



# Portable Solar Generator

(300W~3000W)



# PORTABLE SOLAR GENERATOR

(300W~3000W)



## Product Introduction

This unit is multi-function portable solar generator which uses energy from the sun to produce pure sine wave output. This unit integrates a battery pack (including LiFePO4 Battery or Lead Acid Battery), MPPT/PWM solar charge controller, and an inverter into a compact system to turn solar energy into an electrical current. Each component is designed to match the electricity rating of the device that is receiving power.

Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, adjustable working modes. AC / Solar can charge battery bank at the same time or configurable AC / Solar input priority via LCD setting, and isolation transformer design provides robust power protection and galvanic isolation.

This unit integrates frequencies from 87.5 MHz to 108MHz FM Radio. Listen to all your favorite music and news by choosing your favorite radio stations. Also, you can use MP3 player, USB flash disk to listen music songs offline.

This unit not only provides DC output for DC power application like LED light, DC fan, but also provides USB ports to quickly charge consumer electronics devices like mobile phone.

This unit is ideal for home appliances, portable electronics, and some industrial tools. Smartphones, tablets, and portable GPS technology can be charged several hundred times through solar energy. Besides, it's worry-free to start up motor-type loads such as refrigerators, motors, compressors and laser printers.

## Product Features

- 1 Pure sine wave output
- 2 Widely input voltage range
- 3 4 working modes selection
- 4 8 fast-charging USB ports
- 5 Well-designed for ease of portability
- 6 Convenient with more power output like AC, USB, and 12VDC/24VDC
- 7 FM Radio function, also can support MP3, USB flash disk and memory card
- 8 Easy to set up even during an emergency
- 9 LCD display to show charging and dispensing progress
- 10 Auto restart while AC is recovering
- 11 Overload and short circuit protection
- 12 Compatible to mains voltage or generator power
- 13 Metal case to make the product difficult to deform to guarantee long lifetime usage
- 14 Smart multi-stage battery charger with optional equalization for optimized battery performance



## How IT Works:



## Multipurpose Power Supply



### Solar Support

Besides your AC wall outlets, you can also use a portable solar panel to power up this portable solar generator. Because of this, you'll have access to unlimited power while you're enjoying the great outdoors.



### USB Type-C

This portable solar generator supports 8 fast-charging USB ports output that allow you to fast charge all your latest electronics devices. Whether it's your smartphone or tablet, from now on you'll never run out of power again.

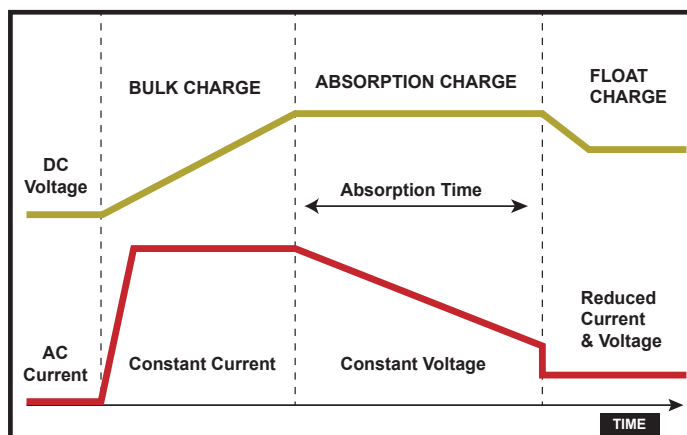


### Uninterruptible Power Supply (UPS)

The power bank is completely immune to power outages, making it the perfect gadget to be used during emergencies at home, in the office, and outdoors; supports all necessary safety features.

## Three Charging Stages

This unit charge controller has a 3-stage battery charging algorithm for a rapid, efficient and safe battery charging.



## Bulk Charge:

This algorithm is used for day to day charging. It uses 100% of available solar power to recharge the battery and is equivalent to constant current.

## Absorption Charge:

When the battery has charged to the Absorption voltage set-point, it undergoes an absorption stage which is equivalent to constant voltage regulation to prevent heating and excessive gassing in the battery.

## Float Charge:

After Absorption Charge, the controller will reduce the battery voltage to a float voltage set point. Once the battery is fully charged, there will be no more chemical reactions and all the charge current would turn into heat or gas. Because of this, the charge controller will reduce the voltage charge to smaller quantity, while lightly charging the battery. The purpose for this is to offset the power consumption while maintaining a full battery storage capacity. In the event that a load drawn from the battery exceeds the charge current, the controller will no longer be able to maintain the battery to a Float set point and the controller will end the float charge stage and refer back to bulk charging.



