

[Manuals.plus](#) /

› [Luminous](#) /

› Luminous Solarverter 3KVA User Manual

Luminous SOLARVERTER 3KVA

Luminous Solarverter 3KVA User Manual

Model: SOLARVERTER 3KVA

[Introduction](#)

[Key Features](#)

[Setup](#)

[Operation](#)

[Maintenance](#)

[Troubleshooting](#)

[Specifications](#)

[Warranty &
Support](#)

1. INTRODUCTION

The Luminous Solarverter 3KVA is an advanced solar inverter designed to provide reliable and efficient power for residential and commercial applications. This manual provides essential information for the safe and effective installation, operation, and maintenance of your Solarverter system. It supports up to 3000 Wp of solar panel input and operates at a 48V battery bank voltage, ensuring robust performance. Its pure sine wave output protects connected appliances, and the inbuilt isolation transformer offers protection against grid noise and voltage spikes. The system features an easy-to-use LCD display for monitoring and three user-settable modes for optimized energy management.

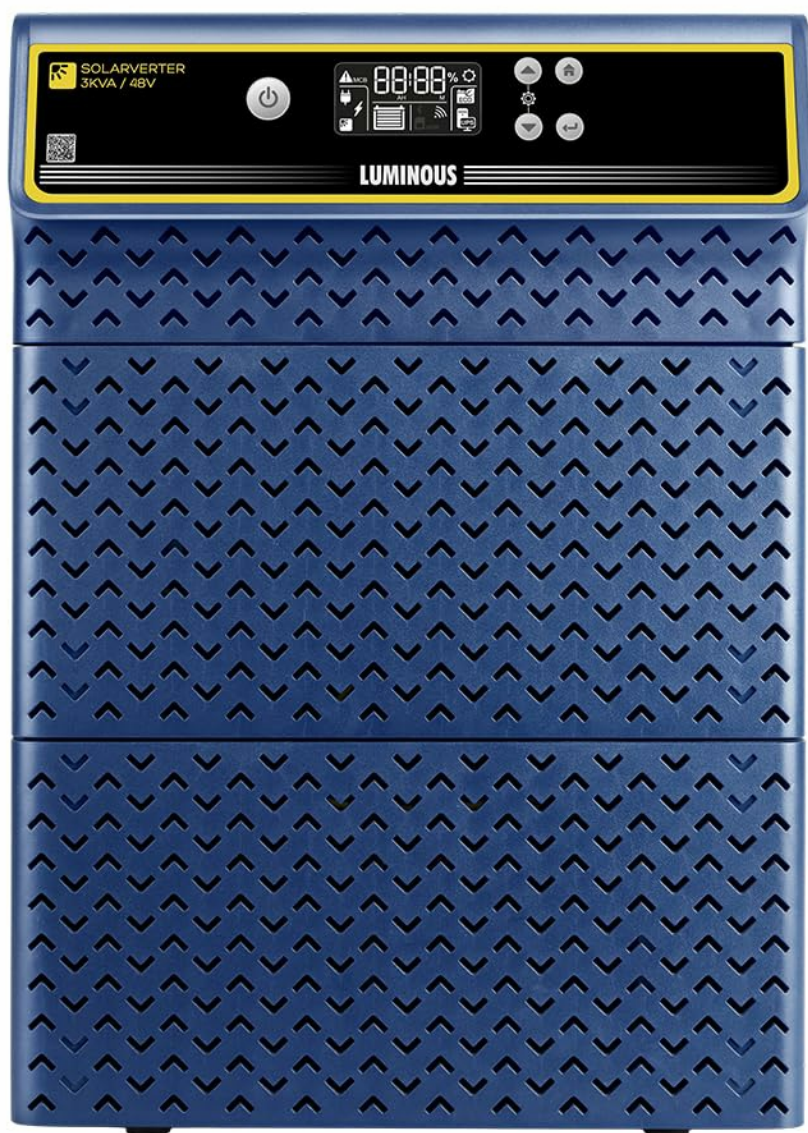


Figure 1: Front view of the Luminous Solarverter 3KVA unit, showcasing its compact design and integrated LCD display.

