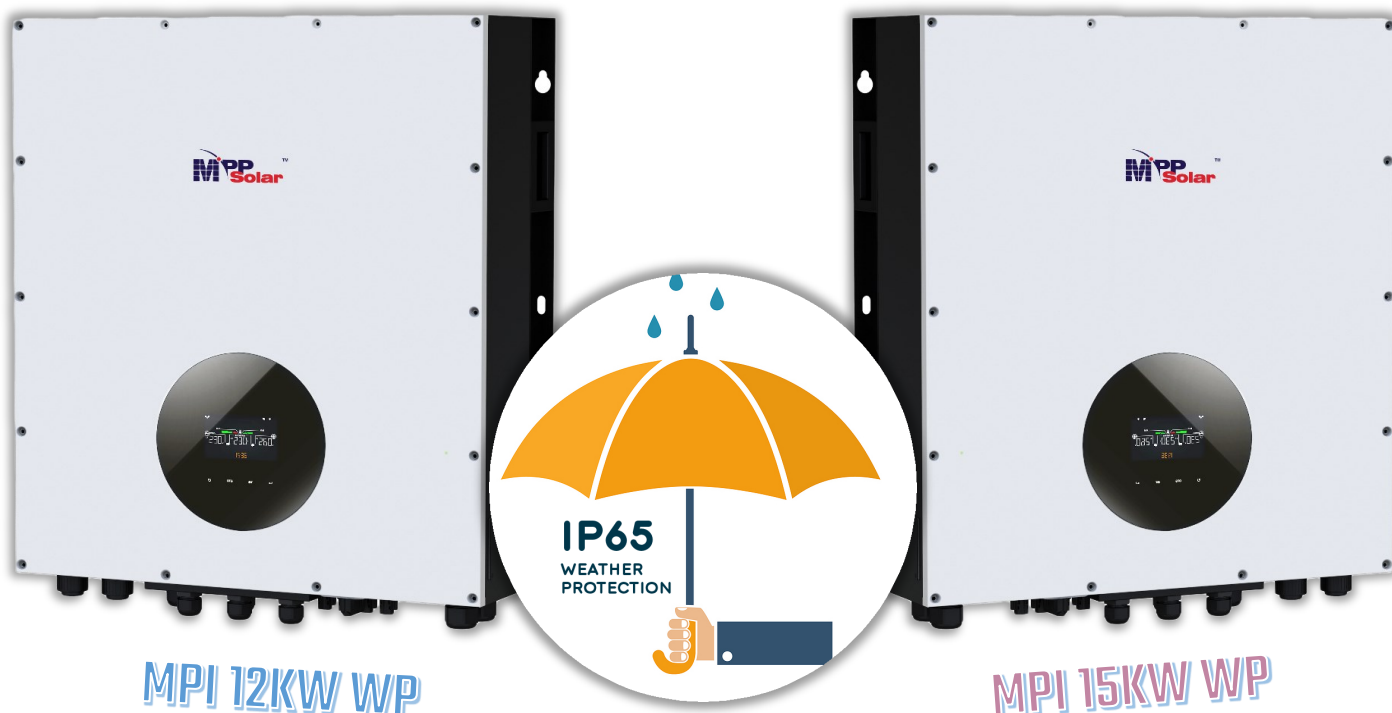


380-400V 3P HYBRID  
SOLAR INVERTER



# 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).

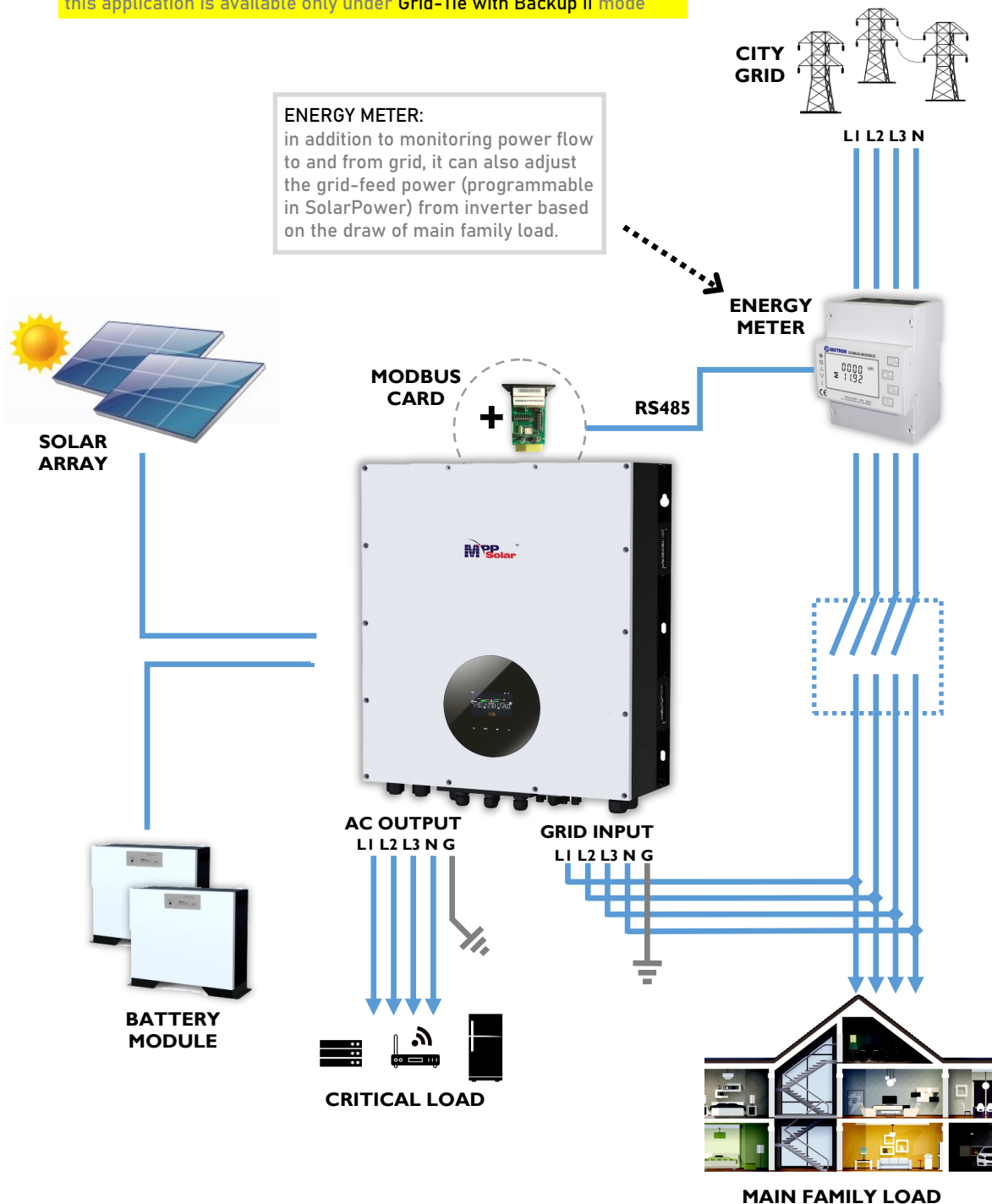
\*certain restrictions apply: do not install units on sites where there is direct exposure to sunlight, rain, snow, >95% humidity, near antenna or at altitude >2km above sea level

