Hz/60Hz
Peak Efficiency	94%
Surge Capacity	2*rated power for 5 seconds
Battery Parameters	
Battery Type	Lithium and Lead Acid Battery, support user define
System Voltage	48V
AC Charging & Solar Charging Mode	
Charging Algorithm	3 stages
Max. AC Charging Current	80Amp (@VI/P=230Vac)
Max. PV Array Power	6500W
PV Array Max. Power Point Tracking Range	60~500Vdc
Max. PV Array Open Circuit Voltage	500Vdc
Max. Charging Current (AC+PV)	120Amp
General Parameters	
Operating Temperature Range	-10°C ~55°C
Storage Temperature	-15°C ~60°C
Dimensions	450x300x130mm
Net Weight	9.6kg

HVM Solar Inverter

6.2KW/6.2KVA Output



- Supports pure sine wave inversion and bypass output.
- Max. output power up to 6200W.
- MPP tracking range between 60~450Vdc.
- Supports grid charging and solar charging.
- Max. charging current up to 120A.
- Supports simultaneous grid and generator dual AC inputs.
- Built-in dual AC outputs.
- Built-in dust cover.
- Air-cooled forced heat dissipation.
- Built-in multiple protection functions.
- Built-in MC4 connectors, plug-and-play connection for PV input.

Inverter Model	POW-HVM6.2K-PRO
AC Input	
Input Voltage Waveform	Sinusoidal (Utility or generator)
Nominal Input Voltage	230Vac
Max. AC Input Voltage	300Vac
Nominal Input Frequency	50Hz/60Hz
Efficiency	>95% (Rated R load, battery full charged)
Switching Time	10ms typical (UPS); 20ms typical (Appliances)
AC Output (Off-grid)	
Rated Output Power	6200VA/6200W
Output Voltage Regulation	230Vac±5%
Output Frequency	50Hz
Peak Efficiency	93%
Overload Protection	5s@ ≥ 130% Load; 10s@105%~130% Load
Surge Capacity	2*rated power for 5 seconds
Standby Power Consumption	<55W
Battery Parameters	
Battery Type	Lithium and Lead Acid Battery, support user define
System Voltage	48V
AC Charging & Solar Charging Mode	
Charging Algorithm	3 stages
Max. AC Charging Current	100Amp (@VI/P=230Vac)
Max. PV Array Power	6000W
PV Array Max. Power Point Tracking Range	60~450Vdc
Max. PV Array Open Circuit Voltage	500Vdc
Max. Charging Current (AC+PV)	120Amp
General Parameters	
Operating Temperature Range	-10°C ~50°C
Storage Temperature	-15°C ~60°C
Dimensions	136x323.6x449.3mm
Net Weight	10.3kg

SunSmart Solar Inverter

8/10/12KW 230V AC Output



- Supports single-phase (230Vac) or three-phase (400Vac) output.
- Dual MPP trackers, efficiency up to 99.9%.
- Each input current can reach 22A.
- Wide MPPT range from 200 to 650Vdc.
- Supports connection to 48V lithium batteries and lead-acid batteries.
- Max. charging current up to 260A.
- Supports external WiFi communication.
- Built-in multiple protection functions.



Inverter Model	POW-SunSmart 8KL3	POW-SunSmart 10KL3	POW-SunSmart 12KL3
AC Input			
Input Voltage Waveform	Sinusoidal (Utility or generator)		
Nominal Input Voltage	230Vac/400Vac （three phase）		
Input Voltage Range	Phase: 170Vac~280Vac, Line: 305~485V		
Nominal Input Frequency	50Hz/60Hz		
Switching Time	10ms typical		
AC Output (Off-grid)			
Rated Output Power	8000W	10000W	12000W
Max. Surge Power	16000W	20000W	24000W
Output Frequency	50Hz		
Peak Efficiency	≥ 92%		
Overload Protection	5min@102%~110% load; 10s@110%~125% load; 10s@ > 125%±10% load		
Battery Parameters			
Battery Type	Lithium and Lead Acid Battery, support user define		
System Voltage	48V		
AC Charging & Solar Charging Mode			
Charging Algorithm	3 stages		
Max. AC Charging Current	100A	120A	120A
Max. PV Array Power	6000W/6000W	7500W/7500W	9000W/9000W
PV Array Max. Power Point Tracking Range	200~650Vdc/200~650Vdc		
Max. PV Array Open Circuit Voltage	800Vdc/800Vdc		
Max. Charging Current (AC+PV)	180Amp	220Amp	260Amp
General Parameters			
Operating Temperature Range	-10℃ ~55℃, >45℃ derated		
Dimensions	620x445x130mm		
Net Weight	27kg		