UNINTERRUPTED POWER FOR EFFORTLESS LIVING

Power Through Every Outage With Ease



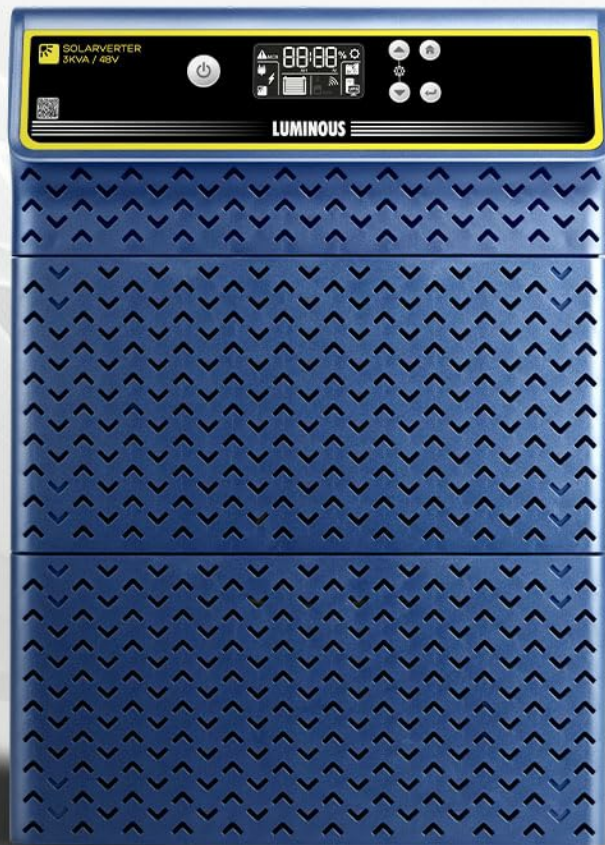
Figure 2: The Luminous Solarverter 3KVA seamlessly integrated into a modern home environment, providing uninterrupted power.

2. KEY FEATURES

- **High Capacity Performance:** 3KVA pure sine wave output ensures safe and efficient power for high-load appliances across homes, offices, and shops.
- **Smart Energy Management:** Supports up to 3000 Wp solar panels with 3 user-settable modes—Solar, Solar+Grid, and Grid+Solar—for optimal energy savings.
- **Wider Operating Voltage:** Functions seamlessly across 140V–290V input range, ensuring consistent performance in fluctuating grid conditions.
- **Advanced Protection:** Equipped with MCB, reverse polarity, short-circuit, and over-temperature protection, plus inbuilt isolation transformer for grid surge safety.
- **Informative LCD Display:** Easy-to-read screen provides real-time system status, battery levels, mode settings, and performance diagnostics.
- **BIS Certified & Reliable:** Complies with IS/IEC standards, backed by a 24-month warranty for dependable,

RELIABLE POWER FOR BIGGER SAVINGS

Uninterrupted Back-up with Smart Energy



**3* Years
Warranty**



**Maximum Capacity
Utilization**



**User-friendly
LCD Display**



**Customisable
Saving Modes**

Figure 3: Diagram illustrating key features such as warranty, capacity utilization, user-friendly LCD, and customizable saving modes.

3. SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of your Luminous Solarverter. It is recommended that installation be performed by a qualified technician.

3.1. Site Selection

- Choose a cool, dry, and well-ventilated area, away from direct sunlight, moisture, and flammable materials.
- Ensure adequate clearance around the unit for proper airflow and heat dissipation.
- The mounting surface must be sturdy enough to support the inverter's weight (approximately 18.5 kg).

3.2. Wiring Connections

Before making any connections, ensure all power sources (grid, solar, battery) are disconnected and secured.

1. **Battery Connection:** Connect the 48V battery bank to the designated battery terminals on the inverter. Ensure correct polarity (+ to + and - to -).
2. **Solar Panel Connection:** Connect the solar panel array (up to 3000 Wp) to the solar input terminals. Verify that the open-circuit voltage (Voc) and short-circuit current (Isc) of the array are within the inverter's specifications.
3. **Grid Input Connection:** Connect the AC grid supply to the grid input terminals.
4. **AC Output Connection:** Connect your household loads to the AC output terminals.
5. **Grounding:** Ensure the inverter is properly grounded to prevent electrical hazards.



Figure 4: Illustrative diagram showing the Luminous Solarverter integrated into a home solar power system, indicating connections to solar panels, batteries, and household loads.

