



# SALEM **SURYA** BATTERIES

*Committed Power*

IS 9001 : 2015 CERTIFIED



## **SURYA SMART** SERIES

We congratulate you for your excellent choice of our UPS which incorporates with advanced DSP based MOSFET PWM PURE SINEWAVE technology which was equipment friendly with superfast charging for smart battery management. Hope you shall be fully satisfied with our UPS for years to come. We are providing our best service after sales.

**USER MANUAL &  
WARRANTY CARD**

## SAFETY PRECAUTIONS

- ▶ Before installing the ups, read all instructions of this user manual.
- ▶ Do not exposed the UPS to rain, snow, direct sunlight, liquids of any type or close to heat emitting source.
- ▶ Be sure that the area around the system is well ventilated.
- ▶ To reduce risk of electric shock, disconnect all the wirings from the UPS before attempting any maintenance or cleaning.
- ▶ Battery generate explosive gases during normal operation, be extra caution working with metal tools on or around the batteries.
- ▶ UPS should be properly connected with ground.

## ABOUT UPS

UPS is the device that powers the electric appliances in the event of the power failure. The PWM circuit generates a PURE SINEWAVE around 50Hz that super impose the AC generated by the inverter transformer. The DC voltage from the battery is first converted into low volt AC by the DC-AC supply.

## WARRANTY CONDITIONS

- ▶ Every UPS is inspected and tested thoroughly before leaving our premises.
- ▶ We undertake to repair this UPS free of cost for a period of 36 months from the date of purchase.
- ▶ The warranty does not cover any form of damage resulting from accident, misuse, application of incorrect voltage, fire and water etc.
- ▶ The warranty is not valid if serial no and or warranty seal of the UPS has been deleted, defected or altered.
- ▶ The company will not accept any responsibility for damage or loss incurred during transit of the UPS.
- ▶ This warranty does not cover any cost of transportation of the UPS from the installation place to service centre vice versa.
- ▶ Any accessories (like battery, battery trolley, LED/LCD, plastic parts or any household goods etc.) connected to the system will not be covered under warranty.
- ▶ If the UPS is purchased from unauthorised source or dealer, the warranty will be null & void of lodging any claim. Customer have to produce warranty card and invoice.
- ▶ All disputes are subjected to salem jurisdiction.

## UPS FRONT PANEL



Inverter ON/OFF

LCD Display



Inverter ON/OFF

LCD Display

## LCD Indications

- ✓ Charging Amps
- ✓ Input Voltage
- ✓ Output Voltage
- ✓ Battery Voltage
- ✓ Load in Watts

## UPS BACK PANEL



SURYA SMART 1100/1250



SURYA SMART 2250

1. O/P Socket
2. Circuit Breaker
3. Main Cable
4. Fan
5. Battery (+ve)
6. Battery (-ve)
7. Binary Switch

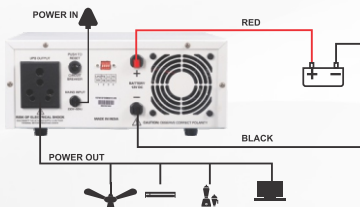
UPS	AUT	SOL-ON	NC
INV	TUB	SOL-OFF	NC

## PROTECTION

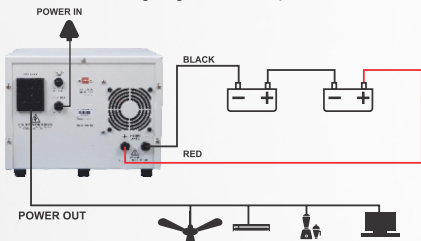
- ▶ Overload (5 Times Auto Retry)
- ▶ Over Temperature
- ▶ Battery Low (5 Times Auto Retry)
- ▶ Short Circuit

## INSTALLATION

(Wiring Diagram - for 12V System)



(Wiring Diagram - for 24V System)



- ▶ Before installation check the input and output wiring and the input supply at the input mains socket (Phase on right side, Neutral on left side and Earth on top).
- ▶ Check the voltage of Neutral to Earth should be less than 5V, Phase to Neutral voltage is equal to phase to Earth voltage.
- ▶ Before connecting the UPS to the battery, ensure the inverter switch in OFF position, then connect UPS wires to the battery terminals with proper tight.
- ▶ Switch ON the inverter switch and check the load without AC input.
- ▶ Switch ON AC mains to the Ups by plugging the mains card for charging the battery.

## TROUBLE SHOOTING

- ▶ No output in inverter, check the ON/OFF switch and also check the battery condition.
- ▶ No output with long buzzer sound during mains, check the AC fuse backside the UPS.
- ▶ There is no battery charging indication, Check the input voltage.

## Technical Specifications

S.No.	Specifications	Surya Smart Series
1	Input Voltage on Inverter Mode	90V - 290V $\pm$ 10V
2	Input Voltage on UPS Mode	180V - 270V $\pm$ 10V
3	Output Voltage on Mains Mode	Same as Input
4	Output Voltage on Backup Mode	220V $\pm$ 10%
5	Output Frequency on Backup Mode	50Hz $\pm$ 0.5Hz
6	Switching from Mains to UPS and from UPS to Mains	Automatic
7	Output Wave form on Mains Mode	Same as Input
8	Output Wave form on Backup Mode	Pure Sine wave
9	Battery Charging Current	15 A
10	Compatible Battery Types	Lead Acid / Lithium
11	UPS Transfer Time	< 10m sec
12	Auto Reset Feature	Yes
13	Operating Temperature	0°C - 45°C

\*Note : ♦ Power Factor may vary depending upon the load.

♦ Because of a policy of continuous product improvement, specifications are subject to change without notice

## FEATURES

- ▶ DSP Controller Based PURE SINE WAVE UPS
- ▶ SMD Components gives more efficient and reduce human errors
- ▶ Resettable Circuit Breaker
- ▶ Smart LCD Display with Audible Alarm
- ▶ Smart Charger For Several Battery Management
- ▶ Built in Thermal Sensor
- ▶ SOLAR Compatible
- ▶ LITHIUM Battery Compatible
- ▶ Charge controller, no mechanical contact for charger controller.
- ▶ Generator Compatible.
- ▶ Regulated Output Suitable for Smooth Operation of Motors. 0% Failure.
- ▶ Smart Overload and Short Circuit.

## WARRANTY CARD

Customer Name

Product Name

Address

Date of Purchase

Mobile No

**Model No.**  
**QR Code**  
**Serial No.**

**Dealer**

**Unit 1 :** 76,75,73 & 80 The Salem Industrial Co-op. Estate,  
Udayapatty, Salem - 636 140.

**Unit 2 :** Plot No.F-19, Industrial Area, Phase-1,  
Ram Nagar, Varanasi - 221 110, Uttar Pradesh.

**TAMILNADU. INDIA.**

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