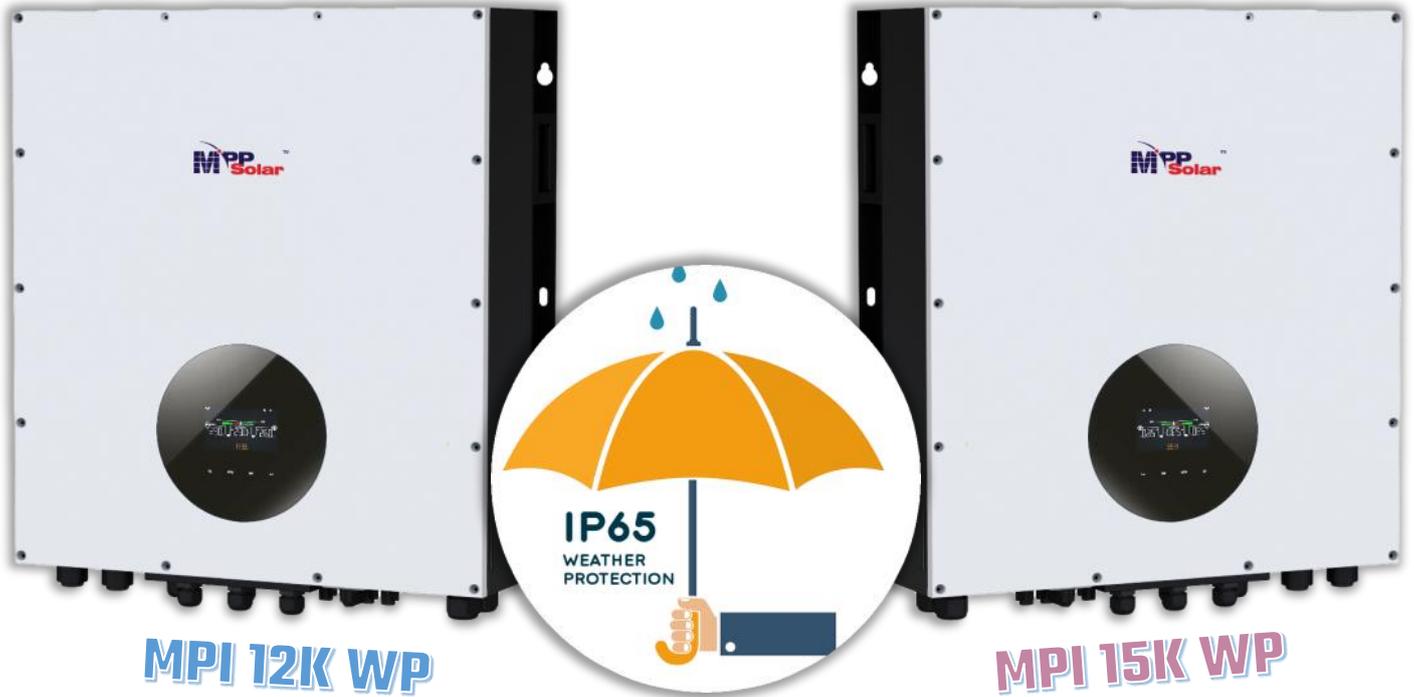


380-400V 3P HYBRID  
SOLAR INVERTER



# MPI WP HYBRID

## IP65 GRID-TIE + BATTERY BACKUP 3-PHASE SOLAR INVERTER

### MPI WP Hybrid Series

Newly developed from the original MPI Hybrid inverters with enhanced weather protection on IP65 rated enclosure, the new WP hybrid model allows application for both indoor and outdoor environment\* and also offers added protection against PCB corrosion and increases product life. In addition to the 3 main modes of operations (Grid-Tied, Off-Grid, and Grid-Tied with backup), other new features include:

- Built-in WIFI transmitter (for monitoring on smartphones)
- BMS support to Pylontech / Weco / Soltario battery systems
- Parallel ready up to 6 units
- Large, touchable LCD function keys

Communication ports on the MPI WP hybrids include: RS232 and USB port (direct connection to PC), dry contact (to use with compatible generators), intelligent slot (for SNMP and MODBUS cards\*\*), and BMS port (for connecting to compatible Lithium BMS systems).