Hybrid Solar Inverter

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-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	10.2KW
Output Voltage Regulation	230Vac±5% Single phase
Output Frequency	50Hz
Peak Efficiency	93%
No Load Power Consumption	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
Max. PV Array Power	10200W
PV MPPT Voltage Range	90~500Vdc
Max. PV Array Open Circuit Voltage	500Vdc
Max. Charging Current (AC+PV)	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	44.3A
General Specification	
Operation Temperature	-10°C ~50°C
Communication Interface	RS232 (WiFi)
Dimension	537x390x130mm
Net Weight	14.5kg

SunSmart Solar Inverter

10KW 120Vac AC Output



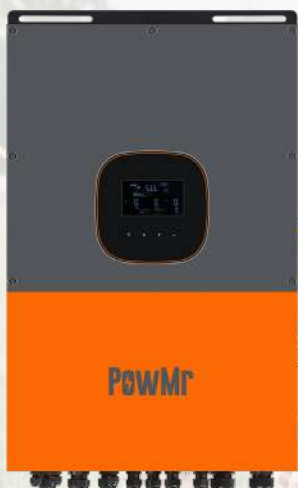
- Supports up to 6 parallel units.
- 90~140Vac AC input voltage range.
- 125~500Vdc wide voltage range for PV access.
- Higher input DC current up to 22A in a single circuit.
- Compatible to both residential single phase & split phase equipment.
- Higher output power up to 10000W.
- 2 MPP Tracker, dual 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	POW-SunSmart 10KP
Permitted Parallel Number	/	1~6
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℃ ~55℃ , >45℃ derated (-14~131 ℉ ; 113 ℉ derated)	
Communication interface	RS485 (WIFI) / 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, each with a 18A input, and a Max. PV input current of 30A.
- 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

12/20KW 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 	WECCO
 iPotisEdge	 FEB
STELTEC	 Lithium Valley technology
	SUNWODA 欣旺达

Inverter Model	SOLXPOW X3-12K	SOLXPOW X3-20K
PV Input		
Max. PV Array Power	18000W	30000W
PV Input Voltage Range	135~1000V	
PV MPPT Voltage Range	200~950V	
Max. PV Input Current	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	12000W	20000W
Nominal Input Voltage	L/N/PE; 220/230/240V	
Nominal Frequency	50Hz/60Hz	
Max. Output Current	20A	33.5A
THD	<3% @Rated output power	
DCI	<0.5%In	
AC Output (Back-up)		
Rated Output Power	12000W	20000W
Nominal Input Voltage	L/N/PE; 220/230/240V	
Nominal Frequency	50Hz/60Hz	
Max. Output Current	20A	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	




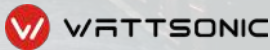



Hybrid Inverter

30/50KW 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 X4-30K	SOLXPOW X4-50K
PV Input		
Max. PV Array Power	45000W	75000W
PV Input Voltage Range	140~1000V	
PV MPPT Voltage Range	200~950V	
Max. PV Input Current	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	45000W	75000W
Nominal Input Voltage	L/N/PE; 220/230/240V	
Nominal Frequency	50Hz/60Hz	
Max. Output Current	50A	83A
THD	<3% @Rated output power	
DCI	<0.5%In	
AC Output (Back-up)		
Rated Output Power	45000W	75000W
Nominal Input Voltage	L/N/PE; 220/230/240V	
Nominal Input Frequency	50Hz/60Hz	
Max. Output Current	50A	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

100~150Ah 12.8V



- A wide range of battery models to meet diverse capacity needs.
- Supports both series and parallel connections.
- Ideal upgrade for lead-acid battery storage systems .
- 6000 cycle lifespan.
- Compact size, lightweight, improved space utilization.
- Simple and user-friendly installation.



