

120/240V LV HYBRID
SOLAR INVERTER

GRID INTERACTIVE

IP65 DESIGN

120V SINGLE PHASE

208V/240V SPLIT PHASE

LVX 12KWP



2X DUAL AC INPUT

Grid + Generator input fulfills redundant backup power supply. Users can control genset function easily from LCD setting



ARC / RSD PROTECTION¹

Built-in ARC (arc fault protection) will help detect unwanted PV arcing and RSD (rapid shut down) transmitter feature can quickly cut system output during emergency



NEW APP (i.SOLAR)

This is a special APP designed for this model only and offers OTA firmware update feature not available on other APPs.



ZERO GRID FEED

With standard CT sensor, user can program inverter to utilize PV power entirely for self-use without grid injection.



BMS (RS485 / CAN)²

Pylontech and other 3rd party BMS are supported (specialized BMS cable is required). RS485 and CANbus type are available.



CALIFORNIA ENERGY COMMISSION

Grid Support Solar/Battery Inverters

Manufacturers: Model Names: Rows: 25 Download Excel file

Manufacturer	Model Number	Description	Hybrid Inverter	Continuous Inverter Output (kW)	Nominal Voltage (VAC)
MPP SOLAR	LVX 12KW	120V/240V Vac Grid Support Utility			
MPP SOLAR	WP 12KW	Interactive Inverter	Y	9.0186	120
MPP SOLAR	LVX 12KW	120V/240V Vac Grid Support Utility			
MPP SOLAR	WP 12KW	Interactive Inverter	Y	9.0186	240

Word(s) found.



1. RSD transmitter requires RSD-D receiver (optional accessory, sold by AP Smart) on PV array to work and upon fault conditions inverter will cut output and also power to transmitter, prompting receiver to cut off PV voltage and ensure overall safety.
2. BMS RS485 cable sold separately upon request.

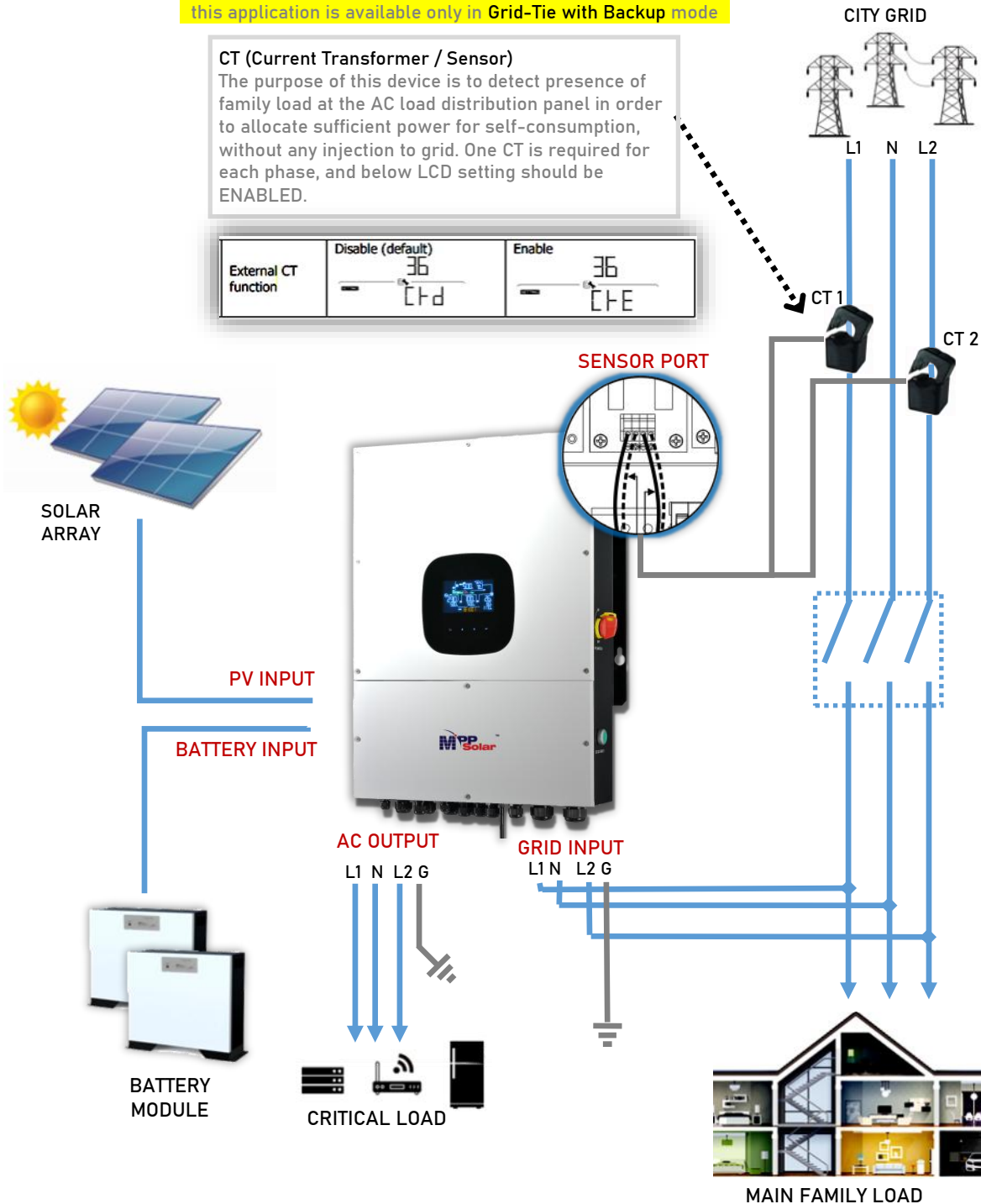
*IP65 restrictions: do not install units on sites where there is direct exposure to sunlight, rain, snow, >95% humidity, near antenna or at altitude >2km above sea level.

