



NEW ENERGY NEW LIFE

PV PRODUCT CATALOG

2025





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BUY EVERYWHERE

Start business with all over the world

SERVICE EVERYWHERE

Offer convenient service for all over the world

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Email:agent@powmr.com



E-catalog 2025



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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



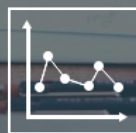
Product system
upgrade



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

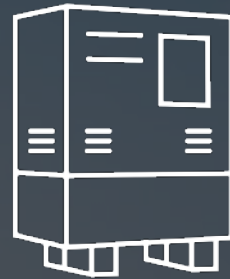




CATALOG



Solar Controller



Solar Inverter



Inverter



Battery



Solar Panel



Accessories

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	

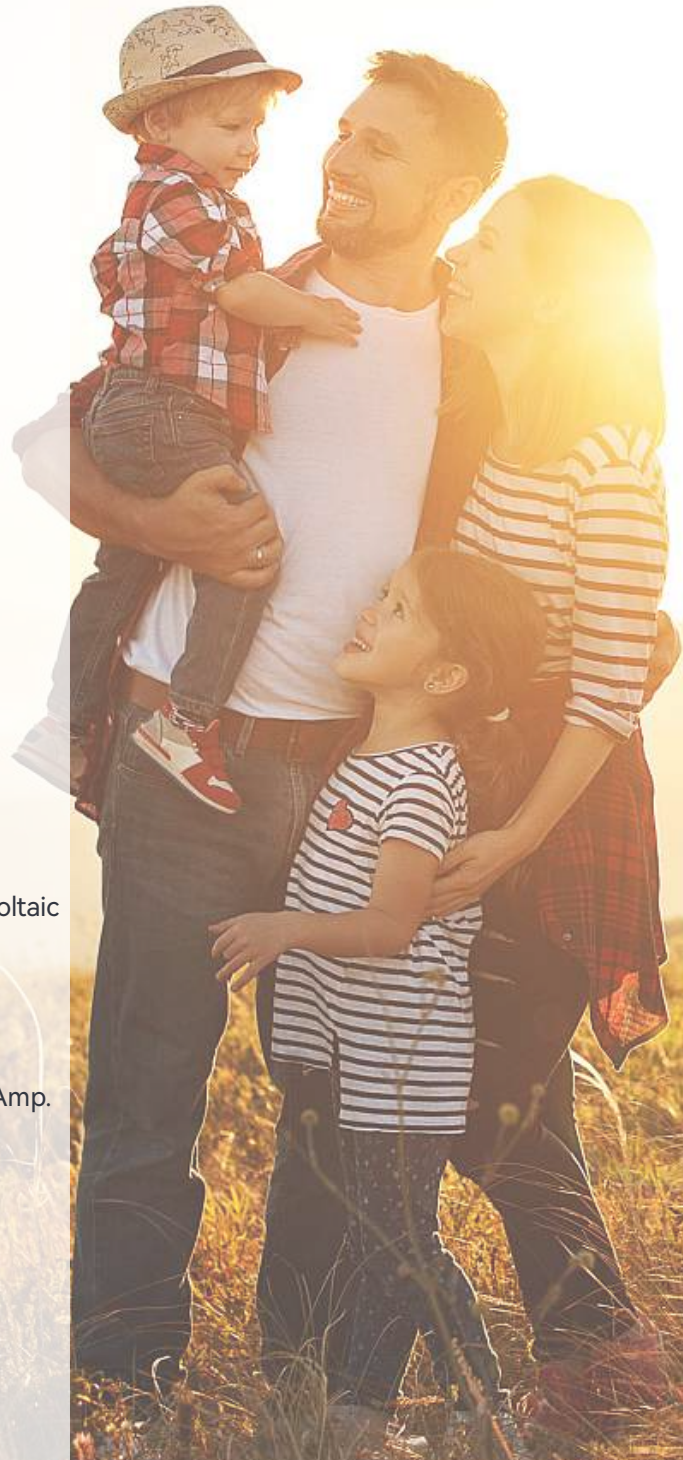
HVM

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.
- 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

HVM Solar Inverter

2.0/3.2KW Output



- Pure sine wave inverter output.
- Supports double surge output for 1 seconds.
- Suitable for converting 12/24VDC to 230V \pm 5% AC output.
- Max. charging current up to 140A.
- The RGB mode light allows for a clear observation of the inverter's operating mode.
- Configurable AC/Solar Charge priority via LCD setting.
- Supports grid charging and solar charging.
- Built-in anti-dust kit.
- Built-in multiple protection functions.

