

SOLAR HYBRID HOME PCU MPPT SERIES

OZ-M



Range Available : 850VA to 10KVA

Core Features:

- ▲ State of Art highly efficient and high switching speed MOSFET based MPPT Technology.
- ▲ Single PCB concept based design for pure sine wave, solar integration and LCD.
- ▲ Inbuilt smart Solar MPPT Charge controller up to output power (watt) rating.
- ▲ Maximum Solar Power extraction and Utilization to save electricity bill and money.
- ▲ Powerful Charging even during very low Voltage.
- ▲ Completely Noiseless Operation.
- ▲ Precise Auto Thermal management and protection.
- ▲ Fastest protection (Almost all) to make rugged and enhance product life.
- ▲ Advance and reliable software to incorporate and interface SOLAR-UPS Features.
- ▲ Intelligently Controlled Smart and PFCCharger.
- ▲ Long Backup with being a pure sine wave output.
- ▲ 5-stage Smart Charging profile (By both solar and grid) with Auto charge Equalization to enhance Battery life.
- ▲ User Selectable switches to select choice of operation, Hybrid, smart and Normal.
- ▲ Pure sine wave Output at full load.
- ▲ Can run without solar as Normal DSP Sine wave inverter.
- ▲ Very Low maintenance and easy installation.
- ▲ All Parts and Components are genuine make.
- ▲ Dual display LCD & LED.

(First time with SYNCHRONOUS Buck Technology in inverter industries)

Technical Specification

Solar Hybrid PCU (MPPT Series)

System Rating	1KVA	1KVA	2KVA	3KVA	4KVA	5KVA	5KVA/7.5KVA	7.5KVA/10KVA	10KVA
Battery voltage	12V	24V	24V	48V	48V	48V	96V	120V	180V
Solar Charger									
Max Solar panel wattage	1000W	1000W	2000W	3000W	4000W	5000W	5000W/7500W	7500W/10KW	10KW
PV Open circuit voltage Range	16-48V	36-96V	36-96V	64-192V	64-192V	64-192V	132-384V	180-450V	270-450V
Max Solar Current	Upto 50Amp	Upto 50Amp	Upto 50Amp	Upto 50Amp	Upto 50Amp	Upto 50Amp	Upto 50Amp	Upto 50Amp	Upto 50Amp
Charger Topology	Actual MPPT based smart charging								
Inverter									
Rated Input voltage	Normal mode Range: 100V ~ 280V UPS Mode Range: 170V ~ 260V								
Rated Output Voltage on mains	Same as Input								
Number of Phase	1 Phase in - 1 Phase Out								
Load Power Factor	0.8PF								
Output Parameter									
Rated Output Voltage on UPS Mode	230V ± 10V								
Output Frequency on UPS Mode	50Hz ± 0.1Hz								
Output Waveform on UPS Mode	Pure Sine Wave								
Overload	Above 110%								
Short Circuit	>300% Load (Few msec.)								
Voltage Limit UPS Mode									
Mains Low Cut	170V ± 10V								
Mains Low Cut Recovery	180V ± 10V								
Mains High Cut	260V ± 10V								
Mains High Cut Recovery	250V ± 10V								
Voltage Limit Normal Mode									
Mains Low Cut	100V ± 10V								
Mains Low Cut Recovery	110V ± 10V								
Mains High Cut	280V ± 10V								
High Cut Recovery	270V ± 10V								
Protections									
Short Circuit, Battery Overvoltage, Battery Lowvoltage Battery Deep Discharge, Over Temperature (Auto Recovery)									
Alarm & Indication									
Overload, Low Battery, Over Temperature, Battery Over voltage.									
LCD Display									
16 X 2 LCD	Mains Voltage, Output Voltage, Battery Charging, Battery Charged, Solar Voltage, Solar Current and all Faults								
20 X 2 LCD									
LED Indications									
Mains On, Charging On, UPS On, Battery Low, Overload									
Battery Charging									
Mains Disconnect Voltage TUB. Mode	14.4V ± 0.2V	28.8V ± 0.4V	28.8V ± 0.4V	57.6V ± 0.6V	57.6V ± 0.6V	57.6V ± 0.6V	115.2V ± 1V	144V± 1V	216V ± 2V
Mains Reconnect Voltage TUB. Mode	11.8V ± 0.2V	23.6V ± 0.4V	23.6V ± 0.4V	47.2V ± 0.6V	47.2V ± 0.6V	47.2V ± 0.6V	94.4V ± 1V	118V ± 1V	177V ± 2V
Mains Disconnect Voltage STD.Mode	14.0V ± 0.2V	28.0V ± 0.4V	28.0V ± 0.4V	56.0V ± 0.6V	56.0V ± 0.6V	56.0V ± 0.6V	112.0V ± 1V	140V ± 1V	210V ± 2V
Mains Reconnect Voltage STD. Mode	11.8V ± 0.2V	23.6V ± 0.4V	23.6V ± 0.4V	47.2V ± 0.6V	47.2V ± 0.6V	47.2V ± 0.6V	94.4V ± 1V	118V ± 1V	177V ± 2V
Battery Boost Voltage High Mode	14.4V ± 0.2V	28.4V ± 0.4V	28.4V ± 0.4V	57.6V ± 0.6V	57.6V ± 0.6V	57.6V ± 0.6V	115.2V ± 1V	144V± 1V	216V ± 2V
Battery Float Voltage High Mode	13.8V ± 0.2V	27.6V ± 0.4V	27.6V ± 0.4V	55.2V ± 0.6V	55.2V ± 0.6V	55.2V ± 0.6V	110.4V ± 1V	138V ± 1V	207V ± 2V
Battery Boost Voltage STD. Mode	14.0V ± 0.2V	28.0V ± 0.4V	28.0V ± 0.4V	56.0V ± 0.6V	56.0V ± 0.6V	56.0V ± 0.6V	112.0V ± 1V	140V ± 1V	210V ± 2V
Battery Float Voltage STD. Mode	13.4V ± 0.2V	26.8V ± 0.4V	26.8V ± 0.4V	53.6V ± 0.6V	53.6V ± 0.6V	53.6V ± 0.6V	107.2V ± 1V	134V ± 1V	201.6V ± 2V
Charging Current	15A ± 2A	15A ± 2A	15A ± 2A	15A ± 2A	15A ± 2A	15A ± 2A	15A ± 2A	15A ± 2A	15A ± 2A
Recommended Battery Capacity	100Ah - 200Ah	100Ah - 200Ah	100Ah - 200Ah	100Ah - 200Ah	100Ah - 200Ah	100Ah - 200Ah	100Ah - 200Ah	100Ah - 200Ah	100Ah - 200Ah
Number of Batteries	1	2	2	4	4	4	8	10	15
Charger		Power factor controlled Boost technology							
Technology									
Digital Signal Processor (DSP) Based state-of-the-art technology.									
Environment									
Storage Temperature	0-60°C								
Operating Temperature	0-50°C								
Humidity	90% Non-Condensing								