

EverSale RSP-1000-48

EverSale Meanwell RSP-1000-48 Power Supply User Manual

Model: RSP-1000-48

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your EverSale Meanwell RSP-1000-48 Power Supply. The RSP-1000-48 is a 1000W single output AC to DC power supply designed with a 1U low profile chassis. It accepts a wide input voltage range of 90 to 264VAC and delivers a stable 48V DC output at 21A, suitable for various industrial applications. This unit features an internal speed-controlled fan for air cooling, allowing operation up to 60°C. Please read this manual thoroughly before installation and use.

2. SAFETY INSTRUCTIONS

To ensure safe operation and prevent damage to the unit or injury to personnel, observe the following safety precautions:

- **Electrical Hazard:** This unit operates with high voltages. Do not open the casing unless you are a qualified technician. Risk of electric shock.
- **Proper Grounding:** Always ensure the power supply is properly grounded before connecting it to an AC source.
- **Ventilation:** Do not block the ventilation openings. Ensure adequate airflow around the unit to prevent overheating. The internal fan requires clear space to operate effectively.
- **Input Voltage:** Verify that the AC input voltage matches the specified range (90-264VAC) before connecting. Incorrect voltage can damage the unit.
- **Load Capacity:** Do not exceed the maximum output wattage (1000W) or current (21A at 48V) to prevent overload.
- **Environment:** Install the unit in a dry, well-ventilated area, free from excessive dust, moisture, and corrosive gases. Avoid direct sunlight and high temperatures beyond the specified operating range (up to 60°C).
- **Installation:** All installation and wiring should be performed by qualified personnel in accordance with local electrical codes.

3. SETUP AND INSTALLATION

Follow these steps for proper installation of your RSP-1000-48 power supply:

1. **Unpacking:** Carefully remove the power supply from its packaging. Inspect for any physical damage.
2. **Mounting:** The RSP-1000-48 features a 1U low profile chassis. Mount the unit securely in a suitable enclosure or rack, ensuring proper ventilation around all sides, especially the fan intake and exhaust.
3. **AC Input Wiring:**
 - Connect the AC input wires (Line, Neutral, Ground) to the designated terminals on the power supply. Refer to the terminal block markings.
 - Ensure all connections are tight and secure to prevent loose contacts and potential hazards.
 - Confirm the AC input voltage is within the 90-264VAC range.
4. **DC Output Wiring:**
 - Connect the DC output wires (Positive and Negative) to your load. Observe correct polarity.
 - Use appropriate gauge wiring for the 21A output current to minimize voltage drop and heat generation.
5. **Parallel Function (Optional):** If using multiple RSP-1000-48 units in parallel for increased power, follow the manufacturer's specific guidelines for parallel connection. This typically involves connecting the output terminals of multiple units together and ensuring proper current sharing. Consult the detailed technical datasheet for parallel operation instructions.
6. **Final Check:** Before applying power, double-check all wiring connections for correctness and security.



Figure 1: Front view of the Meanwell RSP-1000-48 Power Supply, showing input and output terminals. This image illustrates the compact 1U form factor and the layout of connection points for AC input and DC output.

4. OPERATING INSTRUCTIONS

Once the power supply is correctly installed and wired:

1. **Power On:** Apply AC power to the unit. The power supply should start operating, and the internal fan will activate.
2. **Output Monitoring:** If your system includes monitoring capabilities, verify that the output voltage is stable at 48V and the current draw is within the specified limits.

- 3. **Parallel Operation:** For systems utilizing the parallel function, ensure all connected units are sharing the load evenly. Refer to the technical datasheet for specific adjustments or monitoring requirements for parallel configurations.
- 4. **Power Off:** To shut down the unit, disconnect the AC input power.

5. MAINTENANCE

The RSP-1000-48 power supply is designed for reliable operation with minimal maintenance. However, periodic checks can help ensure longevity and performance:

- **Cleaning:** Periodically inspect the ventilation openings and fan for dust accumulation. Use compressed air or a soft brush to gently remove dust to maintain optimal airflow. Ensure the unit is powered off and disconnected from AC input before cleaning.
- **Connections:** Occasionally check all input and output wiring connections to ensure they remain tight and secure.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature range (up to 60°C) and humidity levels. Avoid exposing the unit to excessive heat, cold, or moisture.
- **Fan Operation:** Listen for unusual noises from the cooling fan, which could indicate a potential issue.

6. TROUBLESHOOTING

If you encounter issues with your RSP-1000-48 power supply, consider the following basic troubleshooting steps:

- **No Output Power:**
 - Check if the AC input power is connected and active.
 - Verify all input and output wiring connections are secure and correct.
 - Ensure the input voltage is within the 90-264VAC range.
 - Check for any tripped circuit breakers or blown fuses in the AC input line.
- **Incorrect Output Voltage/Current:**
 - Confirm the load connected is not exceeding the power supply's maximum output (1000W, 21A at 48V).
 - Disconnect the load and measure the output voltage. If it's still incorrect, the unit may require service.
 - For parallel configurations, ensure proper current sharing settings are applied.
- **Overheating:**
 - Ensure ventilation openings are not blocked and the fan is operating.
 - Reduce the load if it is consistently operating near maximum capacity in a high ambient temperature environment.
 - Verify the ambient temperature is within the specified operating range.

If these steps do not resolve the issue, contact customer support or a qualified technician for further assistance.

7. SPECIFICATIONS

Feature	Specification
Model Number	RSP-1000-48

Feature	Specification
Brand	EverSale (Manufacturer: Mean Well)
Input Voltage Range	90 ~ 264 VAC
Output Voltage	48 VDC
Output Current	21 A
Output Wattage	1000 W
Form Factor	1U Low Profile Chassis
Cooling Method	Internal Speed-Controlled Fan (Air Cooling)
Operating Temperature	Up to 60°C
Product Dimensions (L x W x H)	11.61 x 5 x 1.61 inches (295 x 127 x 41 mm)
Item Weight	4.29 pounds (1.95 kg)
Compatible Devices	Personal Computer (and other industrial applications)
Connector Type	Screw Terminals (ATX refers to internal connection style)

8. WARRANTY AND SUPPORT

Specific warranty information for the EverSale Meanwell RSP-1000-48 Power Supply is not provided in this document. Please refer to the product packaging, the seller's website, or contact EverSale customer service directly for detailed warranty terms and conditions.

For technical support, troubleshooting assistance beyond the scope of this manual, or inquiries regarding parts and service, please contact the retailer where the product was purchased or the official EverSale support channels.

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

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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