

Luminous SOLARVERTER PRO 3KVA ECO

Luminous SOLARVERTER PRO 3KVA ECO Solar Inverter User Manual

Model: SOLARVERTER PRO 3KVA ECO

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your Luminous SOLARVERTER PRO 3KVA ECO Solar Inverter. This advanced inverter is designed to provide reliable power by seamlessly integrating solar, battery, and grid power sources. It features pure sine wave output for sensitive appliances and an in-built MPPT charge controller for optimized solar energy utilization.

2. SAFETY INSTRUCTIONS

Please read all safety instructions carefully before installation and operation. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Installation must be performed by qualified personnel in accordance with all local electrical codes and regulations.
- Ensure the inverter is installed in a well-ventilated area, away from flammable materials, moisture, and direct sunlight.
- Do not open the inverter casing. There are no user-serviceable parts inside. Refer all servicing to qualified service personnel.
- Always disconnect all power sources (solar, battery, grid) before performing any maintenance or cleaning.
- Ensure proper grounding of the inverter.
- Keep children and unauthorized persons away from the inverter.

3. PRODUCT OVERVIEW

The Luminous SOLARVERTER PRO 3KVA ECO is a smart hybrid solar inverter designed for high efficiency and reliable power backup. It incorporates several key features to ensure optimal performance and safety.

Key Features:

- **Smart Hybrid Operation:** Seamlessly switches between solar, battery, and grid power for uninterrupted electricity supply.
- **Pure Sine Wave Technology:** Delivers stable, noise-free power, protecting sensitive appliances.
- **MPPT Charge Controller:** In-built Maximum Power Point Tracking (MPPT) charge controller maximizes solar generation from solar panels.
- **Isolation Transformer:** In-built isolation transformer protects from grid surges and noise.
- **User-Friendly LCD Display:** Provides informative real-time data on system status.
- **Comprehensive Protection:** Includes short-circuit, reverse polarity, and battery overload protection.
- **BIS Certified:** Ensures product quality and safety standards.

Product Images:



Image 1: The Luminous SOLARVERTER PRO 3KVA ECO Solar Inverter, highlighting its BIS certification for quality and safety.

RELIABLE POWER FOR BIGGER SAVINGS

Uninterrupted Back-up with Smart Energy



**3* Years
Warranty**



**Maximum Power
Point Tracking**



**User-friendly
LCD Display**



**Remote
Monitoring**

Image 2: An illustration of the Luminous SOLARVERTER PRO 3KVA ECO, detailing its key features such as MPPT technology, user-friendly LCD display, and remote monitoring capabilities.

UNINTERRUPTED POWER FOR EFFORTLESS LIVING

Power Through Every Outage With Ease



Image 3: The Luminous SOLARVERTER PRO 3KVA ECO integrated into a modern home setting, demonstrating its role in providing uninterrupted power through solar energy.

ONE STOP SOLAR SOLUTION

PAN India
Trained Service
Experts

100% Project
Management
Capabilities

Easy Solar
Financing and
Insurance



Image 4: A visual representation of a complete Luminous solar solution, showcasing the inverter alongside solar panels and batteries, emphasizing a one-stop solar solution.

4. SETUP AND INSTALLATION

Proper installation is crucial for the performance and safety of your solar inverter. It is highly recommended that installation be carried out by a certified electrician or Luminous service technician.

Installation Steps (Overview):

1. **Site Selection:** Choose a cool, dry, well-ventilated area, protected from direct sunlight and rain. Ensure sufficient clearance around the inverter for airflow.
2. **Mounting:** Securely mount the inverter to a sturdy wall or surface using appropriate fasteners.
3. **Battery Connection:** Connect the battery bank to the inverter. Ensure correct polarity. The nominal battery bank voltage for this model is 36V.
4. **Solar Panel Connection:** Connect the solar panels to the inverter's solar input terminals. Ensure the input voltage

range (Vmp: 60V-120V, Voc: 75V-150V) is adhered to.

5. **Grid Connection:** Connect the grid input to the inverter.
6. **Load Connection:** Connect your appliances/loads to the inverter's AC output.
7. **Grounding:** Ensure the inverter is properly grounded.
8. **Initial Power-Up:** Follow the specific power-up sequence detailed in the full installation guide to energize the system.