Overheating  
Protection



Over Current  
Protection



Over Charge  
Protection



Over Discharge  
Protection



Short-Circuit  
Protection



# PORTABLE SOLAR GENERATOR

300W - 3000W

High Frequency MPPT Solar Charger  
Lithium ion Batteries

## Product Introduction

This portable solar generator is equipped with MPPT solar charge controller to maximize and regulate DC power from the solar panels(array) for charging the battery bank.

This unit consists of Lithium-ion battery pack that stores electrical energy, FM Radio, MPPT solar charge controller that can be efficiently charged via the sun in lightly cloudy weather, inverter converts 12V/24V to normal electricity. In addition, this unit does not require any gas to run and also does not emit any toxic fumes like standard gas generators can, not to mention it does not produce any sound. With the included solar panel(s), this unit is a complete solar electric production and storage unit.



MPPT  
Control Technology



AC/Solar Charging



Light Weight and  
Portable



USB Smart Charger



LCD Display and Easy  
to Operate



Multiple Output  
Voltage



Pure Sine Wave  
Output



Built-in Lithium-ion  
Battery

## Product Details

1. Fan
2. Light ON/OFF
3. LED Emergency Light
4. FM Radio Antenna
5. AC Output
6. DC Output
7. AC Input
8. PV/DC Input
9. USB Output
10. DC Output ON /OFF



11. LED Indicates
12. LCD Display
13. Function Button
14. FM Radio
15. Speaker



## PIM300-Li ~ PIM3000-Li

Model		PIM300-Li	PIM500-Li	PIM1000-Li	PIM2000-Li	PIM3000-Li
PHASE		1-phase in/1-phase out				
RATED POWER		300W	500W	1000W	2000W	3000W
Dimension DxWxH (mm)		310x213x240		456x269x434	510x313x475	
Net Weight (kgs)		6.27	10.77	15.27	36.08	38.30
INPUT						
Voltage		110Vac/120Vac/127Vac / 220Vac/230Vac/240Vac(+25%,-35%)				
Frequency Range		50 Hz/60 Hz (Auto sensing)				
OUTPUT						
AC OUTPUT	AC Voltage Regulation (Batt. Mode)	110Vac/120Vac/127Vac / 220Vac/230Vac/240Vac ± 5%				
	Frequency	50Hz/60Hz ± 0.5Hz				
	Surge Power	900W	1500W	3000W	6000W	9000W
	Efficiency (Peak)	83%		86%		89%
	Transfer Time	<=8 ms				
	Crest Factor	3:1				
	Waveform	Pure sine wave				
DC OUTPUT	DC Voltage	12VDC		24VDC		
	DC Current	2A * 4 Ports / 30A Socket		2A * 4 Ports / 60A Socket		
	High-voltage Protection	16VDC		32VDC		
	High-voltage Recovery	15.2VDC		30.4VDC		
	Low-voltage Protection	11VDC		22VDC		
	Low-voltage Recovery	12.6VDC		25.2VDC		
USB Interface		5VDC 3A * 8 Ports				
LED LIGHTING						
Emergency Light	Power	3W				
	Input Voltage	12VDC		24VDC		
External Light	Power	3W				
	Input Voltage	12VDC		24VDC		
	Base	E27				
	Cable	303 ON/OFF Power Cord				
FM RADIO						
Audio Output		2 x 3W				
FM Frequency		87.5 MHz to 108 MHz				
BATTERY & AC CHARGER						
Battery Voltage		12VDC		24VDC		
Battery Type		LiFePO4 Battery				
Battery Capacity		12.8V 30AH	12.8V 50AH	25.6V50AH	25.6V100AH	25.6V150AH
Floating Charge Voltage		14.6VDC		29.2VDC		
Overcharge Protection		14.8VDC		29.6VDC		
MPPT SOLAR CHARGER & AC CHARGER						
Maximum PV Array Power		360W		720W	1440W	
PV Array Open Circuit Voltage Range		18VDC - 130VDC				
Max. PV Array Open Circuit Voltage		145VDC				
Max. Solar Charge Current		30A			60A	
MPPT Efficiency		99.5%				
Start Charging Current		16.8V		29.6V		
Low Input Voltage Protection Point		13.8V		26.6V		
Max. AC Charge Current		10A		5A	15A	
PROTECTION						
Overload Protection		Full load 100%, Inverter alarm. Overload 120%, Inverter shuts down output in 10s.Once the load back to normal, Inverter recovers output.				
Output Short Circuit		Shut down automatically.				
High AC Input Voltage		Turn off AC,transfers to inverter mode automatically.				
Low Battery Voltage		Shut down automatically. Once the AC input recovers, inverter turns on and charge automatically.				
Over Temperature		Shut down automatically.				
SYSTEM						
Display	Display	LCD + LED				
	Display Contents	Input/Output Voltage, Input/Output Current, Battery Voltage, Battery Capacity, Loading Power, Working Modes				
Working Modes		1 - Normal Working Mode, 2 - Solar Priority Mode, 3 - Battery - Inverter Mode, 4 - Energy Saving Mode				
Communication Interface		RS232/SNMP Optional				
OPERATING ENVIRONMENT						
Humidity		5% to 95% Relative Humidity(Non-condensing)				
Altitude		<3000m				
Operating Temperature		0°C to 55°C				

