

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

| | |
|---------------------------------------|--|
| MODEL | PMIV-5MK48V |
| RATED POWER | 5000VA/5000W |
| INPUT | |
| 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) |
| OUTPUT | |
| 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 |
| BATTERY & AC CHARGER | |
| Battery Voltage | 48 VDC |
| Floating Charge Voltage | 54 VDC |
| Overcharge Protection | 66 VDC |
| SOLAR CHARGER & AC CHARGER | |
| 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 |
| PHYSICAL | |
| 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 |
| OPERATING ENVIRONMENT | |
| 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