\*\*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

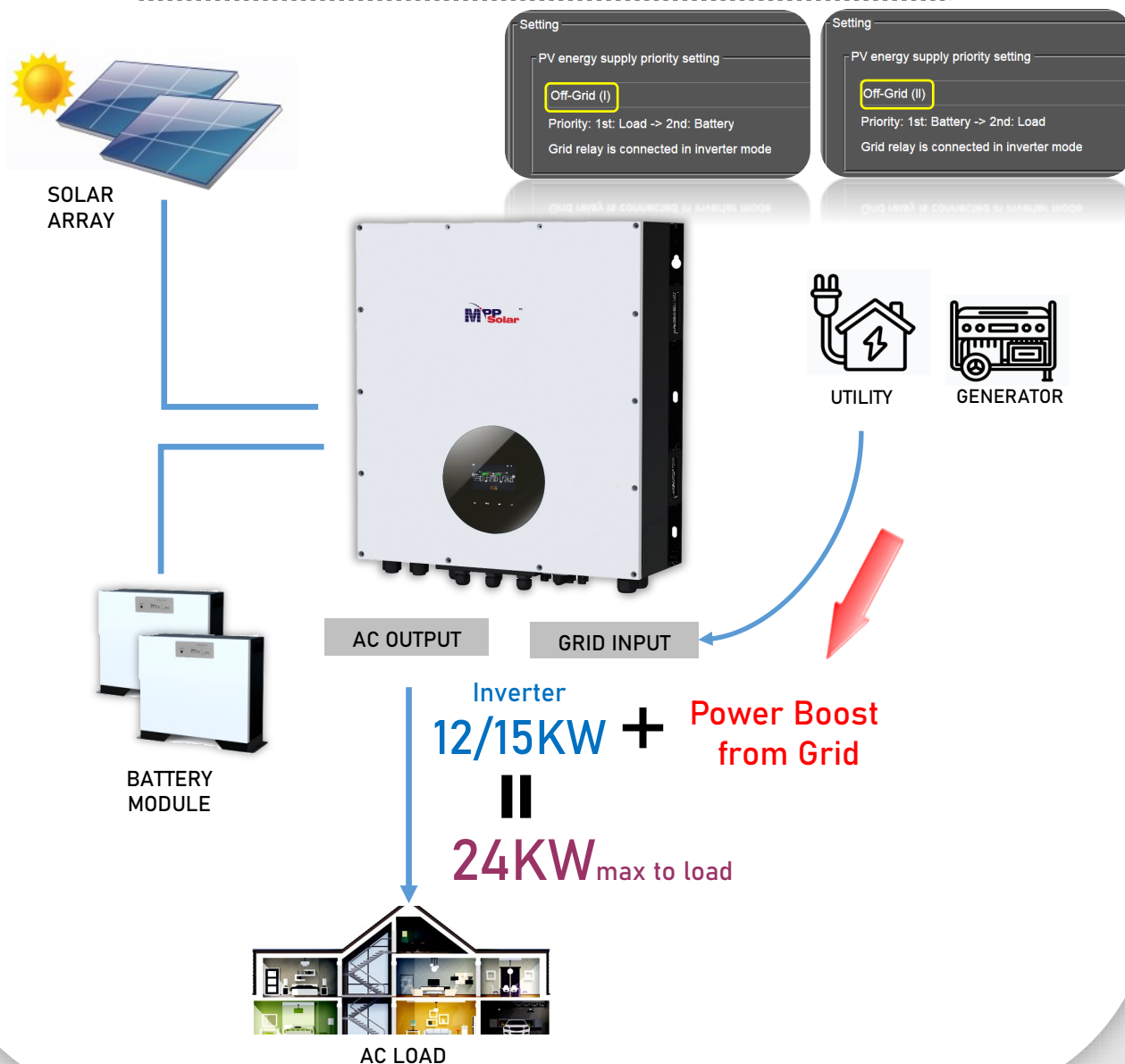


## Enabling Grid-Relay Feature

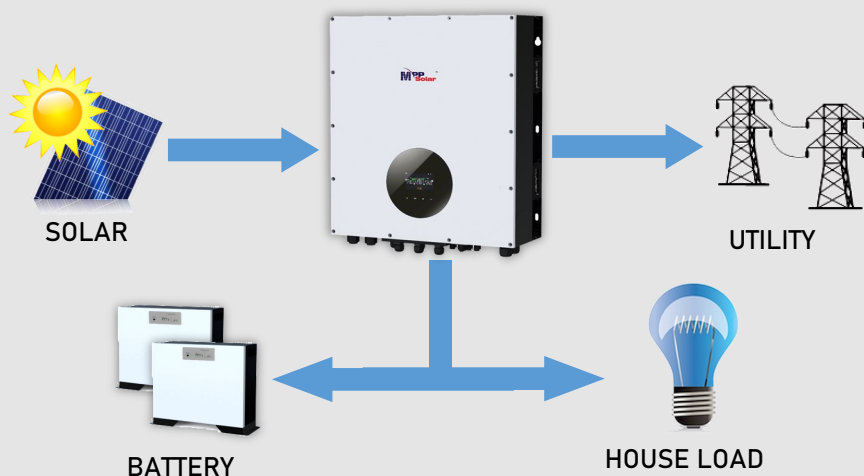
this feature can only be activated under OFF-GRID I and II mode

### Q. What is "Grid Relay" ?

When this feature is enabled and grid is available, the inverter can support load more than its designed maximum output rating (12 or 15kw), by combining power supplied from grid or generator source, and reach up to **24kw** max. This function can only be enabled when selecting **Off-Grid I or II mode** and under these modes, grid-injection is automatically disabled.



## 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.

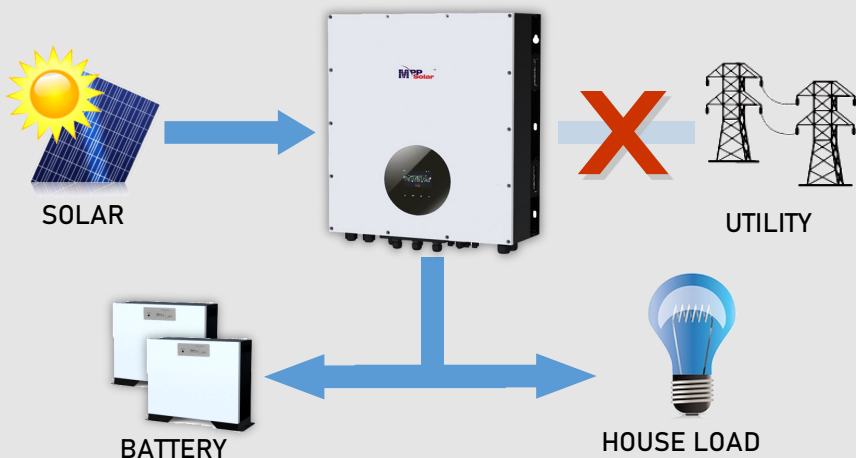
## GRID-TIE ONLY



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 12KW WP

## MPI 15KW 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	22,500W
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 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.