

PIP-MS/MG *PF1* SERIES

Off-Grid Solar Inverter



MPPT

Batteryless support*

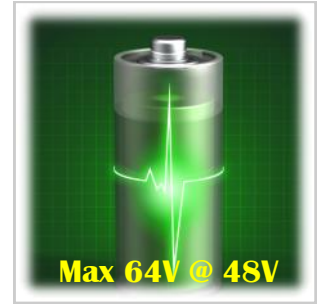
*available on 5048MG only

MAIN FEATURES

- **NEW!** energy-efficient power factor 1.0 design
- Parallel-ready up to 9 units (4-5K only)
- Equalization charging up to 64V (MS 4-5K only)
- Max DC limit up to 66V (MS 4-5k only)
- High PV 450V input + Batteryless Operation (MG 5k only)
- Bulk charge (C.V.) setting time
- 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



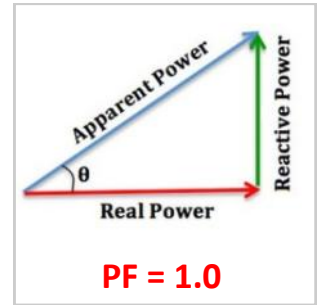
HIGH DC INPUT 66V



EQUALIZATION CHARGING



PARALLEL SUPPORT*



ENERGY EFFICIENT

| PIP-MS/MG *PF1* SERIES | 1012MS | 2024MS | 3024MS | 4048MS(1) | 5048MS | 5048MG |
|--|---|-------------|------------------|---------------|--------|--------|
| ELECTRICAL SPECIFICATIONS | | | | | | |
| Continuous Output | 1000W | 2000W | 3000W | 4000W | 5000W | 5000W |
| Parallel-ready | NO | | YES, MAX 9 UNITS | | | |
| Batteryless Operation | 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 | | | |
| Bulk Volt (Flooded, AGM) | 14.6, 14.1V | 29.2, 28.2V | 58.4, 56.4V | | | |
| Float Volt | 13.5V | 27.0V | 54.0V | 54.0V | | |
| Max DC Volt | 15.5V | 31.0V | 66.0V | 63.0V | | |
| Max AC Charging Current | 20Amp | 30Amp | 60Amp | 80A | | |
| No Load Consumption | <15W | <25W | <50W | <50W | | |
| Power Saving Mode | <5W | <10W | <15W | <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 | 12.5Kg | 13.5Kg | 11Kg |

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

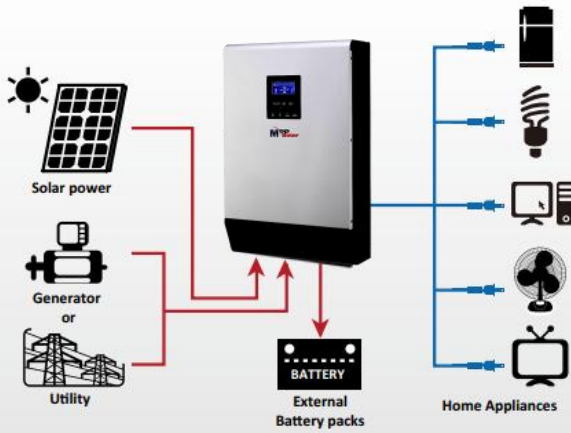


ENERVER
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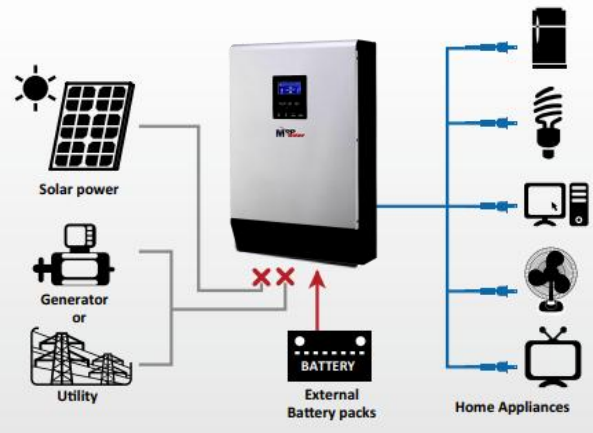


Operation with Battery connected

Solar Power and AC Power available

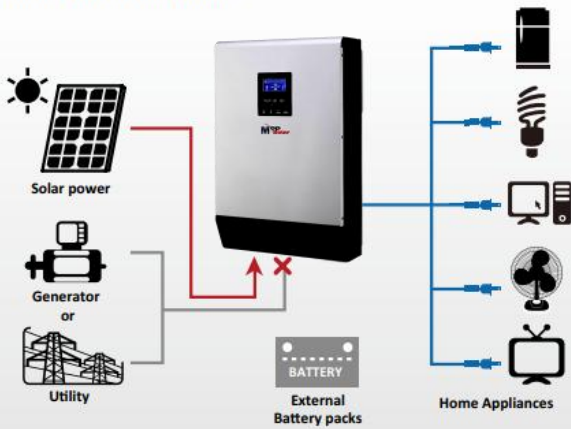


Solar Power and AC Power not available

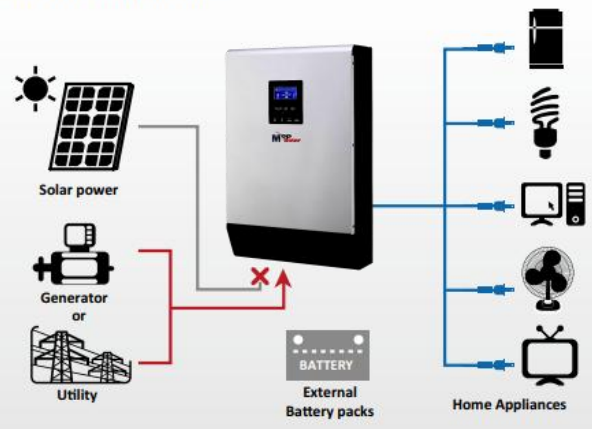


Operation without Battery connected

Solar Power available



AC Power available





PARALLEL KIT



This accessory is applicable to select 48VDC models of HS and MS series inverters. It is a required component to be installed in every unit of a parallel system. A parallel kit includes:

- 1 X PARALLEL BOARD
- 1 X PARALLEL COMM CABLE
- 1 X CURRENT SHARING CABLE

***IMPORTANT:** please do not attempt to parallel non-parallel-ready inverters together, as this will result instant damage of all units!

REMOTE CONTROL DISPLAY MODULE



This device is an extension of the HS/MS inverter's LCD module and allows user to implement control on settings and monitoring from a distance away, one unit at a time.

This remote module can coexist with the built-in LCD display and is compatible with most models in the HS/MS inverter series. Default operating distance: 15m via RJ45 network cable (fixed length cable included)

***For more details on pricing, availability and installation guide, please contact us directly.**