Inverter Model	POW-HVM2.0KW-12V	POW-HVM3.2KW-24V
AC Input		
Input Voltage Waveform	Sinusoidal (Utility or generator)	
Nominal Input Voltage	230Vac	
Max. AC Input Voltage	300Vac	
Nominal Input Frequency	50Hz/60Hz(Auto detection)	
Efficiency	>91%	>93%
Switching Time	10ms	
AC Output (Off-grid)		
Rated Output Power	2.0KVA/2.0KW	3.2KVA/3.2KW
Output Voltage Regulation	230Vac±5%	
Output Frequency	50Hz	
Peak Efficiency	91%	94%
Surge Capacity	2*rated power for 1 seconds	
Cold Start Voltage	11.5Vdc	23.0Vdc
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	80Amp (@VI/P=230Vac)	
Max. PV Array Power	900W	1800W
PV Array MPPT Range	20~150Vdc	30~150Vdc
Max. PV Array Open Circuit Voltage	150Vdc	
Max. Charging Current (AC+PV)	140Amp	
General Parameters		
Operating Temperature Range	-10℃ ~50℃	
Storage Temperature	-15℃ ~60℃	
Dimensions	415x290x111mm	
Net Weight	7.2kg	7.3kg

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

HVM Solar Inverter

3.5KW Output



- Supports pure sine wave inverter and bypass output.
- Five AC output modes and three charging modes available.
- Max. output power up to 3500W/3500VA.
- MPP tracking range between 30~500Vdc.
- Supports grid charging and solar charging.
- Max. charging current up to 100A.
- Built-in dust cover.
- Air-cooled forced heat dissipation.
- Built-in multiple protection functions.



Inverter Model	POW-HVM3.5K-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 typical (UPS); 20ms typical (Appliances)
AC Output (Off-grid)	
Rated Output Power	3500VA/3500W
Output Voltage Regulation	230Vac±5%
Output Frequency	50Hz/60Hz
Peak Efficiency	94%
Surge Capacity	2*rated power for 5 seconds
Cold Start Voltage	24Vdc
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	60Amp (@VI/P=230Vac)
Max. PV Array Power	4000W
PV Array MPPT Range	30~500Vdc
Max. PV Array Open Circuit Voltage	500Vdc
Max. Input Current	15A
Max. Charging Current (AC+PV)	100Amp
General Parameters	
Operating Temperature Range	-10°C ~55°C
Storage Temperature	-15°C ~60°C
Dimensions	330x278x98mm
Net Weight	4.4kg

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.
- 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

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

HVM Solar Inverter

6.2KW Output



- Supports pure sine wave inverter and bypass output.
- Five AC output modes and three charging modes available.
- Max. output power up to 6200W/6200VA.
- MPP tracking range between 60~500Vdc.
- Built-in MC4 connectors.
- Supports grid charging and solar charging.
- Max. charging current up to 120A.
- Built-in dust cover.
- Air-cooled forced heat dissipation.
- Built-in multiple protection functions.

Inverter Model	POW-HVM6200W-48V
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 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
Cold Start Voltage	46.0Vdc
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 MPPT Range	60~500Vdc
Max. PV Array Open Circuit Voltage	500Vdc
Max. Input Current	27A
Max. Charging Current (AC+PV)	120Amp
General Parameters	
Operating Temperature Range	-10°C ~55°C
Storage Temperature	-15°C ~60°C
Dimensions	438x312x122mm
Net Weight	9kg

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: 170~280Vac, 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; 5s@ > 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		

SunSmart Solar Inverter

8/10/12KW 230V AC Output



- Supports single-phase (230Vac) or three-phase (400Vac) output.
- Supports a maximum of 6 units in parallel, with an expansion limit of up to 72KW (for 12KW model).
- Dual MPPT 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 (for 12K model).
- Supports external WiFi communication.
- Built-in multiple protection functions.

Inverter Model	POW-SunSmart 8KPL3	POW-SunSmart 10KPL3	POW-SunSmart 12KPL3
AC Input			
Input Voltage Waveform	Sinusoidal (Utility or generator)		
Nominal Input Voltage	230Vac/400Vac (three phase)		
Input Voltage Range	Phase: 170~280Vac, 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/60Hz		
Peak Efficiency	≥ 92%		
Overload Protection	5min@102%~110% load; 10s@110%~125% load; 5s@ > 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 MPPT 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 (2.03*1.46*0.43ft)		
Net Weight	27kg (59.52lb)		

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

HVM Solar Inverter

11KW Output



- Supports pure sine wave inverter and bypass output.
- Five AC output modes and three charging modes available.
- Max. output power up to 11000W/11000VA.
- MPP tracking range between 60~500Vdc.
- Built-in MC4 connectors.
- Dual MPPT, each input current can reach up to 18A.
- Supports grid charging and solar charging.
- Max. charging current up to 160A.
- Built-in dust cover.
- Air-cooled forced heat dissipation.
- Built-in multiple protection functions.

