

# FSP SOLAR POWERMANAGER OFF-GRID SERIES



Independent Power Experience

5KVA / 5KW

## FSP Solar PowerManager Off-Grid

Via new design concept, FSP integrated high photovoltaic voltage input, Lithium iron battery communication, and Bluetooth mobile monitoring to enhance user experiences. The model fulfills not just unity output power factor, but also satisfies independent application.

It supplies stable and reliable pure sine wave 230Vac power, charges batteries with an integrated MPPT 4kW charger controller. User can define how to use their energy generation through front LCD panel to optimize power consumption. More Simple, More Capable

## GENERAL FEATURES

- Power factor 1 high frequency inverter
- Tri-Power solar, utility and battery management
- Output power source prioritization & timer configuration
- Detachable LCD controller
- Built-in Bluetooth for mobile monitoring(Android)
- Compatible with Lithium iron battery
- USB On-the-GO function
- Support generator
- Cold start function

## TECHNICAL SPECIFICATIONS

<b>MODEL</b>	<b>PMIV-5MK48V</b>
<b>RATED POWER</b>	5000VA/5000W
<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 (Batt. Mode)	230VAC $\pm$ 5%
Surge Power	10000VA for 4 seconds
Efficiency (Peak)	90%
Transfer Time	15 ms (For Personal Appliances)
Waveform	Pure sine wave
<b>BATTERY &amp; AC CHARGER</b>	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>	
Maximum PV Array Power	5000 W
MPPT Range @ Operating Voltage	120VDC~ 430 VDC
Maximum PV Array Open Circuit Voltage	450 V
Maximum Solar Charge Current	100A
Maximum AC Charge Current	100A
Maximum Charge Current	100A
Maximum Efficiency	98%
Solar Charger type	MPPT
<b>PHYSICAL</b>	
Dimension, D x W x H (mm)	140 x 295 x 468 A
Net Weight (kgs)	12
Ingress Protection Rating	IP20
Cooling System	AirForce cooling
Communication Interface	USB/RS232/RS485/Bluetooth/Dry-contact
<b>OPERATING ENVIRONMENT</b>	
Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	10°C- 55°C
Storage Temperature	-15°C- 60°C



### Output source is Solar-Bat-Utility Charging source priority is Solar & Utility

System will adapt Solar and utility both source to charge battery at the same time. Once solar power is low, system will switch to battery mode automatically until reach low bat warning then transfer to utility.  
Power source priority is Solar-> Battery-> Utility  
Charge source priority is Solar & Utility



### Output source & Charger source priority is solar first

When Solar energy is sufficient to charge the battery and feed the loads, utility will stand by until Solar power ceases or battery voltage drops to user's setting.  
Power source priority is Solar-> Battery or Utility  
Charging source priority is Solar-> Utility