CT Sensor Application*

this application is available only in Grid-Tie with Backup mode

CT (Current Transformer / Sensor)
The purpose of this device is to detect presence of family load at the AC load distribution panel in order to allocate sufficient power for self-consumption, without any injection to grid. One CT is required for each phase, and below LCD setting should be ENABLED.

External CT function	Disable (default)	Enable



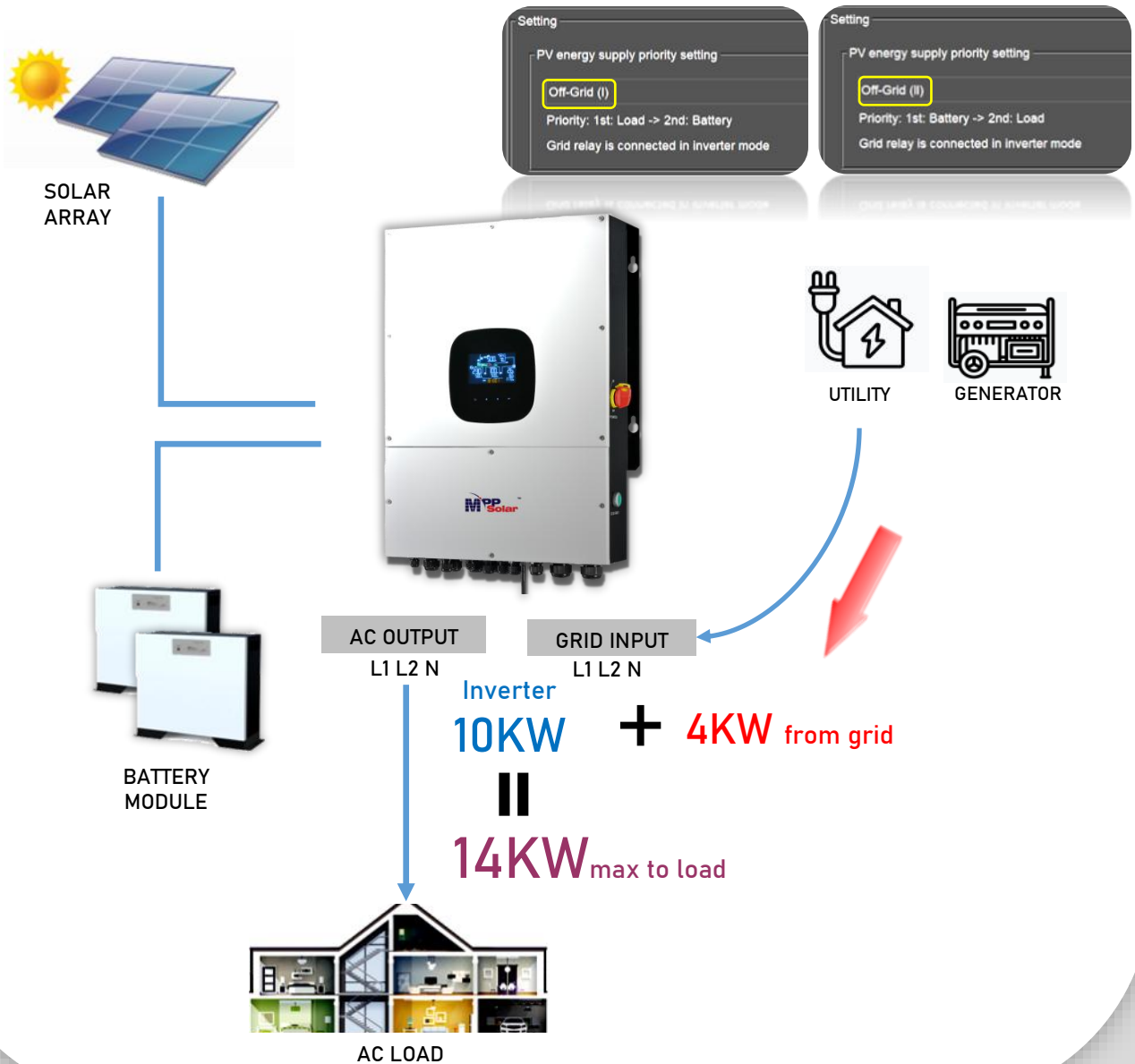
*CTs are standard accessory and TWO (2) are included with inverter, one for each phase and rated 50A each. This illustration is for one unit of LVX 12KW WP only.