Inverter Model	POW-HVM11K-48V
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 typical (UPS); 20ms typical (Appliances)
AC Output (Off-grid)	
Rated Output Power	11000VA/11000W
Output Voltage Regulation	230Vac±5%
Output Frequency	50Hz/60Hz
Peak Efficiency	94%
Surge Capacity	2*rated power for 5 seconds
Cold Start Voltage	46.0Vdc
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	120Amp (@VI/P=230Vac)
Max. PV Array Power	5500W/5500W
PV Array MPPT Range	60~500Vdc/60~500Vdc
Max. PV Array Open Circuit Voltage	500Vdc/500Vdc
Max. Input Current	18A/18A
Max. Charging Current (AC+PV)	160Amp
General Parameters	
Operating Temperature Range	-10°C ~55°C
Storage Temperature	-15°C ~60°C
Dimensions	540x403x122mm
Net Weight	14.8kg

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
SOLUNΔ	WECCO
 iPotisEdge	FEB
STELTEC	LithiumValley 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	28kg	31kg



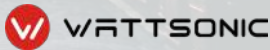



Hybrid Inverter

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.
- 144-750V 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	200~850V	
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	30000W	50000W
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	30000W	50000W
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	

HV-EU Solar Inverter

2.5KW/ 3.5KW Output



- Pure sine wave inverter output.
- Inverter output power up to 2500W/3500W.
- Suitable for converting 12VDC to 220V $\pm 10\%$ AC output.
- Supports double surge output for 1 seconds.
- Built-in USB port with output up to 5V 2.4A.
- Built-in overload, short circuit, over-temperature, under-voltage, over-voltage, and reverse polarity protection.
- Equipped with a remote control panel for easy remote monitoring of data and status.



Model	POW-HV2.5K-12V-EU	POW-HV3.5K-12V-EU
System Voltage (Input Voltage)	12VDC	
Output Voltage	220VAC±10%	
Output Waveform	Pure Sine Wave	
Output Frequency	50Hz	
USB Output	5V/2.4A	
No-load Power Consumption	< 1A	< 1.5A
Surge Capacity	≤ 5000W	≤ 7000W
Efficiency	≥ 85%	
Low Voltage Warning Level	10.5±0.3V	
Low Voltage Cut-off Level	9.5±0.2V	
High Voltage Protection Level	15.5±0.5V	
Low Voltage Recovery Level	11.8±0.3V	
High Voltage Recovery Level	15.7±0.3V	
Overload Protection	120~125%	
Overtemperature Protection	> 80°C	
Operating Temperature Range	-10°C ~+45°C	
Altitude	≤ 3000m	
Dimension(LxWxH)	352x207x85mm	390x207x85mm
Net weight	4.18kg	5.38kg

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	52kg

RELAB-U-SPLIT Solar Inverter

3KW/5KW/10KW Output



- Supports pure sine wave inverter and bypass output.
- The low frequency transformer easily handles large current surges and fluctuations.
- Single unit supports single-phase 110AC, split-phase 220V, or simultaneous 110V and 220V output.
- MPP tracking range between 30~150Vdc/ 60~150Vdc.
- Supports grid charging and solar charging.
- Max. charging current up to 105A (for 10KW model).
- Air-cooled forced heat dissipation.
- Built-in multiple protection functions.

Inverter Model	POW-RELAB 3KU-SPLIT	POW-RELAB 5KU-SPLIT	POW-RELAB 10KU-SPLIT
AC Input			
Input Voltage Waveform	Sinusoidal (Utility or generator)		
Nominal Input Voltage	110Vac		
AC Input Voltage Range	77~132Vac		
Nominal Input Frequency	50Hz/60Hz		
Efficiency	>95% (Rated R load, battery fully charged)		
Switching Time	<8ms		
AC Output (Off-grid)			
Rated Output Power	3000W	5000W	10000W
Peak Output Power	9000W	15000W	30000W
Output Voltage Regulation	110Vac±10%		
Output Frequency	50Hz/60Hz		
Peak Efficiency	>98%		
Surge Capacity	2*rated power for 5 seconds		
Battery Parameters			
Battery Type	Lithium and Lead Acid Battery, support user define		
System Voltage	24V	48V	48V
AC Charging & Solar Charging Mode			
Charging Algorithm	3 stages		
Max. AC Charging Current	38A	50A	105A
Max. PV Array Power	1600W	6400W	6400W
PV Array MPPT Range	30~150Vdc	60~150Vdc	60~150Vdc
Max. PV Array Open Circuit Voltage	150Vdc		
Max. PV Charging Current	60A	120A	120A
General Parameters			
Operating Temperature Range	-10℃ ~50℃		
Storage Temperature	-20℃ ~60℃		
Dimensions	465x310x135mm	545x400x200mm	545x400x200mm
Net Weight	19kg	27.4kg	50.7kg

