



NEW



MPI 3K, 1-Phase

MPI 4K*, 1-Phase

MPI 10K*, 3-Phase

*Now supports parallel output to load, up to 6 units max!

MPI HYBRID SOLAR INVERTER SERIES

GRID-TIED + BATTERY BACKUP

MPI Hybrid Series

These hybrid solar inverters combine the features of both grid-tied and off grid operations, and allow users to operate in 3 main modes:

- Grid-Tied (Feedback)
- Off Grid
- Grid-Tied with Battery Backup

Available in 3KW, 4KW (single phase) and 10kw (3 phase), these hybrid systems offer an off-grid inverter + grid-tie inverter + battery charger. Able to accept PV input voltage up to 500V & 580V (3K and 4K model, respectively) and 900V (10K model) with MPPT functionality, the Hybrid family can support up to max PV array sizes of 4.5KW, 5.0KW, and 14.85KW. This allows users greater flexibility in running load as well as feeding extra solar power back to grid. In the event of grid failure, these systems will switch to battery source like an off-grid inverter and keep your load backed up. The bundled monitoring software, SolarPower, offers powerful features which enable users total control and access to a wide variety of operations to meet all your need. Hybrid models are fully compliant to and certified in VDE (Germany), AS (Australia), and CE standards.



**Optional communication accessories include MODBUS card, MODBUS server, and Energy Meter.

Available upon request

sales@mppsolar.com | www.mppsolar.com

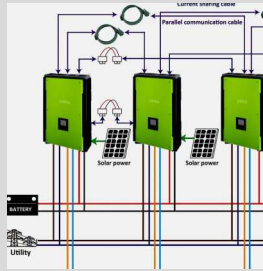
New Features



These new features are now available on selective Hybrid models:



HIGH CHARGING
battery charging current is now up to **80A!**
(4KW)



STACKABLE
Supports parallel operation up to **6** units max!
(4KW, 10KW only)



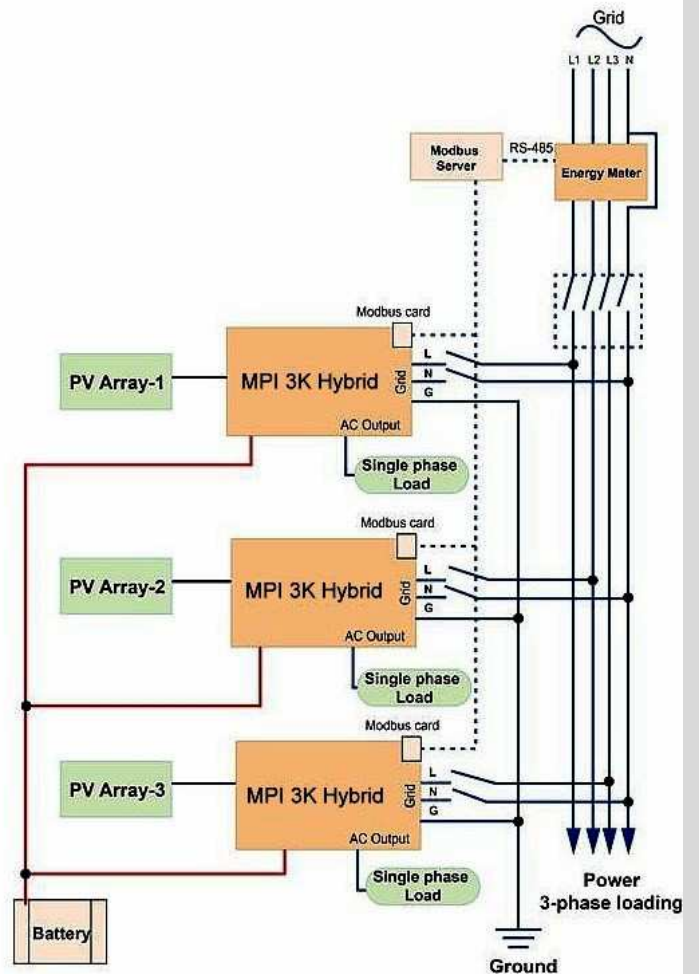
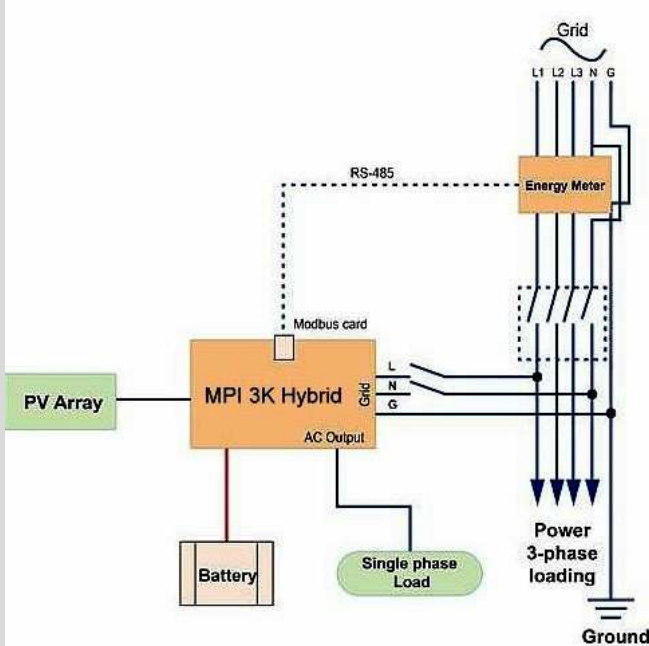
EMS PORT
this useful port is for emergency light load, **230V/5A**
(4KW)