Enabling Grid Relay Feature

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

Q. What is "Grid Relay" ?

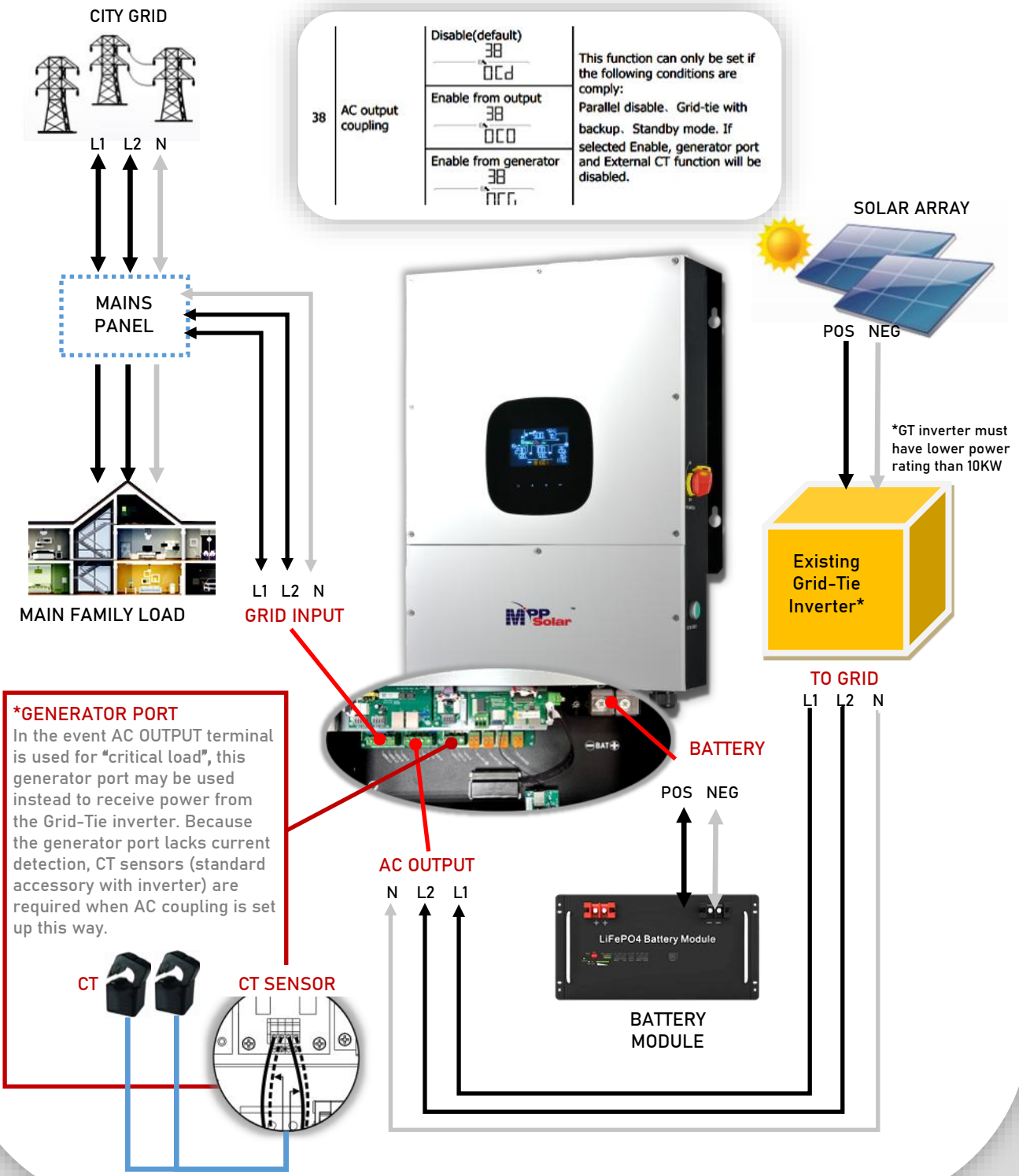
When this feature is enabled and grid is available, the inverter can support load more than its designed maximum output rating (10kw), by combining power supplied from grid or generator source, and reach up to **15kw** max. This function can only be enabled when selecting **Off-Grid I or II mode** and under these modes, **grid-injection is disabled**.



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AC Coupling^{1,2}

1. This feature requires updating firmware to activate **setting 38**, contact us for more details.
2. Two ways to set up AC coupling: via AC OUTPUT (standard) or via GENERATOR PORT



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NEW I.SOLAR APP Exclusive for LVX 12KW WP only



IP65 HYBRID INVERTER

LVX 12KW WP

BASIC POWER SPECIFICATION

Max AC Input / Output Power	10000W
System DC Volt	48VDC
AC Input Voltage	120/240V, 120/208V split phase