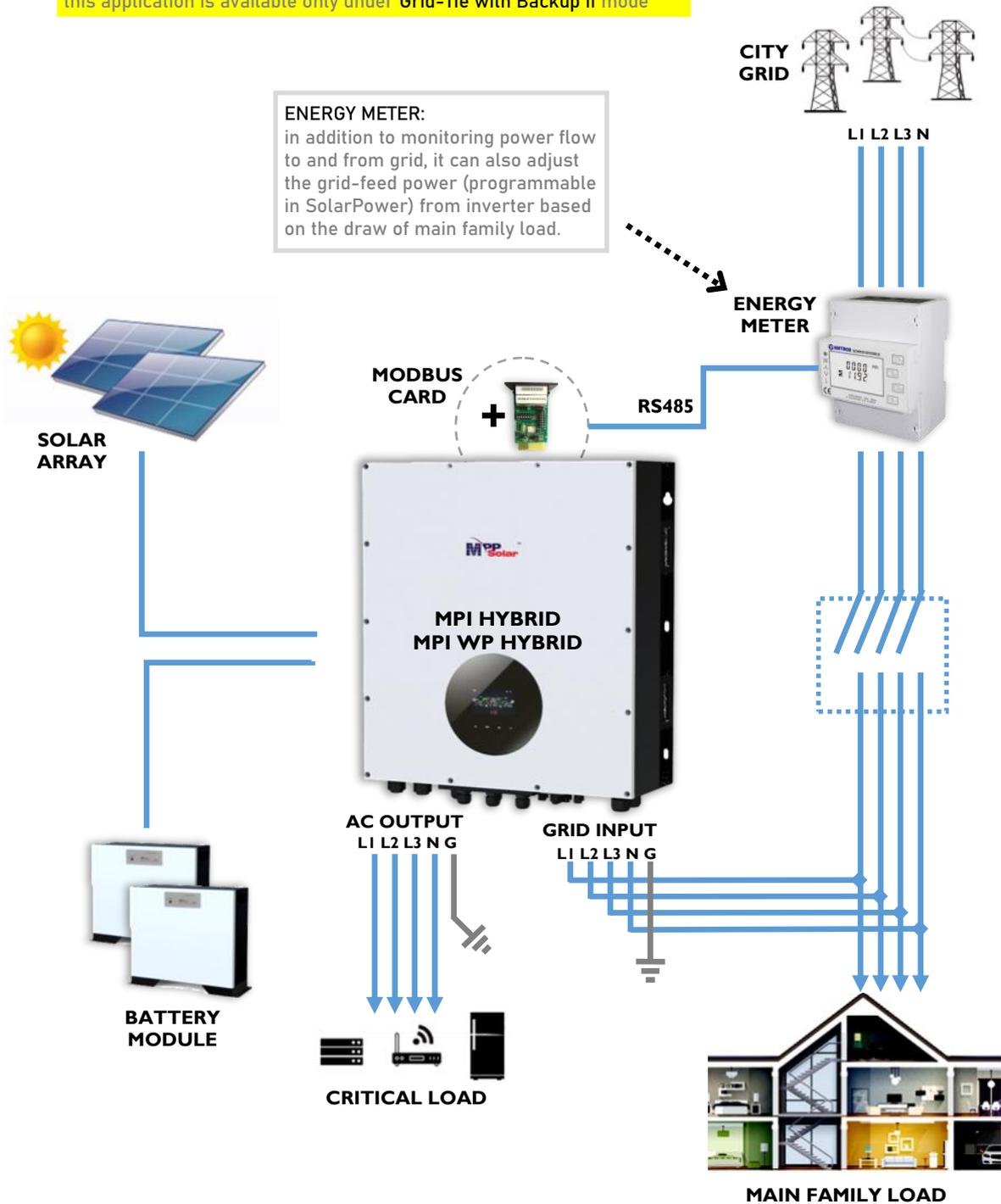
\*certain restrictions apply: do not install units on sites where there is direct exposure to sunlight, rain, snow, >95% humidity, near antenna or at altitude >2km above sea level

\*\*optional accessories sold separately. MODBUS card is for use with Energy Meter (also an optional accessory.)