DUAL AC INPUT
grid + generator. Genset starter dry contact available
(4KW)

Energy Meter Application Diagram: Single Phase vs. Three Phase Setup

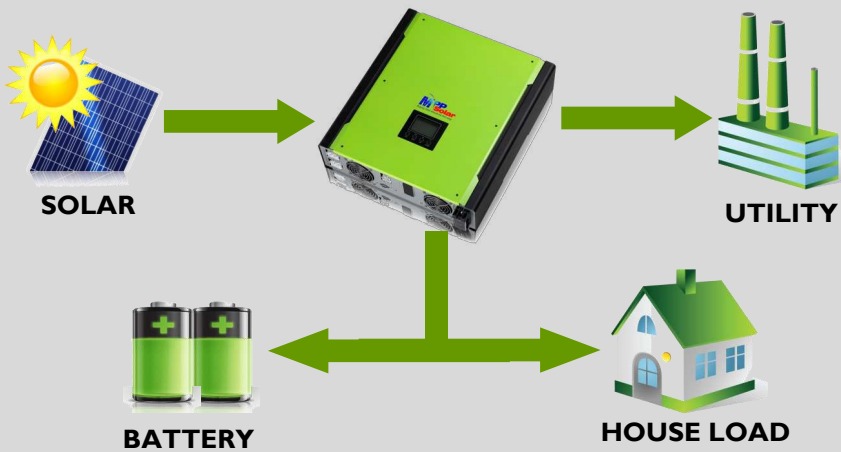
*MODBUS card, Energy Meter, and Web-box are optional accessories.



*Product specifications are subject to change without prior notice. MPP Solar is a registered trademark of MPP Solar Inc.



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 based on the above are offered in 4 main options in this mode. Charging source may be selected from PV and grid as default, PV only, or none (when charging not intended). All programming conditions can be done in the CD-bundled software.

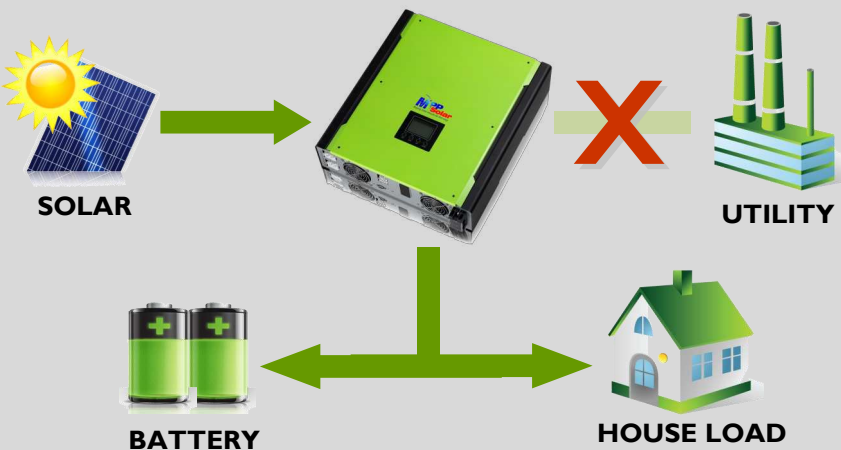
GRID-TIE ONLY



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

There is no priority setting available when this mode is selected.

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 available in 3 options, and grid relay may be connected to inverter to provide support when load > 3kw. Charging source may be selected from PV and grid, PV only, or none (charging not intended). All programming conditions can be done in the CD-bundled software.

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MPI HYBRID 3K

MPI HYBRID 4K

MPI HYBRID 10K

Rated Power			
Continuous Output	3,000W	4,000W	10,000W
PV Input Rating (GRID-TIE)			
Max PV Input Power	4,500W	5,000W	14,850W
Max PV Input Voltage	500Vdc	580Vdc	900Vdc
Start-up / Initial Feeding Voltage	116 / 150Vdc	116 / 150Vdc	320 / 350 Vdc
PV MPPT Range	250 - 450Vdc	120 - 500Vdc	350 - 850 Vdc
Max PV Input Current	18A	18A	18A x 2
MPPT Tracker	1	1	2
Max DC/AC Conversion Efficiency	>96%	>96%	>96%
AC Input			
Start-up / Auto Restart Voltage	120 - 140Vac / 180Vac		
Input Voltage Range	170 - 280Vac		
Nominal Frequency	50 / 60 Hz		
Max AC Input Power	5,100W	4,000W	10,000W
Max AC Input Current	30A	40A	25A
AC Output			
Nominal AC Output Voltage	208/220/230/240Vac	230Vac (P-N) / 400Vac (P-P)	
Output Voltage Range	184 - 265Vac	184 - 265Vac (P-N) / 318 - 460Vac (P-P)	
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 (via grid relay)	5,100W	4,000W	10,000W
Max Output Power (battery mode)	3,000W	4,000W	10,000W
Max Efficiency	>93%	>92%	>91%
Battery Charger			
Nominal DC Voltage	48Vdc		
Max Charging Current	25A	80A	200A
ENVIRONMENTAL / MECHANICAL SPECIFICATIONS			
Communication Port	RS232 / USB		
Certifications	EN62109-1, EN62109-2, EN62040-1 / CE VDE4105, VDE0126-1-1 AS4777/3100 (3K only)		
Operating Temp.	0 - 40°C		-10 - 50°C
Operating Humidity	0 - 90% RH (No condensing)		
Dimension	480*438*107mm	535*438*117mm	622*500*167mm
Net Weight	16Kg	17Kg	45Kg

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