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

110/120Vac 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	120Vac±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=120Vac)
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

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

SunSmart Solar Inverter

6.5KW Output



- Supports pure sine wave inverter and bypass output.
- Max. output power up to 6500W/6500VA.
- Single unit supports single-phase 110AC, split-phase 220V, or simultaneous 110V and 220V output.
- Supports a maximum of 6 units in parallel, with an expansion limit of up to 39KW.
- Time-based charging and discharging for optimized energy use.
- MPP tracking range between 150~450Vdc.
- Dual MPPT, each input current can reach up to 18A.
- Supports grid charging and solar charging.
- Max. charging current up to 140A.
- Built-in dust cover.
- Air-cooled forced heat dissipation.
- Built-in multiple protection functions.



Inverter Model	POW-SunSmart 6.5KP
Parallel	
Permitted Parallel Number	1~6
AC Input	
Input Voltage Waveform	Sinusoidal (Utility or generator)
Nominal Input Voltage	120Vac
Max. AC Input Voltage	140Vac
Nominal Input Frequency	50Hz/60Hz
Switching Time	10ms typical
Max. Bypass Overload Current	63A
AC Output (Off-grid)	
Rated Output Power	6500W
Rated output voltage	120/240 VAC (single-phase/split-phase)
Output Frequency	50Hz/60Hz
Max. Efficiency	>92%
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=120Vac)
Max. PV Array Power	5000W/5000W
PV Array MPPT Range	150~450Vdc/150~450Vdc
Max. PV Array Open Circuit Voltage	550Vdc/550Vdc
Max. Input Current	18A/18A
Max. Charging Current (AC+PV)	140Amp
General Parameters	
Operating Temperature Range	- 10° C - 55° C, >45° C derating
Dimensions	584.6x410x133mm
Net Weight	18.9kg

SunSmart Solar Inverter

10KW 120Vac AC Output



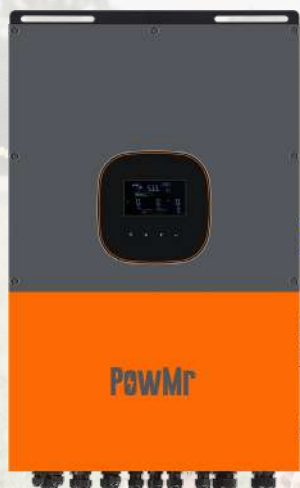
- Supports up to 6 parallel units.
- 90~140Vac AC input voltage range.
- 125~500Vdc wide voltage range for PV access.
- Higher input DC current up to 22A in a single circuit.
- Compatible to both residential single phase & split phase equipment.
- Higher output power up to 10000W.
- 2 MPP Tracker, dual 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 120Vac.
- 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	41.7 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 798mm
Net Weight	49kg

LV Solar Inverter

2.5KW/ 3.5KW Output



- Pure sine wave inverter output.
- Inverter output power up to 2500W/3500W.
- AC output is equipped with both socket ports and terminal ports.
- Suitable for converting 12/24VDC to 110V \pm 10% AC output.
- Integrated display shows operating status.
- Built-in USB port with output up to 5V 2.4A.
- Built-in multiple protection functions.
- Equipped with a remote control panel for easy remote monitoring of data and status.

Inverter Model	POW-LV2.5K -12V	POW-LV2.5K -24V	POW-LV3.5K -12V	POW-LV3.5K -24V
System Voltage (Input Voltage)	12VDC	24VDC	12VDC	24VDC
Output Voltage	110VAC±10%			
Output Waveform	Pure Sine Wave			
Output Frequency	50Hz±1%/60Hz±1%			
USB Output	5V/2.4A			
No-load Power Consumption	< 1A			
Surge Capacity	≤ 5000W(<5ms)			
Efficiency	≥ 85%			
Low Voltage Warning Level	10.5±0.3V	21±0.6V	10.5±0.3V	21±0.6V
Low Voltage Cut-off Level	9.5±0.2V	19±0.3V	9.5±0.2V	19±0.3V
High Voltage Protection Level	15.5±0.5V	31±1V	15.5±0.5V	31±1V
Low Voltage Recovery Level	11.8±0.3V	23.6±0.4V	11.8±0.3V	23.6±0.4V
High Voltage Recovery Level	15.7±0.3V	31.8±0.4V	15.7±0.3V	31.8±0.4V
Overload Protection	120~125%			
Overtemperature Protection	> 80℃			
Operating Temperature Range	-25℃ ~+55℃			
Altitude	≤ 3000m			
Dimension (LxWxH)	350x206x86mm	350x206x86mm	352x207x85mm	390x207x85mm
Net weight	~4.2kg	~4.2kg	~5.4kg	~5.4kg

