



DSP based sine wave Inverters/Chargers

DSP based sine wave Inverters/ Chargers for Residential/Small Office

Luminous DSP based Inverters are undoubtedly the very latest in the world of inverters. Packed with a range of user-friendly features, it is a symbol of convenience and comfort. Very little maintenance, no noise DSP based Inverters stand for powerful performance with all round protection.

Features

- ▶ Digital Signal Processing Technology
- ▶ Sine Wave Output with intelligent real time control
- ▶ Over 200% load cold start by the inverter
- ▶ High speed MOSFET protection for excess currents and voltage spikes
- ▶ No humming noise from Inverter as well as from equipments connected to it
- ▶ DC fuse available on the back panel for easy replacement
- ▶ Compact and Reliable SMT based design
- ▶ Smart Charge plus Technology for faster charging and longer battery life
- ▶ High Frequency based design for instantaneous Sine Wave Control
- ▶ Intelligent Thermal Management for longer life and higher reliability

Smart Charge+ Technology

- ▶ High Frequency based Pulse Width Modulated Charger with high Input Power Factor
- ▶ Up to 70% electricity saving
- ▶ Charges battery up to two times faster
- ▶ Advanced Battery Management Enhances battery life up to 70%
- ▶ Intelligent Continuous Charging Profile adjustment
- ▶ Negligible Water Loss
- ▶ Regulated Battery Charging from 120V to 290V

Protections

- ▶ Overload with Auto Reset.
- ▶ Battery Deep Discharge protection with Reset option
- ▶ Short Circuit Protection
- ▶ Battery reverse polarity protection
- ▶ Phase Reversal Protection
- ▶ Miniature Circuit Breaker for Overload and Short Circuit Protection in Mains Mode instead of Cartridge Fuse

Protections

Audio Alarm on battery low cut off, Overload trip, Short Circuit trip and Phase Reversal shutdown.

Advance Digi Display

Digital Display for Mains On, Inverter On, Smart Charging, Overload/Short Circuit Trip, Battery Low Trip, Battery Fuse Blown and Battery Reverse Connection.

Application

Tube lights, Fans, TV, Bulb, Audio/Video Systems, Cooler, Water Pump, Refrigerator (for higher power inverter above 800VA)

Specifications of DSP based sine wave Inverters

	RATING	800VA	1400VA	2.5KVA
INPUT AC RANGE	Undervoltage	180 +/- 5 V		
	Undervoltage Restoration	185 +/- 5 V		
	Overvoltage	260 +/- 5 V		
	Overvoltage Restoration	255 +/- 5 V		
OUTPUT ON INVERTER MODE	Maximum Power	800VA	1400VA	2500VA
	Maximum Watts	425W	900W	1800W
	Maximum Efficiency	83%	84%	80%
	Voltage (INVERTER Mode)	220 V Nominal +/- 12%		
	Voltage (Mains Mode)	Same as Input		
	Frequency (INVERTER Mode)	50 Hz. +/- 2%		
	Frequency (Mains Mode)	Same as Input (45-55 Hz.)		
	Overload	> 110 %		
Transfer Time (typical a.s)	30 ms.			
INVERTER MODE PROTECTION	Low battery protection	ElectronicTrip		
	Battery reverse protection	Through fuse		
	Inverter mode over load	ElectronicTrip		
	Inverter mode short circuit	ElectronicTrip		
MAINS MODE PROTECTION	Over load / Short circuit	Through MCB		
	Charger protection	Through MCB		
BATTERY	Type	120 AH- 150AH Lead Acid Type		
	Number	1	2	4
	Typical Recharge Time	10-12 Hrs.		
BATTERY CHARGER	Constant Voltage with current limit type	10Amp with boost voltage 14.1V and float voltage 13.9V	28.2V/27.8V	54V/52V
	TECHNOLOGY	High power factor boost charger		
LED DISPLAY	Switch On	White		
	INVERTER ON	INVERTER ON + On(SEVEN SEGMENT)		
	Low Battery Pre-Alarm	INVERTER On + Low Battery +Lb(SEVEN SEGMENT)		
	Battery Low	Low Battery +Lb(SEVEN SEGMENT)		
	Mains On	MAINS ON + On(SEVEN SEGMENT)		
	Smart Charge	SMART CHG + CH(SEVEN SEGMENT)		
	Overload	OVER LOAD + OL(SEVEN SEGMENT-blinking)		
	Short Circuit	OVER LOAD + OL(SEVEN SEGMENT-steady)		
	Battery fuse fail	Red		
	Battery reverse	Red		
MCB Trip	SMART CHG + CH(SEVEN SEGMENT)- blinking			
ALARMS	Low Battery Pre-Alarm	Continuous Beeping		
	Overload Pre alarm	Continuous Beeping		
	Short Circuit	Continuous Beeping		
	MCB Trip	Continuous Beeping		
ENVIRONMENTAL	Operating Temperature	0-40° C		
	Storage Temperature	0-40° C		
	Humidity	0-95 % RH non -condensing		

* Due to Continuous Product improvements, specs are subject to change without notice.