EverSale LRS-350-24

Mean Well LRS-350-24 Switching Power Supply User Manual

Model: LRS-350-24 | Brand: Mean Well

1. Introduction

This manual provides essential information for the safe and efficient operation of your Mean Well LRS-350-24 Switching Power Supply. This high-performance power supply delivers 350.4W of power at 24V and 14.6A, suitable for a wide range of industrial and scientific applications. Please read this manual thoroughly before installation and use to ensure proper functionality and to prevent damage or injury.

2. Safety Information

Always adhere to the following safety precautions to prevent electric shock, fire, or damage to the unit and connected equipment:

- **Voltage Selection:** Before connecting the power supply to the AC mains,**ensure the input voltage selector switch is set correctly** to either 115Vac or 230Vac, matching your local power supply. Incorrect voltage selection will cause severe damage to the unit.
- **Qualified Personnel:** Installation and servicing should only be performed by qualified personnel.
- **Proper Grounding:** Ensure the power supply is properly grounded to prevent electric shock.
- **Ventilation:** Do not obstruct the ventilation openings. Ensure adequate airflow around the unit to prevent overheating.
- **Environment:** Do not operate the unit in wet or excessively dusty environments. Keep away from flammable materials.
- **Load Connection:** Always connect the load before applying power to the unit.
- **Disconnect Power:** Disconnect all power before performing any maintenance or making connections.

3. Product Overview

3.1 Key Features

- Primary output voltage (VDC): 24V
- Output current (A): 14.6A
- Maximum output power (W): 350W
- Input voltage (VAC): Selectable 90 to 132V or 180 to 264V
- Compact design with built-in cooling fan

3.2 Components and Layout

Figure 1: Top View of Power Supply. This image displays the top surface of the Mean Well LRS-350-24 power supply. Visible features include the cooling fan grille, the input terminal block (labeled 'L', 'N', and 'GND' for Line, Neutral, and Ground), the output terminal block (labeled '+V' and '-V' for positive and negative DC output), and a yellow warning label indicating the AC input voltage selector switch. The switch allows selection between 115Vac and 230Vac input.

Figure 2: Angled Top View. A slightly different angled view of the power supply's top side. This perspective clearly shows the voltage selector switch located near the input terminals, emphasized by the yellow warning sticker. The sticker explicitly states: "AC INPUT VOLTAGE CAN BE SELECTED BY SWITCH. CHECK INPUT VOLTAGE AVOIDING

DAMAGE BEFORE POWER ON." This switch is crucial for setting the correct input voltage before operation.

Figure 3: Side and Top Angled View. This image provides an angled view, showcasing both the top and one side of the power supply. The side features additional ventilation slots, which are essential for heat dissipation and maintaining optimal operating temperature. The overall robust metal casing is also visible.

Figure 4: Bottom View. The underside of the power supply is shown, revealing the mounting holes. These holes are designed for secure installation of the unit in various enclosures or setups, ensuring stability and proper integration into your system.

4. Setup

4.1 Mounting

The LRS-350-24 can be mounted using the screw holes on the bottom of the unit (refer to Figure 4). Ensure the mounting surface is stable and allows for adequate ventilation around the power supply, especially around the fan and side vents.

4.2 Input Voltage Selection

This is a critical step. Locate the red or orange slide switch on the side of the input terminal block (visible in Figure 1 and Figure 2). This switch allows you to select between 115Vac and 230Vac input voltage. **Verify your local mains voltage and set the switch accordingly BEFORE connecting the power supply to the AC mains.** Failure to do so will result in immediate and irreversible damage to the unit.

4.3 Wiring Connections

Use appropriate gauge wiring for all connections. Refer to the labels on the terminal blocks:

- **AC Input:** Connect your AC mains power to the 'L' (Line), 'N' (Neutral), and 'GND' (Ground) terminals. Ensure secure connections.
- **DC Output:** Connect your load to the '+V' (Positive) and '-V' (Negative) terminals. Observe correct polarity.
- **Voltage Adjustment:** A small potentiometer (V.ADJ) is typically present near the output terminals, allowing for fine adjustment of the output voltage within a small range. Use a small screwdriver to

adjust if necessary.

5. Operating Instructions

Once all connections are securely made and the input voltage is correctly selected:

1. **Power On:** Apply AC power to the unit. The internal fan should start operating, and an indicator LED (if present) should illuminate, signifying power is on.
2. **Monitor Output:** Verify the output voltage and current with a multimeter if precise values are critical for your application.
3. **Power Off:** To shut down, disconnect the AC input power.

6. Maintenance

Regular maintenance ensures the longevity and reliable operation of your power supply:

- **Cleaning:** Periodically clean the fan grille and ventilation openings to prevent dust buildup, which can impede airflow and lead to overheating. Use compressed air or a soft brush.
- **Inspection:** Regularly inspect all wiring connections for looseness or signs of wear.
- **Fan Check:** Listen for unusual noises from the cooling fan. If the fan becomes excessively noisy or stops spinning, it may require replacement to prevent thermal damage to the unit.

7. Troubleshooting

Refer to the table below for common issues and their potential solutions:

Problem	Possible Cause	Solution
No output voltage	No AC input power; Incorrect input voltage selection; Overload protection activated; Internal fuse blown.	Check AC power source and connections; Verify input voltage selector switch setting; Reduce load; Consult qualified technician for fuse replacement.
Output voltage too low/high	Voltage adjustment potentiometer misset; Overload; Faulty unit.	Adjust V.ADJ potentiometer; Reduce load; Contact support if issue persists.
Unit overheating	Insufficient ventilation; Overload; Fan malfunction.	Ensure clear airflow around unit; Reduce load; Check fan operation and clean vents.
Unusual noise from unit	Fan bearing issue; Loose components.	Inspect fan for obstructions or wear; Ensure unit is securely mounted. Consider fan replacement if noise persists.

8. Specifications

Detailed technical specifications for the Mean Well LRS-350-24 Power Supply:

Parameter	Value

Parameter	Value
Model Name	LRS-350-24
Primary Output Voltage (VDC)	24V
Output Current (A)	14.6A
Maximum Output Power (W)	350W
Input Voltage (VAC)	90 to 132V, 180 to 264V (Switch Selectable)
Current Rating	14.6 Amps
Cooling Method	Air (Built-in Fan)
Form Factor	ATX or SFX
Connector Type	ATX
Package Dimensions	9.88 x 5 x 2.6 inches
Item Weight	1.66 pounds (approx. 0.75 kg)
Manufacturer	MEAN WELL
Date First Available	May 22, 2017

9. Warranty and Support

For warranty information and technical support, please refer to the documentation provided with your purchase or contact the retailer. Keep your proof of purchase for any warranty claims.
For further assistance, you may also visit the official Mean Well website or contact their customer service directly.