

# PowerSolar™ Inverter Series

3000VA – 5000VA

» Solar

» Green

» Compact

VFD



The BPC PowerSolar Inverter combines functions of an inverter, solar charger and battery charger to offer uninterrupted power. The LCD display offers comprehensive user-configurable information such as battery charging current, AC/Solar charger priority, and acceptable input voltage depending on the application.

The BPC PowerSolar Inverter series includes the following options:

**MPPT** – Maximum Power Point Tracker system. Its function is to maximize the energy available from the connected solar module arrays at any time during its operation.

**PWM** – Pulse Width Modulation. Used in inverters to give a steady output voltage irrespective of the load. PWM Inverters have additional circuits for protection and voltage control.





# PowerSolar™ MPPT Inverter 3000VA – 5000VA

## Technical Specification

- Wide DC input range
- Compatible to mains voltage or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Smart battery charger design for optimized battery performance
- Cold start function
- Optional parallel operation up to 9 units
- Zero (0ms) transfer time to protect mission-critical loads such as servers and ATMs
- Removable LCD control module with multiple communications
- Built-in Bluetooth for mobile monitoring (Android App is available)
- Supports USB On-the-Go function
- Reserved communication port for BMS (RS485, CAN BUS or RS232)
- Pure sine wave solar inverter
- Selectable high power charging current

MODEL	PSOLAR - M <sub>3</sub>	PSOLAR - M <sub>5</sub>
Power Rating VA / W	3000 / 3000	5000 / 5000
Parallel Capability	Up to 9 units	
<b>INPUT</b>		
Voltage	230 VAC	
Selectable Voltage Range	110 - 280 VAC	
Frequency Range	50 Hz / 60 Hz (auto sensing)	
<b>OUTPUT</b>		
AC Voltage Regulation (Battery Mode)	230 VAC ±5%	
Output THDv	≤3% for Linear Load, ≤8% for non-linear load	
Surge Power	6000VA for 5 sec	10000VA for 5 sec
Efficiency (Peak)	93% at Line Mode, 90% at Battery Mode	
Transfer Time	0 ms	
Waveform	Pure Sinewave	
<b>BATTERY</b>		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	34 VDC	66 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Solar Charger Type	MPPT	
Maximum PV Array Open Circuit Voltage	145 VDC	
Maximum PV Array Power	1500 W	4000 W
MPP Range @ Operating Voltage	30 - 115 VDC	60 - 115 VDC
Maximum Solar Charge Current	60 A	80 A
Maximum AC Charge Current	60 A	
Maximum Charge Current	120 A	140 A
<b>ENVIRONMENT</b>		
Humidity	5% to 95% relative humidity (non-condensing)	
Operating Temperature	0°C to 55°C	
Storage Temperature	-15°C to 60°C	
<b>PHYSICAL</b>		
Dimensions (WxDxH) mm	303 x 140 x 525	
Net Weight (kgs)	13	13.5
Communication Interface	USB / RS232 / RS485 / Bluetooth / Dry Contact	



## PowerSolar™ PWM Inverter 3000VA – 5000VA

### Technical Specification

- Compatible to mains voltage or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Smart battery charger design for optimized battery performance
- Cold start function
- Pure sine wave solar inverter
- Selectable high power charging current
- Wide DC input range
- Selectable input voltage range for home appliances and personal computers
- Configurable AC/Solar input priority via LCD setting

MODEL	PSOLAR - P3	PSOLAR - P5
Power Rating VA / W	3000 / 3000	5000 / 5000
<b>INPUT</b>		
Voltage	230 VAC	
Selectable Voltage Range	170 - 280 VAC (for personal computers); 90 - 280 VAC (for home appliances)	
Frequency Range	50 Hz / 60 Hz (auto sensing)	
<b>OUTPUT</b>		
AC Voltage Regulation (Battery Mode)	230 VAC ±5%	
Surge Power	6000VA	10000VA
Efficiency (Peak)	90% - 93%	
Transfer Time	10 ms (for personal computers); 20 ms (for home appliances)	
Waveform	Pure Sinewave	
<b>BATTERY</b>		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Maximum PV Array Open Circuit Voltage	80 VDC	105 VDC
Maximum PV Array Power	1200 W	2400 W
MPP Range @ Operating Voltage	N/A	N/A
Maximum Solar Charge Current	50 A	50 A
Maximum AC Charge Current	25 A	60 A
Maximum Charge Current	70 A	110 A
<b>ENVIRONMENT</b>		
Humidity	5% to 95% relative humidity (non-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	
<b>PHYSICAL</b>		
Dimensions ( WxDxH ) mm	285 x 100 x 334	300 x 100 x 440
Net Weight (kgs)	6.3	8.5
Communication Interface	USB / RS232	

## The BPC Group

BPC is an international company operating for 25 years globally, with partners and distributors located around the world.

These regions include:

### EUROPE

UK, France, Germany, Gibraltar, Ireland, Netherlands, Malta, Norway, Portugal, Russia.

### MIDDLE EAST

Bahrain, Georgia, Iraq, Jordan, Kuwait, KSA, Lebanon, Oman, Qatar, Syria, Turkey, UAE, Yemen.

### AFRICA

Algeria, Botswana, Burkina Faso, Democratic Republic of the Congo, Egypt, Ethiopia, Ghana, Kenya, Libya, Mozambique, Nigeria, Rwanda, Sierra Leone, South Africa, Sudan, Tanzania, Uganda, Zambia.

### FAR EAST & ASIA

India, Pakistan, Sri Lanka, Indonesia.

To ensure a high level of pre and post sales support is offered, BPC work closely with distributors, providing key commercial and technical training whilst providing competitive costing structures tailored to specific region markets, ensuring the most suitable BPC products are offered. We pride ourselves on long standing relationships with our partners which is reflected in the ongoing support provided locally.



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Authorised Distributor