AC Input Frequency	50 / 60Hz, auto-sensing
Max AC Input Current	60A
Maximum Parallel	Up to 6 units
Grid Relay Power Capacity	14000W
No load / Standby Draw (batt)	99.5W / 20W

PV INPUT SPECS

Max PV Input Power	12000W
Max PV Input Volt	600V (Voc)
MPPT Range	120 - 550 VDC
Max PV Input Current	2*18A (30A limit)
Number of PV Input	2
Max Grid-Tie Efficiency	>96%

BATTERY OUTPUT & CHARGING SPECS

Output Waveform	Pure Sine Wave
AC Output Voltage	120V single phase, 208/240V split phase
AC Output Frequency	50 / 60Hz, programmable
Max Efficiency	>91%
Max Utility Charging	200A
Max Solar Charging	200A
Max System Charging	200A
Max Bulk/Float Charge	60V

ENVIRONMENTAL / MECHANICAL SPECS

IP Rating	IP65
Certification	UL1741SA / CSA / CEC listed
Communication Port	USB / RS232 / BMS / WIFI / Dry Contact
Operating Temp.	-20 ~ 58°C (power derate above 45°C)
Operating Humidity	0 - 90% RH (No Condensing)
Altitude	Max 2000m (derate 1% every 100m above 1000m)
Dimension	715*515*216mm
Net Weight	45KG