Battery Model		POW-100AH -12.8V	POW-100AH- 12.8V-MINI	POW-150AH -12.8V
Battery Specifications				
Battery Type		LiFePO4 battery		
Nominal Voltage		12.8V		
Rated Capacity		100AH	100AH	150AH
Rated Energy		1280Wh	1280Wh	1920Wh
Operating Voltage Range		10~14.6V	10.8~14.6V	10.8~14.6V
Charging Voltage		14.6V	14V	14.6V
Max. Charging Current		50A	100A	150A
Max. Discharging Current		100A	100A	150A
Max. No. of Series Connections		4 PCS	4 PCS	4 PCS
Max. No. of Parallel Connections		4 PCS	4 PCS	4 PCS
General Parameters				
Cycle Life		6000 times (0.2C, 25° C@80% DOD)		
Casing Material		ABS		
Operation Temperature	Charging	0°C ~50°C	0°C ~55°C	0°C ~55°C
	Discharging	-10°C ~60°C	-20°C ~55°C	-20°C ~55°C
Dimension		325x170x215mm	260x169x211mm	330x171x215mm
Net Weight		11.5kg	10kg	15kg

Energy storage LiFePO4 Battery

100~300Ah 12.8V/25.6V



-
- A wide range of battery models to meet diverse capacity needs.
 - Supports both series and parallel connections.
 - Ideal upgrade for lead-acid battery storage systems.
 - 6000 cycle lifespan.
 - Compact size, lightweight, improved space utilization.
 - Simple and user-friendly installation.

Battery Model		POW-200AH -12.8V	POW-300AH -12.8V	POW-100AH -25.6V
Battery Specifications				
Battery Type		LiFePO4 battery		
Nominal Voltage		12.8V	12.8V	25.6V
Rated Capacity		200AH	300AH	100AH
Rated Energy		2560Wh	3840Wh	2560Wh
Operating Voltage Range		10.8~14.6V	10.8~14.6V	21.6~29.2V
Charging Voltage		14V	14.6V	29.2V
Max. Charging Current		200A	150A	100A
Max. Discharging Current		200A	250A	100A
Max. No. of Series Connections		4 PCS	4 PCS	2 PCS
Max. No. of Parallel Connections		4 PCS	4 PCS	2 PCS
General Parameters				
Cycle Life		6000 times (0.2C, 25° C@80% DOD)		
Casing Material		ABS		
Operation Temperature	Charging	0°C ~55°C	0°C ~45°C	0°C ~45°C
	Discharging	-20°C ~55°C	-20°C ~60°C	-20°C ~60°C
Dimension		485x170x240mm	522x240x218mm	485x170x240mm
Net Weight		19kg	30kg	21kg

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, 5 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		5 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







Wall-mounted Lithium Iron Phosphate

100AH~200AH



- Supports up to 16 units in parallel.
- Grade A+ battery cells.
- Sustains output of 150A high current.
- Built-in intelligent battery management system for protection.
- High-quality components ensure excellent quality, with a 5-year warranty promise.
- 80% depth of discharge, with a charging cycle life of up to 6000 times.
- Peripheral low-voltage switch reduces power consumption.
- Comprehensive protection functions.



