

# PIP-MS/MG "PF1" SERIES

## Off-Grid Solar Inverter



\*available on 5048MG only

### MAIN FEATURES

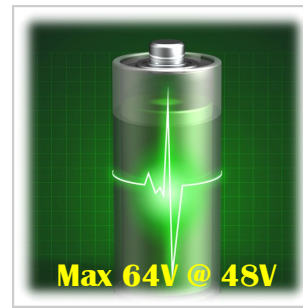
- NEW! energy-efficient power factor 1.0 design
- Parallel-ready up to 9 units\* (MS 5K, MG only)
- Max Equalization up to 64V (MS 5K, MG only)
- High PV 450V input + Batteryless (MG only)
- Bulk charge (C.V.) setting time (MS 5K, MG only)
- Built-in MPPT solar charger up to 80A
- High frequency pure sine wave design
- Suitable for with or without grid input
- Programmable parameters
- Max up to 80A utility charging
- Adjustable bulk/float voltage
- Wide AC input range
- Lightweight, easy to install
- FREE monitoring software
- LCD Display + LED indicators
- USB/RS232 communication interface
- (optional) remote display available

**\*Important: batteries MUST be connected when configuring in parallel operation!**

sales@mppsolar.com | www.mppsolar.com



HIGH DC INPUT 66V

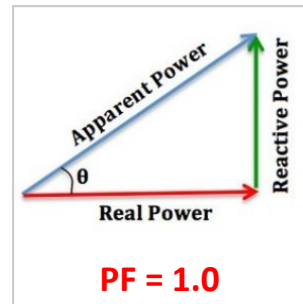


EQUALIZATION CHARGING



Max 9 units

PARALLEL SUPPORT



ENERGY EFFICIENT

PIP-MS/MG \*PF1\* SERIES      1012MS      2024MS      3024MS      5048MS(64V)      5048MG

	ELECTRICAL SPECIFICATIONS				
Continuous Output	1000W	2000W	3000W	5000W	5000W
Parallel-ready	NO	NO	NO	YES	
Batteryless Operation	NO	NO	NO	NO	YES
Input Power Factor	1				
Input Voltage Range	90~280VAC (Appliance mode), 170~280VAC (UPS mode)				
Input/Output Frequency	50Hz / 60Hz				
Output Voltage	230VAC±5%				
Output Waveform	Pure Sine Wave				
Output Regulation	< 3% RMS for battery voltage range				
Output Short Circuit	Circuit Breaker				
Peak Efficiency	95% (line mode) / 91% (inverter mode)				
Transfer Time	<10ms (UPS mode), <20ms (Appliance mode) **				
Charging Mode	3-stage				
Nominal DC Voltage	12V	24V	48V		
Default Bulk Volt (Flooded, AGM)	14.6, 14.1V	29.2, 28.2V	58.4, 56.4V		
Default Float Volt	13.5V	27.0V	54.0V	54.0V	
Max Charging Voltage	14.6V	29.2V	64V		
Max AC Charging Current	20A	30A	60A	80A	
No Load Consumption	<15W	<25W	<50W		
Power Saving Mode	<5W	<10W	<15W		
	Solar Charger				
Algorithm	MPPT				
System DC Voltage	12V	24V	48V	48V	
Max PV Input Voc	102V	75V	145V	450V	
MPPT Range	15 - 80V	30 - 66V	60 - 115V	120 - 430V	
Max Charging Current/Power	40A, 500W	25A, 600W	80A, 4000W	80A, 4500W	
	ENVIRONMENTAL / MECHANICAL SPECIFICATIONS				
Certification	CE				
Operating/Storage Temp.	0°C ~ 55°C / -15°C ~ 60°C				
Operating Humidity	20~90%RH Non-Condensing				
Dimension	355*272*100mm		468*295*120mm		
Net Weight	7.0Kg	7.0Kg	7.5Kg	11Kg	11Kg

\*MPP Solar Inc. reserves the right to change product specification without notice. MPP Solar is a registered trademark.

\*\*Parallel Mode transfer time is 30ms

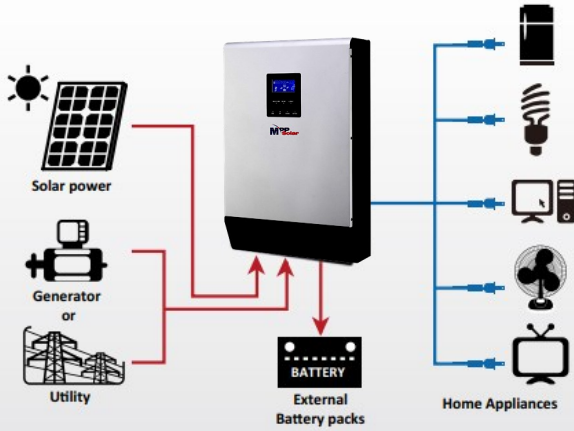


# Special Features

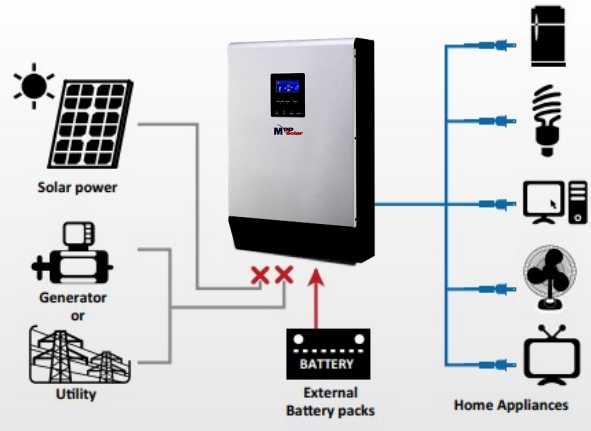


## Operation with Battery connected

Solar Power and AC Power available

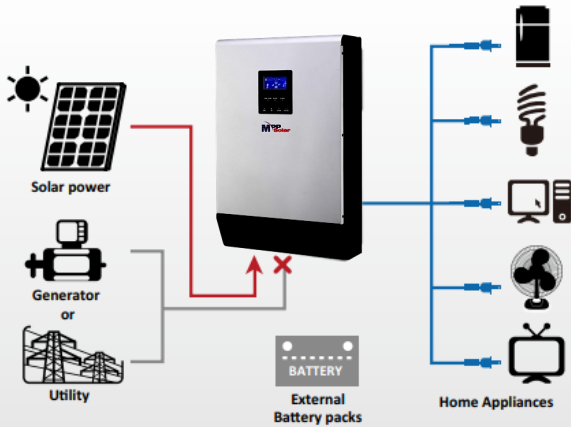


Solar Power and AC Power not available

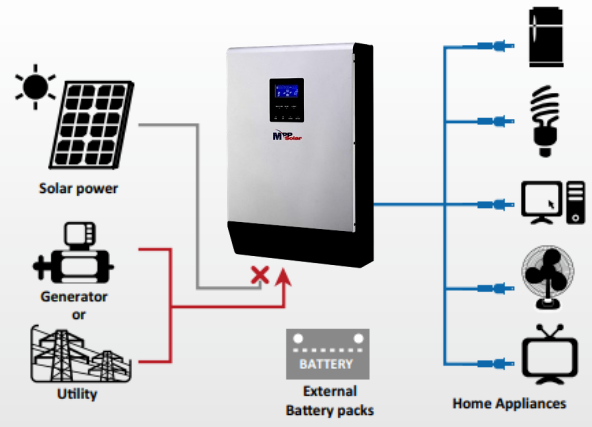


## Operation without Battery connected\*

Solar Power available



AC Power available



\*5048MG only