

SAURYA SOLAR HYBRID PCU (OFF GRID)

INTRODUCTION

Saurya Solar Inverter is a Hybrid PWM based PCU which has Dual Source of Charging, from Solar as well as Grid Power. Solar Charge Controller is designed for maximum utilization of Solar Power with optimum Battery charging and timely shut down of Battery at lower Voltage. It gives a Pure Sine Wave with minimum Distortion.



KEY FEATURES

- ❖ Dual source of charging from Solar Power as well as Grid Power.
- ❖ Regular priority of Solar Power to give maximum benefits from solar energy to run the load or charge the battery.
- ❖ All Critical Parameters displayed on LCD Panel which can be set through switches in front.
- ❖ Maximum usage of Solar Power to minimize the electricity bill and being eco-friendly.
- ❖ Double stage MOSFET over current protection at priority.
- ❖ Thermal trip with auto recovery.
- ❖ Reverse current protection from battery to solar in absence of solar power.
- ❖ Grid Power utilization according to presence of Solar Power.

DISPLAYING PARAMETERS ON LCD

• Model VA & Capacity	• AC Output Voltage	• Battery Overload Trip
• Battery Voltage	• Discharging Current	• PV Reverse
• PV Charging Current	• Load Percentage	• Short-circuit
• Grid I/P Voltage	• Load Status	• Battery Low/High
• Grid Charging Current	• Battery Status	• Grid MCB/Fuse Trip

PROTECTIONS

Thermal Trip | Battery High/Low | Short-Circuit | PV Reverse | Grid MCB/Fuse Trip | Overload Trip.

TECHNICAL SPECIFICATIONS

PARAMETERS	SAURYA 1450VA	SAURYA 2100VA
Nominal Battery Voltage	24V	24V
PV Input	1400Wp	1600Wp
No Load Output Voltage	230V \pm 2%	230V \pm 2%
Full Load DC Current	55A \pm 1.0A	70A \pm 1.0A
Full Load O/P Voltage	\geq 180V	\geq 180V
Output Voltage Waveform	Pure Sine Wave	Pure Sine Wave
PWM Charge Controller	45A	45A
Input AC Voltage (Normal)	90V-290V \pm 2%	90V-290V \pm 2%
Input AC Voltage (UPS Mode)	145V-260V \pm 2%	145V-260V \pm 2%
Change Overtime (Maximum)	\leq 7msec	\leq 7msec
Grid Charging Current	14.5A \pm 1.0A	14.5A \pm 1.0A
Default Boost Voltage	28.8V \pm 0.2V	28.8V \pm 0.2V
Float Voltage	27.4V \pm 0.2V	27.4V \pm 0.2V
AVR Range in Mains Mode	30% Extra \leq 180VAC	30% Extra \leq 180VAC
Battery Low Alarm	21.2V \pm 0.2V	21.2V \pm 0.2V
Default Battery Low Cut	20.4V \pm 0.2V	20.4V \pm 0.2V
Overload Protection	\geq 56A \pm 1.0A	\geq 71A \pm 1.0A
Short-Circuit Protection	Yes	Yes
Thermal Protection	\geq 95°C	\geq 95°C
PV Reverse Protection	Yes	Yes
Grid MCB/Fuse Trip	Yes	Yes

PEARL

PEARL ELECTRONICS & POWER SYSTEMS

C-1, INDUSTRIAL ESTATE, ROORKEE- 247667 (UTTARAKHAND) INDIA

Tel. : +91-1332-262545, 8126892545, 9760002545

E-mail : info@pearlpower.in