Energy storage LiFePO4 Battery

30/50Ah 12.8V



- A wide range of battery models to meet diverse capacity needs.
- Supports both series and parallel connections.
- Designed with a lead-acid battery casing for easy system upgrades from lead-acid to lithium batteries.
- 3000/4000 cycle lifespan.
- Higher energy density compared to lead-acid batteries, with a smaller size and lighter weight.
- Simple and user-friendly installation.
- Ideal upgrade for lead-acid battery storage systems.
- Compact size, lightweight, improved space utilization.

Battery Models		POW-30AH-12.8V	POW-50AH-12.8V
Battery Specifications			
Battery Type		LiFePO4 Battery	
Nominal Voltage		12.8V	
Rated Capacity		30AH	50AH
Rated Energy		384Wh	640Wh
Operating Voltage Range		10.8~14.4V	10.8~14.4V
Charging Voltage		14.4V	14.4V
Max. Charging Current		30A	50A
Max. Discharging Current		30A	50A
Max. No. of Series Connections		4 PCS	4 PCS
Max. No. of Parallel Connections		4 PCS	4 PCS
General Parameters			
Cycle Life		3000 times (0.2C, 25° C@80% DOD)	4000 times (0.2C, 25° C@80% DOD)
Casing Material		ABS	
Operating Temperature	Charging	0°C ~60°C	0°C ~60°C
	Discharging	-10°C ~60°C	-10°C ~60°C
Storage Temperature		-30°C ~50°C	-30°C ~50°C
Dimension		124x164x172mm	138x213x229mm
Net Weight		4kg	6kg

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-MINI	POW-100AH-12.8V	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		10.8~14.6V	10.8~14.6V	10.8~14.6V
Charging Voltage		14V	14.6V	14.6V
Max. Charging Current		100A	100A	100A
Max. Discharging Current		100A	100A	100A
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 ~55°C	0°C ~55°C	0°C ~55°C
	Discharging	-20°C ~55°C	-20°C ~55°C	-20°C ~55°C
Dimension		260x169x211mm	325x170x215mm	330x171x215mm
Net Weight		10kg	11.5kg	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	200A	100A
Max. Discharging Current		200A	200A	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 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 Contact		
Cycle Life	≥ 6000 Times @80%DOD, 25℃		
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)	550x470x202mm	700x630x170mm	
Net Weight	44kg	87kg	
BMS communication protocol matching			
			
			
			
			

Floor-standing LiFePO4 Battery

280Ah Rated Capacity



- No installation required.
- The Foma casters wheels at the bottom of the inverter are durable and flexible.
- Supports up to 16 units in parallel.
- 200A charge/discharge current.
- Built-in BMS ensures safe and efficient system operation.
- Smart touchscreen facilitates monitoring battery data.
- 6000 cycle lifespan.
- Comprehensive protection functions.
- Easily compatible with communication protocols of most inverter brands.

Battery Models	POW-LIO48300-16S		
System Voltage	51.2V		
Capacity	280Ah		
Nominal Energy	14.336KWh		
Constant Voltage charging Voltage	58.4V		
Max. Discharging Cutoff Current	43.2V		
Recommended Discharge Cutoff Voltage	48V		
Max. Charging Current	200A		
Max. Discharging Current	200A		
Max. Parallel Connection of Batteries	16		
Communication Interface	RS232/RS485/CAN/Dry Contact		
Cycle Life	≥ 6000 Times @80%DOD,25° C		
Operating Temperature	Charging:0~60℃ ; Discharging: -10℃ ~ 65℃		
Nominal Operation Altitude	< 2000m		
Nominal Operation Humidity	<90%RH		
IP Grade	IP21		
Recommended Operation Environment	Indoor		
BMS communication protocol matching			
			
			
			
			






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	345.6V	432V
Voltage Range	172.8~224V	259.2~336V	345.6~448V	432~512V
Charging Cut-off Voltage	224V	336V	448V	512V
Max. Charging Current	50A			
Max. Discharging Current	50A			
Max. Stacking Quantity	5			
Energy Capacity Expansion Limit	25kWh			
Charging Temperature	0℃ ~55℃			
Discharging Temperature	-20℃ ~55℃			
Communication Port	RS232, RS485, CAN			
Cycle Life	≥ 5000 Times @80%DOD,25℃ , 0.5C; ≥ 4000 Times @80%DOD,40℃ , 0.5C			
Protection Rating	IP65			
Dimensions (LxWxH)	636x185x1055 mm	636x185x1400 mm	636x185x1745 mm	636x185x2100 mm
Net Weight	~128kg	~176kg	~224kg	~272kg
BMS Communication Protocol Matching				
				