Remarks;Products specifications are subject to change without notice.



Overheating  
Protection



Over Current  
Protection



Over Charge  
Protection



Over Discharge  
Protection



Short-Circuit  
Protection



# PORTABLE SOLAR GENERATOR

**300W – 3000W**

**High Frequency PWM Solar Charger  
Lithium ion Batteries**

## Product Introduction

This portable solar generator is equipped with PWM solar charge controller to maximize and regulate DC power from the solar panels(array) for charging the battery bank.

This unit consists of Lithium-ion battery pack that stores electrical energy, FM Radio, PWM solar charge controller that can be efficiently charged via the sun in lightly cloudy weather, inverter converts 12V/24V to normal electricity. In addition, this unit does not require any gas to run and also does not emit any toxic fumes like standard gas generators can, not to mention it does not produce any sound. With the included solar panel(s), this unit is a complete solar electric production and storage unit.



PWM  
Control Technology



AC/Solar Charging



Light Weight And  
Portable



USB Smart Charger



LCD Display and Easy  
to Operate



Multiple Output  
Voltage



Pure Sine Wave  
Output



Built-in Lithium-ion  
Battery

## Product Details

1. Fan
2. Light ON/OFF
3. LED Emergency Light
4. FM Radio Antenna
5. AC Output
6. DC Output
7. AC Input
8. PV/DC Input
9. USB Output
10. DC Output ON /OFF