Battery Model	POW-LIO48100-16S		POW-LIO48200-16S
System Voltage	51.2V		
Capacity	100Ah	200Ah	
Nominal Energy	5.12KWh	10.24KWh	
Constant Voltage charging Voltage	58.4V		
Max. Discharge Cutoff Voltage	43.2V		
Recommended Discharge Cutoff Voltage	48V		
Max. Charging Current	100A	150A	
Recommended Charging Current	40A	40A	
Max. Discharge Current	100A	150A	
Max. Parallel Connection of Batteries	16		
Communication Interface	RS232/RS485/CAN/Dry Contac		
Cycle Life	≥ 6000 Times @80%DOD, 25°C		
Operating Temp	Charging: 0~60° C; Discharging: -10° C~65° C		
Nominal Operation Altitude	< 2000m		
Nominal Operation Humidity	<90%RH		
IP Grade	IP21		
Recommended Operation Environment	Indoor		
Battery Dimensions (LxWxH)	510x440x170mm	670x450x207mm	
Net Weight	44kg	87kg	
BMS communication protocol matching			
			
			
			
			

Floor-standing Lithium Iron Phosphate Battery

280Ah Rated Capacity

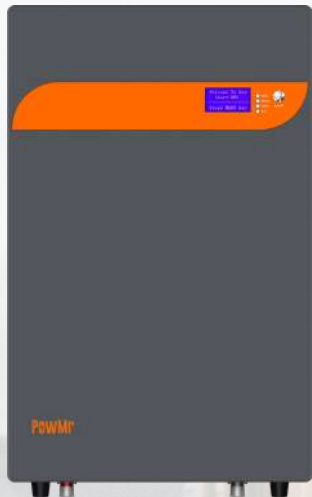


-
- High-capacity, high-safety lithium iron phosphate cells.
 - Easy installation and configuration.
 - Sleek appearance, suitable for home energy storage scenarios.
 - Built-in BMS ensures safe and efficient system operation.
 - 6000 cycles lifespan.
 - Supports parallel connection of up to 15 units.
 - Easily compatible with communication protocols of most inverter brands.

Battery Model	POW-LIO51300-16S		
System Voltage	51.2V		
Capacity	280Ah		
Discharge Cut-off Voltage	≤ 44.8V		
Charging Voltage	56V		
Charging Cut-off Voltage	58.4V		
Internal Resistance	≤ 12mΩ		
Max. Charging Current	200A		
Max. Discharging Current	200A		
Max. Parallel Quantity	15		
Operating Temperature	Charge: 0~55℃ ; Discharge: -20~55℃		
Communication Port	RS232/RS485/CAN		
Cycle Life	≥ 6000 Times @80%DOD, 25℃		
Nominal Operating Altitude			
Protection Rating			
Recommended Operating Environment			
Dimensions (LxWxH)			
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°C		
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			
			
			
			
			


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			
			
			
			
			

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
inv t	GROWATT 古 瑞 瓦 特
MUST 美世乐	SOROTEC Power Solutions Expert
PYLONTECH	GOODWE
victron energy EDGE POWER	SERMATEC
LU X POWER	Voltronic Power Advancing 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					

Stacked Lithium Iron Phosphate Battery

High Voltage Battery



- Stackable installation and connection.
- No traditional cable connection required between batteries.
- IP65 protection rating suitable for indoor or outdoor use.
- Sleek appearance, suitable for home or commercial settings.
- Max. 5 batteries can be stacked, with system voltage ranging from 204.8V (2 batteries) to 512V (5 batteries).

Battery Model	POW-HVB-10	POW-HVB-15	POW-HVB-20	POW-HVB-25
System Voltage	204.8V	307.2V	409.6V	512V
Capacity	50AH			
Discharge Cut-off Voltage	172.8V	259.2V	342.9V	432V
Voltage Range	172.8~224V	259.2~336V	345.6~448V	432~560V
Charging Cut-off Voltage	224V	336V	448V	560V
Max. Charging Current	50A			
Max. Discharging Current	50A			
Max. Stacking Quantity	5			
Energy Capacity Expansion Limit	25kWh			
Charging Temperature	0°C ~60°C (Under 0°C extra heating mechanism)			
Discharging Temperature	-20°C ~60°C (Under 0°C work with reduced capacity)			
Communication Port	RS232, RS485, CAN			
Cycle Life	≥ 6000 Times @80%DOD, 25°C			
Protection Rating	IP65			
Dimensions (LxWxH)	636x185x1065 mm	636x185x1418 mm	636x185x1770 mm	636x185x2122 mm
Net Weight	~130kg	~180kg	~230kg	~280kg
BMS Communication Protocol Matching				
				