				
				

High-voltage LiFePO4 Battery

20~100 kWh



- LiFePO4 battery for enhanced safety and extended lifespan.
- Three-layer architecture (BMU + RBMS + SBMS) for comprehensive protection.
- Air conditioning, fans, and fire suppression system in the battery module.
- Standard 19-inch rack design for easy installation and maintenance.
- User-friendly touchscreen interface with multiple communication protocols.
- USB software upgrade for convenience.
- Modular design with 5.12kWh per battery module.
- Configurable from 4 to 14 modules in series.
- Scalable capacity supporting up to 8 clusters in parallel.



Battery Model	POW-HVC-20	POW-HVC-30	POW-HVC-50	POW-HVC-100
Nominal Voltage	204.8V	307.2V	512V	1024V
Rated Capacity	100Ah			
Battery Module Qty in Series	4	6	10	20
Nominal Energy	20.48kWh	30.72kWh	51.2kWh	10.24kWh
Charging Voltage	220.8~230.4V	331.2~345.6V	552~576V	1104~1152V
Discharge Cut-off Voltage	172.8V	259.2V	432V	608.4V
Float Charging Voltage	217.6~220.8V	326.4~ 331.2V	544~552V	1088~ 1104V
Max. Charging Current	100A			
Recommended Charging Current	20A			
Max. Discharging Current	100A			
Recommended Discharging Current	20A			
Status Indicator	RUN-Green Light; Alarm-Red Light			
Operating Temperature	Charge: 0~55°C ; Discharge: -20~60°C			
Storage Temperature	0°C ~45°C			
Communication Interface	CAN/RS485			
Cycle Life	≥ 4000 cycles at 0.5C/0.5C, 25°C			
IP Rating	IP20			
Certification	IEC62619, UN38.3, MSDS			
Warranty	5 years			

General Parameter of System Components

RBMS

Dimension(W/D/H)	482x500x182mm
Weight Approx.	22kg

LiFePO4 Battery Module-51.2V100Ah

Dimension(W/D/H)	442x560x134.5mm
Weight Approx.	43kg

SBMS

Dimension(W/D/H)	272x160x62mm
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High-voltage LiFePO₄ Battery

Energy Storage System

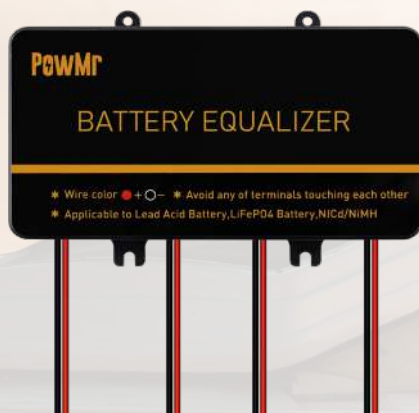


- Supports RS485, CAN, Ethernet, and dry contact for integration.
- Internal battery balancing with up to 300mA current.
- High-precision voltage and temperature monitoring: $\pm 3\text{mV}$, $\pm 1^\circ\text{C}$.
- Automatic control for parallel operation and offline control of lithium battery systems.
- Self-test and status monitoring with HMI display.
- Only one SBMS display required for parallel operation.
- Supports up to 19.2kW of PV power with dual inputs.
- Off-grid operation with $< 5\text{ms}$ switching time.
- Includes high/low voltage ride-through, islanding protection, and black start.
- Supports up to 15 PCS inverters in parallel.
- Built-in EMS (Energy Management System).
- Generator support with dry contact signal.

Battery Model	POW ESS-P100B215
DC Technical Specifications	
Nominal Voltage	768V
Rated Voltage Range	672~864V
Rated Capacity	280Ah
Battery Pack Configuration	1P16S (1 parallel, 16 series) (51.2V, 14.336kWh each battery)
Nominal Energy	215kWh
Charge/Discharge Rate	≤ 0.5CP
Cooling Method	Forced air cooling
AC Technical Specifications (On-grid)	
Rated Power	100KW
Rated Input Voltage	400Vac
Rated Voltage Range	320~460V
Rated Capacity	152A
Rated Frequency	50Hz/60Hz
Frequency Range	45~55Hz/55~65Hz
Total Current Waveform Distortion	<3% (at rated power)
Power Factor	>0.99 (at rated power)
Adjustable Power Factor Range	-1 (leading)~1 (lagging)
System Technical Specifications	
Auxiliary Power Parameters	2kW, 220V AC, 50Hz, 3-phase, N+PE
Fire Suppression System	S-type aerosol
Corrosion Resistance	C4
Ingress Protection (IP) Rating	IP54
Operating Temperature Range	-15°C ~ +45°C
Storage Temperature	-20°C ~ +55°C (SOC@30% ~ 50%)
Operating Humidity Range	0% ~ 95% RH (non-condensing)
Installation Method	Outdoor installation
Operating Conditions	Maximum 2 charge and 2 discharge cycles per day
System Communication Interface	Ethernet/RS485
Communication Protocols	Modbus TCP/IEC61850/Modbus RTU
Altitude	3000m (derating above 3000m)
Dimensions (DWH)	2330*1738*1250mm
Weight	2400kg