11. LED Indicates
12. LCD Display
13. Function Button
14. FM Radio
15. Speaker



## PIP300-Li ~ PIP3000-Li

Model		PIP300-Li	PIP500-Li	PIP1000-Li	PIP2000-Li	PIP3000-Li
PHASE		1-phase in/1-phase out				
RATED POWER		300W	500W	1000W	2000W	3000W
Dimension DxWxH (mm)		310x213x192		456x269x434	510x313x475	
Net Weight (kgs)		5.17	9.69	14.17	35.00	37.20
INPUT						
Voltage		110Vac/120Vac/127Vac / 220Vac/230Vac/240Vac(+25%,-35%)				
Frequency Range		50 Hz/60 Hz (Auto sensing)				
OUTPUT						
AC OUTPUT	AC Voltage Regulation (Batt. Mode)	110Vac/120Vac/127Vac / 220Vac/230Vac/240Vac ± 5%				
	Frequency	50Hz/60Hz ± 0.5Hz				
	Surge Power	900W	1500W	3000W	6000W	9000W
	Efficiency (Peak)	83%		86%		89%
	Transfer Time	<=8 ms				
	Crest Factor	3:1				
	Waveform	Pure sine wave				
DC OUTPUT	DC Voltage	12VDC		24VDC		
	DC Current	2A * 4 Ports / 30A Socket		2A * 4 Ports / 60A Socket		
	High-voltage Protection	16VDC		32VDC		
	High-voltage Recovery	15.2VDC		30.4VDC		
	Low-voltage Protection	11VDC		22VDC		
	Low-voltage Recovery	12.6VDC		25.2VDC		
USB Interface		5VDC 3A * 8 Ports				
LED LIGHTING						
Emergency Light	Power	3W				
	Input Voltage	12VDC		24VDC		
External Light	Power	3W				
	Input Voltage	12VDC		24VDC		
	Base	E27				
	Cable	303 ON/OFF Power Cord				
FM RADIO						
Audio Output		2 x 3W				
FM Frequency		87.5 MHz to 108 MHz				
BATTERY & AC CHARGER						
Battery Voltage		12VDC		24VDC		
Battery Type		LiFePO4 Battery				
Battery Capacity		12.8V 30AH	12.8V 50AH	25.6V50AH	25.6V100AH	25.6V150AH
Floating Charge Voltage		13.7VDC		27.4VDC		
Overcharge Protection		14.0VDC		28.0VDC		
MPPT SOLAR CHARGER & AC CHARGER						
Solar Controller Type		PWM				
Maximum PV Array Power		360W		720W	1440W	
PV Array Open Circuit Voltage Range		10 - 25VDC		20 - 50VDC		
Max. PV Array Open Circuit Voltage		25VDC		50VDC		
Max. Solar Charge Current		30A		30A	60A	
Max. AC Charge Current		10A		10A	15A	
PROTECTION						
Overload Protection		Full load 100%, Inverter alarm. Overload 120%, Inverter shuts down output in 10s.Once the load back to normal, Inverter recovers output.				
Output Short Circuit		Shut down automatically.				
High AC Input Voltage		Turn off AC,transfers to inverter mode automatically.				
Low Battery Voltage		Shut down automatically. Once the AC input recovers, inverter turns on and charge automatically.				
Over Temperature		Shut down automatically.				
SYSTEM						
Display	Display	LCD + LED				
	Display Contents	Input/Output Voltage, Input/Output Current, Battery Voltage, Battery Capacity, Loading Power, Working Modes				
Working Modes		1 - Normal Working Mode, 2 - Solar Priority Mode, 3 - Battery - Inverter Mode, 4 - Energy Saving Mode				
Communication Interface		RS232/SNMP Optional				
OPERATING ENVIRONMENT						
Humidity		5% to 95% Relative Humidity(Non-condensing)				
Altitude		<3000m				
Operating Temperature		0°C to 55°C				

Remarks;Products specifications are subject to change without notice.



Overheating  
Protection



Over Current  
Protection



Over Charge  
Protection



Over Discharge  
Protection



Short-Circuit  
Protection



# PORTABLE SOLAR GENERATOR

**300W – 1500W**

**Low Frequency MPPT Solar Charger  
VRLA Batteries**

## Product Introduction

This portable solar generator is equipped with MPPT solar charge controller to maximize and regulate DC power from the solar panels(array) for charging the battery bank.

This unit consists of VRLA battery pack that stores electrical energy, FM Radio, MPPT solar charge controller that can be efficiently charged via the sun in lightly cloudy weather, inverter converts 12V/24V to normal electricity. In addition, this unit does not require any gas to run and also does emit any toxic fumes like standard gas generators can, not to mention it does not produce any sound. With the included solar panel(s), this unit is a complete solar electric production and storage unit.



MPPT  
Control Technology



AC/Solar Charging



Light Weight and  
Portable



USB Smart Charger



LCD Display and Easy  
to Operate



Multiple Output  
Voltage



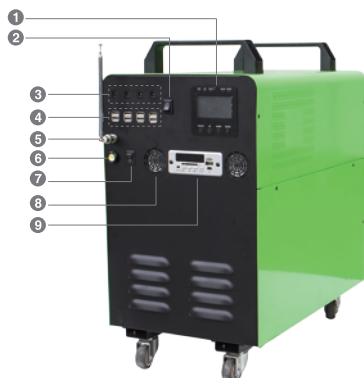
Pure Sine Wave  
Output



Large Capacity  
Energy

## Product Details

1. LCD Display
2. DC Output ON /OFF
3. DC Output
4. USB Output
5. FM Radio Antenna
6. LED Emergency Light
7. Light ON/OFF
8. Speaker
9. FM Radio