				
				

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-LTW-15A

MPPT; 12V/24V;
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



POW-M80-PRO
POW-M100-PRO

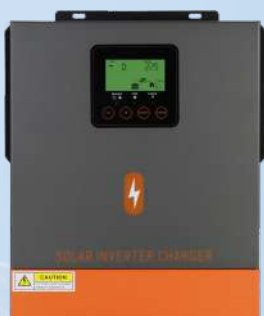
MPPT; 24/36/48/60/72V;
Lead acid & lithium battery



Solar Charger Inverter

POW-HVM1K-12V
POW-HVM1.5K-24V

220V; Single phase; Off-grid



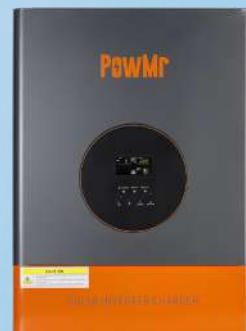
POW-HVM2H-12V-N
POW-HVM3.2H-24V-N

220V; Single phase; Off-grid



POW-RELAB 3KE
POW-RELAB 5KE
POW-RELAB 10KE

220V; Single phase; Off-grid



POW-RELAB 3KU
POW-RELAB 5KU
POW-RELAB 10KU

110V; Single phase; Off-grid



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

110V; Single phase; Off-grid



POW-LVM3.2K-24V

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-HVM6.2K-48V-LIP

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



POW-HVM6.2K-PRO

220V; Single phase; Off-grid;
2 AC input; 2 AC output



POW-SunSmart 8KL3
POW-SunSmart 10KL3
POW-SunSmart 12KL3

220V; Single/three phase;
2 MPPT; Off-grid



POW-HVM10.2M

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



POW-SunSmart 10K
POW-SunSmart 10KP

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 X3-12/20K

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



SOLXPOW X4-30/50K

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



Battery and Battery Accessory

POW-100AH-12.8V

Support parallel;
Up to 4 sets in series



POW-100AH-12.8V-MINI

Up to 4 sets in parallel;
Up to 4 sets in series



POW-150AH-12.8V

Up to 4 sets in parallel;
Up to 4 sets in series



POW-200AH-12.8V

Up to 4 sets in parallel;
Up to 4 sets in series



POW-300AH-12.8V

Up to 4 sets in parallel;
Up to 4 sets in series



POW-100AH-25.6V

Up to 2 sets in parallel;
Up to 2 sets in series



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

Up to 15 unit in parallel;
Wall-mounted



POW-LIO48100-16S POW-LIO48200-16S

Up to 16 unit in parallel;
Wall-mounted



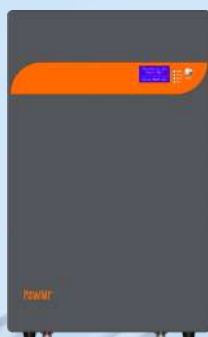
POW-LIO51300-16S

Up to 15 unit in parallel;
Floor-standing



POW-LIO51200-150A

Up to 16 unit in parallel;
Wall-mounted



POW-LIO51400-16S

Up to 16 unit in parallel;
Stackable



POW-HVT SERIES

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



POW-HVB SERIES

Up to 5 unit in series; Stackable;
High-voltage



BE24 BE48

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



New Energy New Life

All-in-one Energy Storage System

POW-ESS5S

220V; 2.56kWh; 5600W/VA