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

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	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 °C		
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	
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(Auto recognized)		
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: 14.2V; Lead acid flooded battery: 14.6V		
Absorption charging voltage	Maintenance-free lead acid battery: 14.4V GEL: No; Lead acid flooded battery: 14.8V		
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	≤ 50mA		
Duration of absorption charging	2 Hours		
Light control voltage	5V/10A		
Charge loop voltage drop	≤ 0.2V		
LCD Temperature	-20° C~+70° C		
Operating Temperature	-20° C~+55° C		
Working humidity	≤ 90% 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. 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

25A/35A/45A Charging



- MPPT charging current up to 25A/35A/45A.
- Suitable for 12V/24V energy storage systems.
- Can charge lead-acid batteries or lithium batteries.
- Charging efficiency up to 97%.
- MPP tracking efficiency up to 99%.
- Three-stage charging for safety and efficiency.
- Built-in multiple protections to ensure safe operation.
- Heat sink for effective cooling.
- Built-in lithium battery activation function.



Models	POW-M25-PRO	POW-M35-PRO	POW-M45-PRO
Solar Input Parameters			
Max. Input Power:			
For 12V System	300W	420W	540W
For 24V System	600W	840W	1080W
Input Voltage Range:			
For 12V System	<60V	<80V	<100V
For 24V System	<60V	<80V	<100V
Battery Charging Parameters			
Charging Technology	MPPT		
Charging Algorithm	3 Stages		
Nominal System Voltage	12V/24V		
Battery Voltage Range	9~30V		
Rated Charging Current	25A	35A	45A
Conversion Efficiency	≤ 98%		
Max. Power Point Tracking Efficiency	>99%		
Temperature Compensation	-3mV/°C /2V (default)		
Self-Consumption	44mA/12V; 26mA/24V		
DC Output Parameters			
Rated DC Output Current	15A	20A	25A
General Parameters			
IP Class	IP32		
Operating Temperature Range	-35°C ~+45°C		
Humidity Range	≤ 95% Non-condensing		
Altitude	<3000m		
Dimensions	160x115x51mm	195x135x65mm	195x135x65mm
Net Weight	500g	900g	1035g

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.



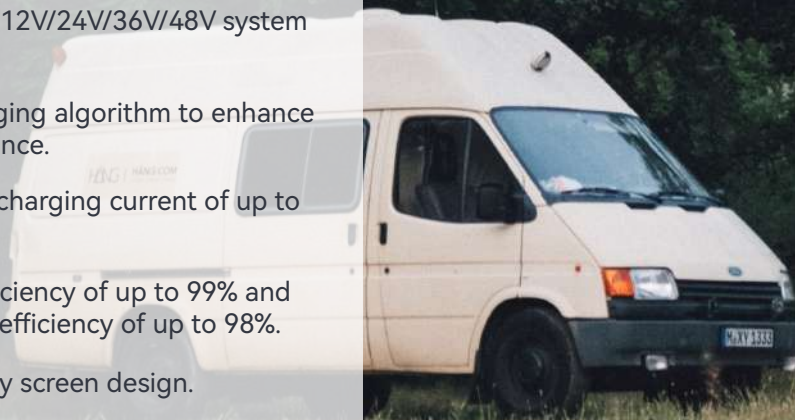
Controller Model	POW-M60-PRO
Charge specification	
Charging mode	MPPT
Charging Algorithm	3-Stage
Selectable battery type	Vented/ Sealed/ Gel/ NiCd/ Lithium battery, support user define
System type	DC12V/24V/36V/48V
Rated charging current	60A
PV utilization	≤ 98%
Input specification	
Max. Input Power:	
For 12V system	720W
For 24V system	1440W
For 36V system	2100W
For 48V system	2800W
Input Voltage Range:	
For 12V system	20-80Vdc
For 24V system	37-105Vdc
For 36V system	50-160Vdc
For 48V system	72-160Vdc
Output specification	
Rated output current	6A
Max. DC output current	8A
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

60A Charging



- 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. Input Power:	
For 12V system	720W
For 24V system	1440W
For 36V system	2100W
For 48V system	2800W
Input Voltage Range:	
For 12V system	20-80Vdc
For 24V system	37-105Vdc
For 36V system	50-160Vdc
For 48V system	72-160Vdc
Output specification	
Rated output current	25A
Max. DC output current	30A
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 Release



- MPPT charging current up to 60A.
- Compatible with 12V/24V/36V/48V energy storage systems.
- Supports charging for lead-acid or lithium batteries.
- Customizable charging current limit.
- Charging efficiency up to 97%.
- Maximum power point tracking efficiency up to 99%.
- Supports up to 12 units in parallel.
- External temperature sensor for precise battery temperature monitoring.
- Built-in multiple protection functions for safe operation.
- Heat sink design for efficient cooling.
- Built-in lithium battery activation function.