For detailed wiring diagrams and specific connection procedures, please refer to the comprehensive installation guide provided with your product.

5. OPERATING INSTRUCTIONS

Once installed, the Luminous SOLARVERTER PRO 3KVA ECO operates largely automatically. The user-friendly LCD display provides real-time information about the system's status.

LCD Display:

The LCD screen displays critical information such as input voltage, output voltage, battery charge status, solar generation, load consumption, and any error codes. Refer to the detailed display guide in the full manual for interpretation of all indicators.

Source Priority Selection:

The inverter allows users to select the source priority (Solar, Battery, or Grid) based on their energy management preferences. This setting can typically be adjusted via buttons near the LCD display or through a connected interface. Consult the full manual for specific instructions on changing source priority.

- **Solar Priority:** Maximizes the use of solar power, reducing reliance on the grid.
- **Battery Priority:** Utilizes battery power first, often used in off-grid scenarios.
- **Grid Priority:** Uses grid power primarily, with solar/battery as backup.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Luminous SOLARVERTER PRO 3KVA ECO Solar Inverter.

- **Cleaning:** Keep the inverter's exterior clean and free from dust. Use a dry, soft cloth. Do not use liquid cleaners.
- **Ventilation:** Ensure that the ventilation openings are not blocked to prevent overheating.
- **Connection Checks:** Periodically inspect all electrical connections (solar, battery, grid, load) for tightness and signs of corrosion.
- **Battery Health:** Monitor battery health as per the battery manufacturer's recommendations.
- **Professional Inspection:** It is recommended to have a qualified technician perform a comprehensive inspection at least once a year.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter. For problems not listed here, please contact Luminous customer support.

Problem	Possible Cause	Solution
Inverter not turning on	No input power (battery/solar/grid), loose connections, tripped breaker.	Check all power sources and connections. Ensure breakers are not tripped.
No AC output	Overload, short circuit, inverter fault, output breaker tripped.	Reduce load. Check for short circuits. Reset output breaker. If problem persists, contact support.
Low battery backup time	Overloaded battery, aged battery, insufficient charging.	Reduce load. Check battery health and charging parameters. Consider battery replacement if aged.
LCD shows error code	Specific system fault.	Refer to the full manual's error code section for specific meanings and solutions.

8. SPECIFICATIONS

Feature	Specification
Model Number	SOLARVERTER PRO 3KVA ECO
Rated AC Power	230V (single phase)
Max Supported Panel Power	3000 Wp
Input Voltage Range (Vmp)	60V-120V
Input Voltage Range (Voc)	75V-150V
Charge Controller Type	MPPT
Nominal Battery Bank Voltage	36V
Output Waveform	Pure Sine Wave
Product Dimensions (LxWxH)	43.2 x 42.9 x 30 cm
Item Weight	31.5 kg
Certifications	BIS certified

9. WARRANTY AND SUPPORT

Warranty Information:

The Luminous SOLARVERTER PRO 3KVA ECO Solar Inverter comes with **a2-year warranty** from the date of purchase. This warranty covers manufacturing defects and faulty workmanship under normal operating conditions. Please retain your purchase receipt as proof of warranty.

The warranty does not cover damages caused by improper installation, misuse, unauthorized modifications, natural disasters, or normal wear and tear. For full warranty terms and conditions, please refer to the warranty card included with your product.

Customer Support:

For technical assistance, service requests, or any inquiries regarding your Luminous product, please contact Luminous

customer support:

- **Website:** Visit the official Luminous website for support resources and contact details.
- **Service Centers:** Locate authorized Luminous service centers in your region.

When contacting support, please have your product model number (SOLARVERTER PRO 3KVA ECO) and purchase details ready.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Answered questions about this manual

If I replace the motherboard (PCB) and MPPT card in my Luminous Solarverter Pro 3kVA 36V inverter, how many years of warranty will the company provide?

The Luminous SOLARVERTER PRO 3KVA ECO typically comes with a 2-year warranty from the original date of purchase. This warranty covers manufacturing defects and faulty workmanship under normal operating conditions.Regarding the replacement of internal...

[Read full answer](#)

