

# 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
- High PV voltage input up to 500V
- 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

## Detachable LCD control module with various communications

Thanks for detachable LCD control module design which can be wired remotable panel and up to 20 meters communication from inverter.



## Integrated Bluetooth interface with Android App

Plus mobile monitoring solution, Bluetooth interface benefit user to configure and monitor their own inverter wirelessly. The communication distance up to 6~7m in an open space.

## Supports USB On-the-Go function

Through USB communication, users can more easily to download the data log from inverter or load the setting profile



**PYLONTECH COMPATIBLE**

## Lithium iron battery energy storage

Specially developed for the professional and demanding use of battery storage systems. The third generation inverter is compatible with high-quality lithium iron battery - Pylontec US2000B Plus/US3000B without external controller.

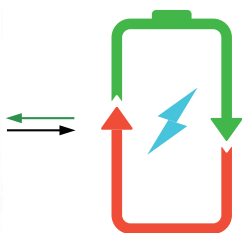
## LCD Operation

Stand on off grid conception, user can through LCD control panel to dominate how to use their own power and define inverter performance. Simple and convenient to configurate output source, charger source prioritization, charging current, and timer, etc.



## Battery equalization extends lifecycle

Inverter can activate battery equalization function periodically via user setting. It will help remove lead acid battery sulfate crystals to optimize battery performance and even extend lifecycle.

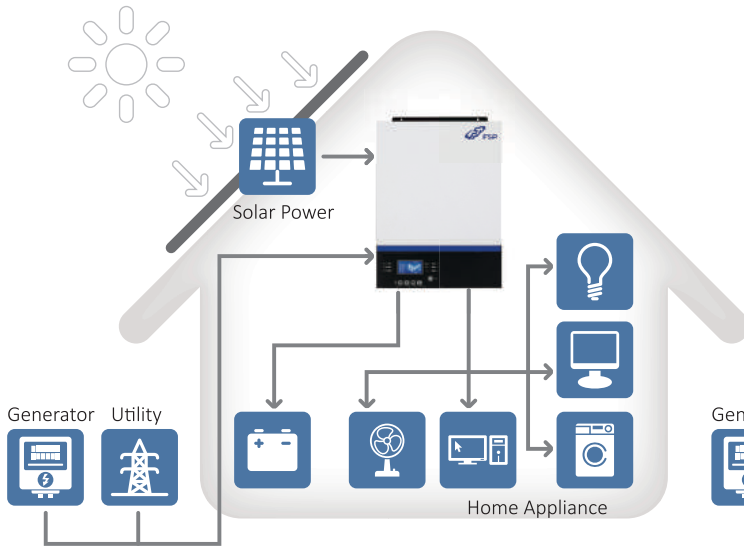


# Genuine Off - Grid Inverter

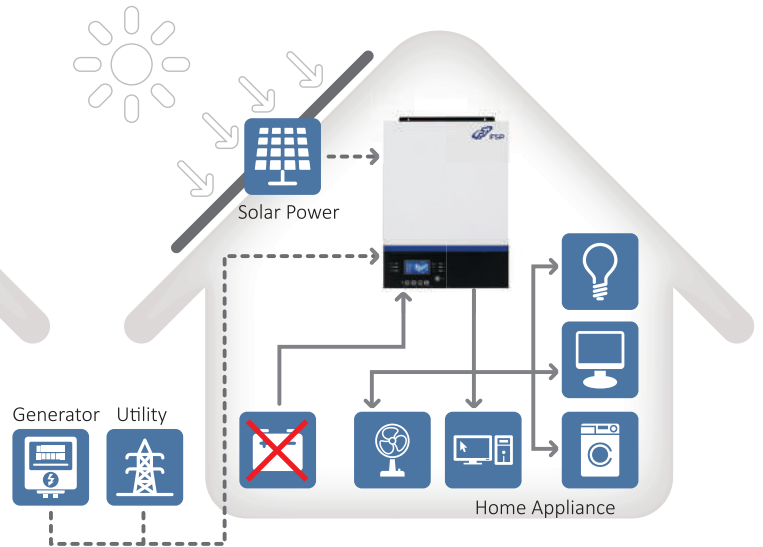
Flexible and Trustworthy

Suffice your demand and application of energy storage or inverter standalone without battery