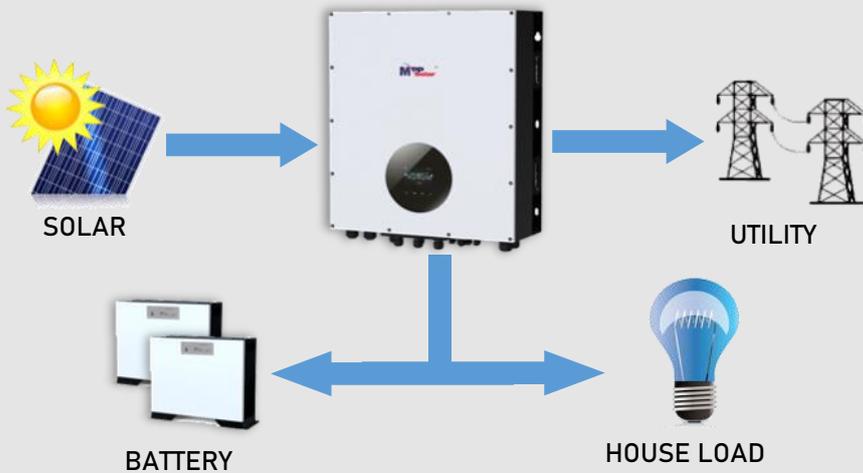


# MODBUS / Energy Meter Application

this application is available only under Grid-Tie with Backup II mode



## GRID-TIE + BATTERY BACKUP



In this operation mode, users can program unit to

- Feedback PV power to utility
- Provide PV power to load
- Charge battery by PV

Different priority settings are available in this mode. Charging source may be selected from PV and grid as default, PV only, or none (when charging not intended). All programming parameters can be set in SolarPower, the bundled monitoring software.

## GRID-TIE ONLY



In this operation mode, the inverter will only behave like a pure grid-tie inverter where it feeds back electricity to grid from PV array.

There is no priority setting available when this mode is selected. No battery is used here.

## OFF-GRID ONLY



In this operation mode, grid feedback to utility is disabled. Users can only program unit to:

- Provide PV power to load
- Charge battery by PV

Different priority settings are also available, and **GRID RELAY** may be enabled to inverter to provide extra power beyond maximum rating. Charging sources may be selected from PV and grid, PV only, or none (charging not intended).

**380-400V 3P HYBRID  
SOLAR INVERTER**

**MPI HYBRID WP SERIES**

**MPI 12K WP**

**MPI 15K WP**

| Rated Power                               |  |         |
|---|--|---------|
| Continuous Output                         | 12,000W  | 15,000W |
| Parallel-Ready                            | Yes, up to 6 units   |         |
| PV Input Rating (GRID-TIE)                |  |         |
| Max PV Input Power                        | 16,000W  |         |
| Max PV Input Voltage                      | 1,000V   |         |
| Start-up / Initial Feeding Voltage        | 320 / 350 Vdc  |         |
| PV MPPT Range                             | 350 - 950 Vdc  |         |
| Max PV Input Current                      | 26A each   |         |
| MPPT Tracker                              | 2  |         |
| Max DC/AC Conversion Efficiency           | 96%  |         |
| AC Input                                  |  |         |
| Start-up / Auto Restart Voltage           | 120 - 140Vac / 180Vac  |         |
| Input Voltage Range                       | 170 - 290Vac   |         |
| Nominal Frequency                         | 50 / 60 Hz   |         |
| Max AC Input Current                      | 40A  |         |
| AC Output                                 |  |         |
| Nominal AC Output Voltage                 | 3-Phase 400Vac (P-P)   |         |
| Output Voltage Range                      | 184 - 265Vac per phase                                       |         |
| Output Frequency (GRID-TIE)               | 47.5 - 51.5Hz / 59.3 - 60.5 Hz                               |         |
| Output Frequency (OFF-GRID)               | 50 / 60Hz, auto-sensing                                      |         |
| Output Waveform                           | Pure Sine Wave   |         |
| Max Output Power (grid relay enabled)*    | 24KW   |         |
| Max Output Power (battery mode)           | 12,000W  | 15,000W |
| Max Efficiency                            | 91%  |         |
| Battery Charger                           |  |         |
| DC Voltage Range                          | 40 - 62Vdc   |         |
| Nominal DC Voltage                        | 48Vdc  |         |
| Max Charging Current                      | 250A   | 300A    |
| ENVIRONMENTAL / MECHANICAL SPECIFICATIONS |  |         |
| Ingress Protection Rating                 | IP65   |         |
| Communication Port                        | RS232 / USB / BMS / WIFI / Dry Contact / Intelligent Slot    |         |
| Certifications                            | EN62109-1, EN62109-2, EN62040-1 / CE<br>VDE4105, VDE0126-1-1 |         |
| Operating Temp.                           | -25 to 60°C (power derating starts >45°C)                    |         |
| Operating Humidity                        | 0 - 100% RH (No condensing)                                  |         |
| Operating Altitude                        | max 1000m (power derating 1% per 100m beyond 1000m)          |         |
| Dimension                                 | 750 x 660 x 255mm  |         |
| Net Weight                                | 69KG   | 72KG    |

\*applicable to Off-Grid modes I and II only

Product specifications are subject to change without further notice.