Model	POW-M60-ULTRA
Solar Input Parameters	
Max. Input Power:	
For 12V System	720W
For 24V System	1440W
For 36V System	2100W
For 48V System	2800W
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/24/36V/48V
Battery Voltage Range	9~60V
Rated Charging Current	60A
Conversion Efficiency	≥ 98.1%
Max. Power Point Tracking Efficiency	>99%
Self-Consumption	0.7W~1.2W
DC Output Parameters	
Rated DC Output Current	25A
General Parameters	
IP Class	IP32
Operating Temperature Range	-35°C ~+45°C
Humidity Range	≤ 95% Non-condensing
Altitude	<3000m
Dimensions	221x163x77mm /8.7x6.42x3.03in
Net Weight	1442g / 3.18lb

MPPT Solar Controller

60A Charging



- 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. Input Power:	
For 12V System	720W
For 24V System	1440W
For 36V System	2100W
For 48V System	2800W
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
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	990g / 2.18lb
Electromagnetic Compatibility	EN61000, EN55022, EN55024
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

80A/100A Charging



- 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. 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

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-HVM2.0KW-12V
POW-HVM3.2KW-24V

230V; Single phase; Off-grid



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

220V; Single phase; Off-grid



POW-HVM3.5K-24V

220V; Single phase; Off-grid



POW-HVM4.2M-24V-N
POW-HVM6.2M-48V-N

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



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-HVM6200W-48V

220V; Single phase; Off-grid



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

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



POW-SunSmart 8KPL3
POW-SunSmart 10KPL3
POW-SunSmart 12KPL3

220V; Single/three phase; 2 MPPT;
Off-grid; Max. Parallel: 6



POW-HVM10.2M

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



POW-HVM11K-48V

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



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



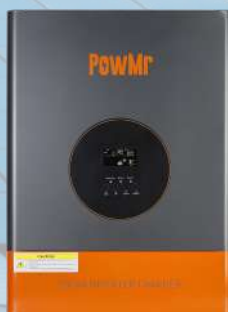
POW-HV2.5K-12V-EU
POW-HV3.5K-12V-EU

220V; Single phase; Off-grid



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

110V; Single phase; Off-grid



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

110V; Single/split 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-SunSmart SP5K

110V; Single/split phase;
Off-grid; Max. parallel: 6



POW-SunSmart 6.5KP

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



POW-SunSmart 10K
POW-SunSmart 10KP

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



POW-SunSmart LV12K

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



POW-LV2.5K-12V
POW-LV2.5K-24V
POW-LV3.5K-12V
POW-LV3.5K-24V

110V; Single phase; Off-grid



Energy Storage Battery

POW-30/50AH-12.8V

Up to 4 sets in 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-100AH-12.8V

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-LIO48100-16S POW-LIO48200-16S

Up to 16 units in parallel;
Wall-mounted



POW-LIO48300-16S

Up to 16 units in parallel;
Floor-standing



POW-HVB SERIES

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



POW-HVC SERIES

20~100 kWh; 100Ah; High Voltage



POW ESS-P100B215

215kWh; 280Ah; High Voltage



Battery Accessory

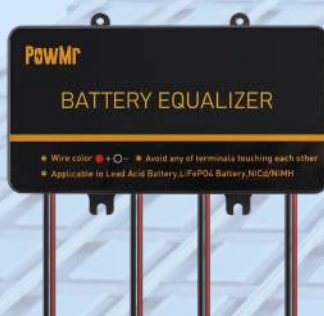
BE24

Gel/Flood/AGM;



BE48

VRLA/LFP/Ni/CD/Ni/MH



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-1220 POW-Keeper-1230 POW-Keeper-1240

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



Pstar-30A Pstar-60A Pstar-80A

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



POW-M25-PRO POW-M35-PRO POW-M45-PRO

MPPT; 12/24V;
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



POW-M60-ULTRA

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



ACCESSORIES



98/164/230/328FT



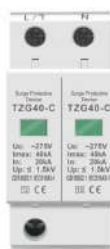
3/16/26/30/40/50FT



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