



## HYBRID SOLAR INVERTER (MPPT) – WALL MOUNTABLE

MPPT Solar Inverters are a next generation solar inverters with high efficiency MPPT technology ensure 20% to 30% more solar power harvesting from the same capacity solar panels as compare to other technology. Its state-of-the-art design and intelligent control optimizes the yield of all PV installations in residential, offices, rural and other remote installations with very poor or no grid availability. It consists of MPPT based solar charge controller and bi-directional inverter with transformer on the AC side. Transformer based design makes our inverter more rugged and reliable in worst grid input conditions. It provides uninterrupted Pure Sine Wave power at the load output using Solar, Battery and grid input in customizable order of priority.

Latest DSP based control ensures excellent performance and protection from any kind of malfunction.

The high conversion efficiency helps in longer battery backup Ease of operation and Plug 'N' Play type of design make it the ideal product for all kinds of users.

### Salient Features

- Intelligent Charging algorithm to increase Battery Life.
- MPPT based State-of-the-art Latest technology for optimum performance.
- Smart solar charging current sharing when mains is available.
- DSP based automatic battery level management.
- Compatible with Inverter load as well as UPS load.
- By pass switch for manual operation.
- Protection Inverter Batt. Low, Batt. High, Overload, Short circuit, Over temp, PV reverse, MCB Trip / Fuse Trip.
- Smart Solar Management (User Configurable).

Advance Battery Management for longer battery life and prevent battery from over charging

1.1 KVA | 1.6 KVA | 2.1 KVA | 2.5 KVA

**LENTO INDUSTRIES PVT. LTD.**

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# HYBRID SOLAR INVERTER (MPPT) – WALL MOUNTABLE

## Technical Specification

Parameter	Unit	1.1 KVA	1.6 KVA	2.1 / 2.5 KVA
Model name		1100/12/24	1600/24	2100/2500/24
System rating (Name Plate)	VA	1100	1600	2500
Input current at no load at Nominal Battery	Adc	2.4	2.5	2.8
Full Load Input Current ±2A	Amp	70	51	85
Standard wattage of bulb load in count ±10	Wp	880	1280	2000
Operating DC voltage	V	12	24	
Input voltage max Voc	Vdc	45	90	
Maximum Solar array power	Wp	1000	2000	2500
Max PV modules	Nos	3(330W)	4(340W)	8(330W)
Modules in series	Nos	NO	2	2
Parallel strings	Nos	3	2	4
Switching element in SCC			MOSFET	
Topology			Interlaved Buck converter 2Stage	
Input Current from panel max	Adc		<=30	
Type of control			Micro	
Type of solar charger			MPPT	
Max current rating of SCC	Adc	80.0	50.0	90.0
Efficiency of MPPT tracking	%		>=95	
Mppt Tracking Range	Vdc	28-50	42-90	
Switching element in Inverter			MOSFET	
Type of Control			PWM	
Nominal Output voltage in inverter mode	Vac		220V ± 7V	
Output supply phases			single	
Nominal Output Frequency of Inverter	Hz		± 1 (Default is 50Hz) selectable 50/60Hz (Optional)	
Frequency (Min - Max during Grid by pass)	Hz		47-53/57-63	
Frequency (Min - Max during Grid by pass)	Hz		40-70/50-70	
Output voltage regulation	%		180-220	
Output THD (v) at linear load	%		<5%	
Creast Factor			3:01	
Overload	Sec		OK (6 Retry)	
Cooling Fan ON at temp	°C		60 (or >50% of Rated Load or >8A Charging or Solar I>20A)	
Cooling Fan Off at temp	°C		55 (or <40% of Rated Load or <5A Charging or Solar I<10)	
Peak efficiency of inverter	%	81	81	81
Battery low voltage alarm per battery	Vdc		10.8 /10.5± 0.2	
Battery low voltage cut per battery	Vdc		10.5 /10.2± 0.2 (With 4 Retry)	
Batter low cut recovery per battery through	Vdc		12.7 ± 0.2 (or Mains or reset switch on front panel)	
Battery High cut with Alarm per battery	Vdc		15.5±0.2	
Battery High cut Recovery per battery	Vdc		14.5±0.2	
Grid low cut voltage (IT load/Normal load)	Vac		180/100 ± 10	
Grid low cut voltage recovery (IT load/Normal)	Vac		190/110 ± 10	
Grid high cut voltage (IT load/Normal load)	Vac		265/280 ± 10	
Grid high cut voltage recovery (IT load/Normal)	Vac		255/270 ± 10	
Grid charging Enable/Disable			yes	
Selection of UPS Load/Normal Load			yes	
Indication LEDs	°C		Tact switch Status	
Operating Temperature range	°C		0-50	
Storage Temperature range	%		0 +65	
Max RH			95	
Front panel details ( MCB, Display, Selection			Display with tact switch	
Rear panel details (MCB, Terminals etc)			O/P socket,fuse/Circuit breaker,mains & batt. Cable and fan	
Fuse in Solar Path			Yes	
Grid By pass Manually			Through switch	
Input Protection			Resettable Circuit breaker	

Technical Specifications can be changed without prior notice.



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