10. AC Output
11. RS232 Interface
12. Fan
13. AC Input
14. PV/DC Input
15. Master ON/OFF



PIM300 ~ PIM1500						
Model		PIM300	PIM500	PIM1000-12	PIM1000-24	PIM1500
PHASE		1-phase in/1-phase out				
RATED POWER		300W	500W	1000W		1500W
Dimension DxWxH (mm)		456x269x434				510x313x475
Net Weight (kgs)		20.07	22.45	47.82	51.42	76.68
INPUT						
Voltage		110Vac/120Vac/127Vac / 220Vac/230Vac/240Vac(+25%,-35%)				
Frequency Range		50 Hz/60 Hz (Auto sensing)				
OUTPUT						
AC OUTPUT	AC Voltage Regulation (Batt. Mode)	110Vac/120Vac/127Vac / 220Vac/230Vac/240Vac ± 5%				
	Frequency	50Hz/60Hz ± 0.5Hz				
	Surge Power	900W	1500W	3000W		4500W
	Efficiency (Peak)	81% (Battery Mode) / 93% (AC Mode)				
	Transfer Time	<=8 ms				
	Crest Factor	3:1				
	Waveform	Pure sine wave				
DC OUTPUT	DC Voltage	12VDC			24VDC	
	DC Current	2A * 4 Ports / 30A Socket			2A * 4 Ports / 60A Socket	
	High-voltage Protection	16VDC			32VDC	
	High-voltage Recovery	15.2VDC			30.4VDC	
	Low-voltage Protection	11VDC			22VDC	
	Low-voltage Recovery	12.6VDC			25.2VDC	
USB Interface		5VDC 3A * 8 Ports				
LED LIGHTING						
Emergency Light	Power	3W				
	Input Voltage	12VDC			24VDC	
External Light	Power	3W				
	Input Voltage	12VDC			24VDC	
	Base	E27				
	Cable	303 ON/OFF Power Cord				
FM RADIO						
Audio Output		2 x 3W				
FM Frequency		87.5 MHz to 108 MHz				
BATTERY & AC CHARGER						
Battery Voltage		12VDC			24VDC	
Battery Type		Valve-Regulated Lead-acid Battery				
Battery Capacity		1*12V 33AH	1*12V 55AH	1*12V100AH	2*12V55AH	4*12V55AH
Floating Charge Voltage		13.5 VDC			27.0 VDC	
Overcharge Protection		15.5 VDC			31.0 VDC	
MPPT SOLAR CHARGER & AC CHARGER						
Maximum PV Array Power		360W			720W	
PV Array Open Circuit Voltage Range		18VDC - 130VDC				
Max. PV Array Open Circuit Voltage		130VDC				
Max. Solar Charge Current		30A				
MPPT Efficiency		99.5%				
Start Charging Current		16V			28V	
Low Input Voltage Protection Point		13V			25V	
Max. AC Charge Current		0 - 20A (adjustable)				
PROTECTION						
Overload Protection		Full load 100%, Inverter alarm. Overload 120%, Inverter shuts down output in 10s.Once the load back to normal, Inverter recovers output.				
Output Short Circuit		Shut down automatically.				
High AC Input Voltage		Turn off AC,transfers to inverter mode automatically.				
Low Battery Voltage		Shut down automatically. Once the AC input recovers, inverter turns on and charge automatically.				
Over Temperature		Shut down automatically.				
SYSTEM						
Display	Display	LCD + LED				
	Display Contents	Input/Output Voltage, Input/Output Current, Battery Voltage, Battery Capacity, Loading Power, Working Modes				
Working Modes		1 - Normal Working Mode, 2 - Solar Priority Mode, 3 - Battery - Inverter Mode, 4 - Energy Saving Mode				
Communication Interface		RS232/SNMP Optional				
OPERATING ENVIRONMENT						
Humidity		5% to 95% Relative Humidity(Non-condensing)				
Altitude		<3000m				
Operating Temperature		0°C to 55°C				



Overheating  
Protection



Over Current  
Protection



Over Charge  
Protection



Over Discharge  
Protection



Short-Circuit  
Protection



# PORTABLE SOLAR GENERATOR

**300W – 1500W**

**Low Frequency PWM Solar Charger  
VRLA Batteries**

## Product Introduction

This portable solar generator is equipped with PWM solar charge controller to maximize and regulate DC power from the solar panels(array) for charging the battery bank.

This unit consists of VRLA battery pack that stores electrical energy, FM Radio, PWM solar charge controller that can be efficiently charged via the sun in lightly cloudy weather, inverter converts 12V/24V to normal electricity. In addition, this unit does not require any gas to run and also does emit any toxic fumes like standard gas generators can, not to mention it does not produce any sound. With the included solar panel(s), this unit is a complete solar electric production and storage unit.