**As Hybrid Power System**

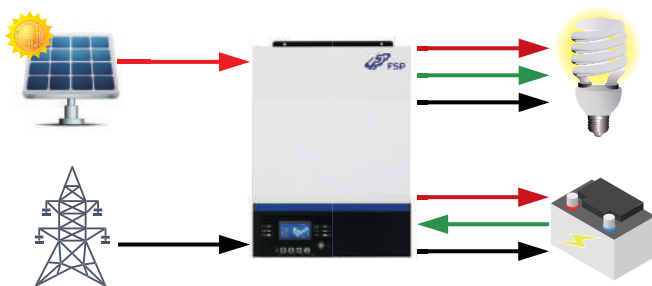


**As Inverter Independent System**



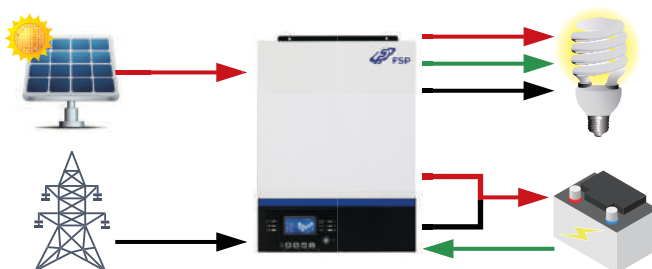
## FSP Solar PowerManager Off-Grid Smart Power Priority

Power and charging source priority of FSP Solar PowerManager Off-Grid smart design can be set up by the front LCD panel according to the power consumption environment, storing and withdrawal of energy are also user-defined.



**Output source Priority is Solar-> Bat-> Utility**  
**Charging source priority is Solar Power Only**

Solar energy is sufficient to charge the battery and carry the loads. Once solar power is low, system will switch to battery mode automatically until battery reaches low warning then system transfers to utility.

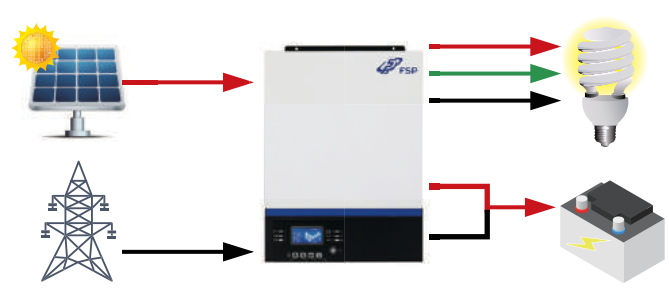


**Output source is Utility first**  
**Charging source priority is solar first**

Utility will feed output loads, Solar power will charge the battery until solar power ceases. Solar and battery energy will be used when utility fails.  
 Power source priority is Utility-> Solar & Battery  
 Charging source priority is Solar-> Utility

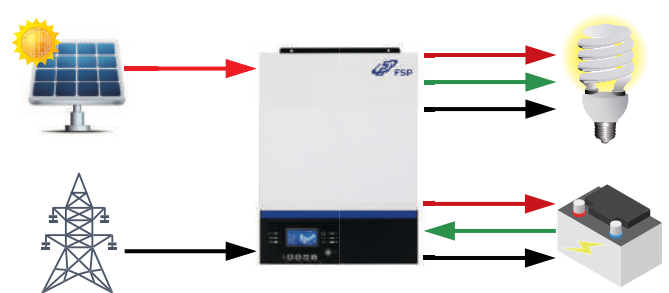
# TECHNICAL SPECIFICATIONS

<b>MODEL</b>	<b>PMIII-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 ± 5%
Surge Power	10000VA
Efficiency (Peak)	90% ~ 93%
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	63 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>	
Maximum PV Array Power	4000 W
MPPT Range @ Operating Voltage	120VDC~ 450 VDC
Maximum PV Array Open Circuit Voltage	500 VDC
Maximum Solar Charge Current	80A
Maximum AC Charge Current	60A
Maximum Charge Current	80A
Maximum Efficiency	98%
Solar Charger type	MPPT
<b>PHYSICAL</b>	
Dimension, D x W x H (mm)	115 x 300 x 400 A
Net Weight (kgs)	10
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