4. OPERATION

4.1. Powering On/Off

- **To Power On:** After all connections are secure, switch on the battery breaker, then the solar array breaker (if applicable), and finally the AC grid input breaker. Press the power button on the inverter's front panel. The LCD will illuminate, and the system will initiate.
- **To Power Off:** Reverse the power-on sequence. First, switch off the AC grid input breaker, then the solar array breaker, and finally the battery breaker. Press and hold the power button on the inverter until it shuts down.

4.2. LCD Display and Navigation

The LCD display provides real-time information about the system's status, battery levels, and operational parameters. Use the navigation buttons (usually 'Up', 'Down', 'Enter', 'Escape') to browse through menus and adjust settings.

4.3. Operating Modes

The Luminous Solarverter 3KVA offers three user-settable modes to optimize energy usage based on your preferences:

1. **Solar Mode:** Prioritizes solar power for charging batteries and powering loads. Grid power is used only when solar power is insufficient or batteries are low. This mode maximizes solar energy utilization and reduces electricity bills.
2. **Solar+Grid Mode:** Utilizes solar power as the primary source. If solar power is insufficient, the system automatically switches to grid power to supplement or power loads. This mode ensures continuous power supply while still prioritizing solar.
3. **Grid+Solar Mode:** Prioritizes grid power for charging batteries and powering loads. Solar power is used as a secondary source, typically when grid power is unavailable or for specific peak-shaving applications.

Refer to the inverter's LCD menu for instructions on how to select and configure these operating modes.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Luminous Solarverter system. Always disconnect all power sources before performing any maintenance.

- **Monthly:**
 - Inspect the inverter for any visible damage, loose connections, or unusual noises.
 - Clean the exterior of the inverter with a dry, soft cloth. Ensure ventilation openings are free from dust and debris.
 - Check battery terminals for corrosion and clean if necessary.
- **Quarterly:**
 - Verify that all wiring connections are secure and free from signs of overheating.
 - Monitor the performance of your solar panels (e.g., check for shading, dirt, or damage).
 - If using flooded lead-acid batteries, check electrolyte levels and top up with distilled water if needed.
- **Annually:**
 - Have a qualified technician perform a comprehensive inspection of the entire solar power system, including the inverter, batteries, and solar panels.
 - Test the system's protection features (e.g., MCB, short-circuit protection).

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your Luminous Solarverter. For problems not listed here or if issues persist, contact customer support.

Problem	Possible Cause	Solution
Inverter not turning on	No battery power; loose battery connections; tripped breaker.	Check battery voltage; ensure connections are secure; reset breakers.
No AC output	Overload; short circuit on output; inverter fault.	Reduce load; check for short circuits in wiring/appliances; restart inverter.
Batteries not charging from solar	Insufficient sunlight; dirty solar panels; faulty solar connection.	Check weather conditions; clean solar panels; verify solar wiring.
LCD display shows error code	Specific system fault (e.g., over-temperature, low battery).	Refer to the inverter's detailed error code list in the full manual or contact support.

7. TECHNICAL SPECIFICATIONS

Parameter	Value
Model Number	SOLARVERTER 3KVA
Capacity	3KVA
Max. Solar Panel Support	3000 Wp
Battery Voltage	48V
Output Waveform	Pure Sine Wave
Input Voltage Range (Grid)	140V–290V
Product Dimensions (LxWxH)	27 x 15 x 32 Centimeters
Item Weight	18 kg 500 g
Certifications	BIS Certified (IS/IEC standards)
Manufacturer	Luminous Power Technologies Private Limited
Country of Origin	India

8. WARRANTY AND SUPPORT

The Luminous Solarverter 3KVA comes with a**24-month warranty** from the date of purchase, covering manufacturing defects and malfunctions under normal operating conditions. This warranty ensures dependable, government-certified solar backup.

8.1. Warranty Terms

- The warranty is valid only with proof of purchase.
- It covers defects in materials and workmanship.

- The warranty does not cover damage caused by improper installation, misuse, neglect, unauthorized repairs, natural disasters, or external factors.
- Any tampering with the product or its serial number will void the warranty.

8.2. Customer Support

For technical assistance, warranty claims, or service requests, please contact Luminous customer support. Ensure you have your product model number and purchase details ready when contacting support.

You can visit the official Luminous website for the latest contact information and service center details:

www.luminousindia.com



Figure 5: Luminous offers a comprehensive solar solution, including project management, trained service experts, and financing options.

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