

Solar MPPT Inverters

Cognivolt's VoltMaster series of Solar MPPT Inverters are cutting-edge next-generation solar inverters. It achieves high-efficiency solar power harvesting from the same capacity of solar panels as compared with other technologies. It is a state-of-the-art design, consisting of an MPPT-based solar charge controller and bi-directional inverter with a transformer on the AC side, providing uninterrupted Pure Sine Wave power which is suitable for residential, commercial, and industrial usage.

HOME UPS • MPPT Solar PCU

Features:

- Cutting edge MPPT based technology to achieve maximum performance
- DSP based battery level management
- Battery equalizer to increase battery life and backup
- User Configurable Smart Solar Management
- Optimized Battery Management to prevent battery from overcharging and to achieve longer battery life
- User selectable priority modes for Grid/Solar/Battery
- Bypass switch for manual Operation
- Compatible with Inverter and UPS load
- Provision of soft and cold start technology
- Protection Inverter Battery Low/High, Overload, Short Circuit, OverTemp, PV reverse, MCB Trip/Fuse Trip etc.
- Available charging Ampere adjustable (0, 5, 10 and 15 Amp)
- Automatic temperature compensation technology



VOLT Master

Industrial Grade Inverter

TECHNICAL SPECIFICATIONS

Model No.	P010100	P0101501	P0102501	P0103501	P0105001	P0107501	P011001		
Rating	1000VA	1500VA	2500VA	3500VA	5000VA	7500VA	10000VA		
Nominal DC	24V			48V		96V	120V		
Switching Element	MOSFET					IGBT			
Controller	Advanced Micro-controller								
Battery Charging Mode	Priority (Grid/Solar)								

MPPT SOLAR PARAMETERS

MPPT	45V-100V			80V-180V		165V-350V	210V-420V
For Max Current (PWM)	40A	50A	60A	50A	60A	70A	
Battery Charging by Solar	20A						

INVERTER PARAMETERS

Output Voltage	220V \pm 10v						
Output Frq.	50Hz \pm 1 Hz						
Max Load (\pm 5%)	800W Bulb Load	1200W Bulb Load	2000W Bulb Load	10.5A	16A	26A	34A
Isolation Transformer	Provided Inbuilt						
Output Waveform	Pure Sine Wave						
THD (Linear Load)	<3%						
THD (Non Linear Load)	<5%						
Overload	>100%						
Inverter Efficiency	>85%						
Changeover Time	<10ms inverter to Mains						
	<20ms mains to inverter						

GRID INPUT PARAMETERS (UPS MODE) IT LOAD

Input Low Cut Voltage	180V \pm 5V						
Input Low Recovery Voltage	190V \pm 5V						
Input High Cut Voltage	260V \pm 5V						
Input High Recovery Voltage	250V \pm 5V						

GRID INPUT PARAMETERS (INVERTER MODE)

Input Low Cut Voltage	90V ± 5V	120V ± 5V	120V ± 5V
Input Low Recovery Voltage	>100V ± 5V	130V ± 5V	130V ± 5V
Input High Cut Voltage	290V ± 5V	290V ± 5V	280V ± 5V
Input High Recovery Voltage	<280V ± 5V	280V ± 5V	270V ± 5V
Input Frequency Range	47Hz-53Hz		
Battery Charging by Grid	Disable, 5A, 10A (Default), 15A		

PHYSICAL SPECIFICATIONS

Operating Temperature	-10 deg. Cel. to +55 deg. Cel.						
Optimum Weight	12.750kg	17.260kg	19.300kg	-	47.650kg	-	-
Dimension LxWxH (cm)	28.3 x 30.5 x 30			-			

BATTERY PARAMETERS

Battery Low Buzzer	10.7V \pm 0.2V Per Battery						
Battery Low Cut	10.5V \pm 0.2V Per Battery						
Battery Float Voltage	13.5V \pm 0.2V Per Battery						
Battery Boost Voltage	14.5V \pm 0.2V Per Battery						
Grid Charging Voltage (Equalize)	15.5V \pm 0.2V Per Battery (After 30 Days)						
Protection	Overload, Battery Low, Battery High, Output Short ckt., Battery Reverse, Over Heat @90°C+10°C, Over/Under Frequency, I/P Hi, I/P Low, SPV High						
Display Parameters	LCD Display for input voltage, Frequency, Battery-Voltage & Current, Load % Solar Voltage & Current & Temperature						
Display Alarms Protection	Output load percentage, Grid-On/Fail/High/Low, Battery-Low Pr-alarm/Low Trip, Inverter-On/OFF, Overload Trip, Temperature						
Endosure	IP20						
Humidity	Up to 95% Rh (Non-Condensing)						
Cooling	Force Air						
Noise	<55 dB, distance 1 meter						

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