PWM  
Control Technology



AC/Solar Charging



Light Weight and  
Portable



USB Smart Charger



LCD Display and Easy  
to Operate



Multiple Output  
Voltage



Pure Sine Wave  
Output



Large Capacity  
Energy

## Product Details

1. LCD Display
2. DC Output ON /OFF
3. DC Output
4. USB Output
5. FM Radio Antenna
6. LED Emergency Light
7. Light ON/OFF
8. Speaker
9. FM Radio



10. AC Output
11. RS232 Interface
12. Fan
13. AC Input
14. PV/DC Input
15. Master ON/OFF



PIP300 ~ PIP1500						
Model		PIP300	PIP500	PIP1000-12	PIP1000-24	PIP1500
PHASE		1-phase in/1-phase out				
RATED POWER		300W	500W	1000W		1500W
Dimension DxWxH (mm)		456x269x434				510x313x475
Net Weight (kgs)		19.01	21.30	46.72	50.32	75.58
INPUT						
Voltage		110Vac/120Vac/127Vac / 220Vac/230Vac/240Vac(+25%,-35%)				
Frequency Range		50 Hz/60 Hz (Auto sensing)				
OUTPUT						
AC OUTPUT	AC Voltage Regulation (Batt. Mode)	110Vac/120Vac/127Vac / 220Vac/230Vac/240Vac ± 5%				
	Frequency	50Hz/60Hz ± 0.5Hz				
	Surge Power	900W	1500W	3000W		4500W
	Efficiency (Peak)	81% (Battery Mode) / 93% (AC Mode)				
	Transfer Time	<=8 ms				
	Crest Factor	3:1				
	Waveform	Pure sine wave				
DC OUTPUT	DC Voltage	12VDC			24VDC	
	DC Current	2A * 4 Ports / 30A Socket			2A * 4 Ports / 60A Socket	
	High-voltage Protection	16VDC			32VDC	
	High-voltage Recovery	15.2VDC			30.4VDC	
	Low-voltage Protection	11VDC			22VDC	
	Low-voltage Recovery	12.6VDC			25.2VDC	
USB Interface		5VDC 3A * 8 Ports				
LED LIGHTING						
Emergency Light	Power	3W				
	Input Voltage	12VDC			24VDC	
External Light	Power	3W				
	Input Voltage	12VDC			24VDC	
	Base	E27				
	Cable	303 ON/OFF Power Cord				
FM RADIO						
Audio Output		2 x 3W				
FM Frequency		87.5 MHz to 108 MHz				
BATTERY & AC CHARGER						
Battery Voltage		12VDC			24VDC	
Battery Type		Valve-Regulated Lead-acid Battery				
Battery Capacity		1*12V 33AH	1*12V 55AH	1*12V100AH	2*12V55AH	4*12V55AH
Floating Charge Voltage		13.7 VDC			27.4VDC	
Overcharge Protection		14.2VDC			38.4 VDC	
MPPT SOLAR CHARGER & AC CHARGER						
Solar Controller Type		PWM				
Maximum PV Array Power		360W			720W	
PV Array Open Circuit Voltage Range		10 - 25VDC			20 - 50VDC	
Max. PV Array Open Circuit Voltage		25VDC			50VDC	
Max. Solar Charge Current		30A				
Max. AC Charge Current		0 - 20A (adjustable)				
PROTECTION						
Overload Protection		Full load 100%, Inverter alarm. Overload 120%, Inverter shuts down output in 10s.Once the load back to normal, Inverter recovers output.				
Output Short Circuit		Shut down automatically.				
High AC Input Voltage		Turn off AC,transfers to inverter mode automatically.				
Low Battery Voltage		Shut down automatically. Once the AC input recovers, inverter turns on and charge automatically.				
Over Temperature		Shut down automatically.				
SYSTEM						
Display	Display	LCD + LED				
	Display Contents	Input/Output Voltage, Input/Output Current, Battery Voltage, Battery Capacity, Loading Power, Working Modes				
Working Modes		1 - Normal Working Mode, 2 - Solar Priority Mode, 3 - Battery - Inverter Mode, 4 - Energy Saving Mode				
Communication Interface		RS232/SNMP Optional				
OPERATING ENVIRONMENT						
Humidity		5% to 95% Relative Humidity(Non-condensing)				
Altitude		<3000m				
Operating Temperature		0°C to 55°C				

Remarks;Products specifications are subject to change without notice.

***Powering the world***



**Guangdong Prostar New Energy Technology Co., Ltd.**

**[www.Prostarpower.com](http://www.Prostarpower.com)**

**[www.Prostar-cn.com](http://www.Prostar-cn.com)**

 WeChat



Website

