

## MEAN WELL LRS-350-24

# MEAN WELL LRS-350-24 AC/DC Switching Power Supply User Manual

Model: LRS-350-24

## 1. PRODUCT OVERVIEW

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The MEAN WELL LRS-350-24 is an AC/DC switching power supply designed to convert alternating current (AC) into stable direct current (DC) for various electronic applications. This unit provides a regulated 24V DC output with a maximum power of 350.4W and can deliver up to 14.6A. It features a wide operating temperature range of -30°C to 70°C, making it suitable for diverse environments. Key features include selectable AC input voltage, comprehensive protection mechanisms, and an intelligent cooling fan control system.

## 2. SAFETY INFORMATION

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

- Ensure the power supply is disconnected from the main AC power source before any installation, wiring, or maintenance.
- Only qualified personnel should perform installation and wiring.
- Verify the input voltage selection switch is set correctly for your region's AC supply (115VAC or 230VAC) before connecting power. Incorrect setting can cause severe damage.
- Do not operate the unit in environments exceeding its specified temperature and humidity limits.
- Ensure proper ventilation around the unit to prevent overheating. Do not block ventilation openings.
- The unit contains high voltage components. Do not open the casing unless specifically instructed by a qualified technician.
- Ground the unit properly to prevent electric shock.

## 3. SETUP AND INSTALLATION

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### 3.1 Mounting

The LRS-350-24 power supply is designed for chassis mounting. Ensure adequate space for airflow, especially around the cooling fan and ventilation slots. Mount the unit securely using appropriate screws.

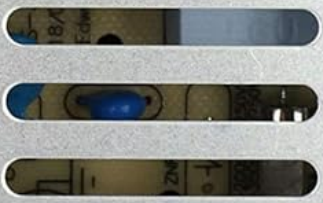
### **3.2 Wiring Connections**

Refer to the terminal block diagram for correct wiring. Ensure all connections are secure and use appropriate wire gauges for the current ratings.



警告使用者：  
此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動。在此種情況下，使用者會被要求採取某些適當的對策。

AC INPUT VOLTAGE CAN BE  
SELECTED BY SWITCH. CHECK  
INPUT VOLTAGE AVOIDING  
DAMAGE BEFORE POWER ON.



**LRS-350-24** (型号)(开关电源)  
OUTPUT (輸出): 24V  $\equiv$  14.6A  
MW01 MADE IN CHINA

MEAN WELL ENTERPRISES CO., LTD.  
No. 28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 24991, Taiwan  
Manual: [www.meanwell.com/manual.html](http://www.meanwell.com/manual.html)



INPUT (輸入):  
100-120V  $\sim$  /6.8A  
200-240V  $\sim$  /3.4A  
50/60Hz

仅适用于海拔2000米以下安全使用

+V ADJ  $\curvearrowright$  +

+V

-V

$\equiv$

N

L



**Figure 1:** Top view of the LRS-350-24 power supply, illustrating the cooling fan, AC input voltage warning label, and the clearly labeled terminal block for input and output connections.



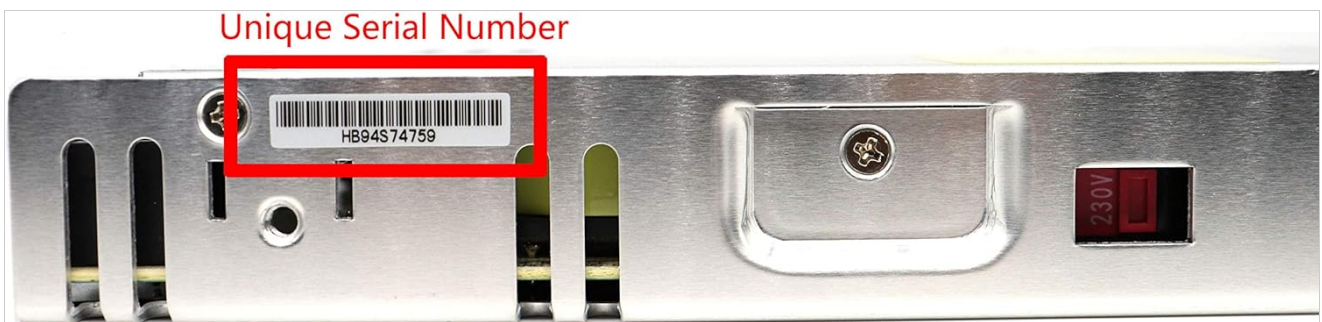
**Figure 2:** Angled view highlighting the terminal block for AC input (N, L, Ground) and DC output (+V, -V), along with the voltage adjustment potentiometer (V.ADJ).

- **AC Input:** Connect the Live (L) and Neutral (N) wires from your AC mains to the corresponding terminals. Connect the Earth Ground wire to the ground terminal ( ).
- **DC Output:** Connect your load to the +V (positive) and -V (negative) terminals. The unit provides multiple output terminals for convenience.

## 4. OPERATING INSTRUCTIONS

### 4.1 Input Voltage Selection

The LRS-350-24 features a switch to select the AC input voltage range. This switch is typically located on the side of the unit.



**Figure 3:** Side view of the power supply, clearly showing the red switch for selecting between 115V and 230V AC input. Ensure this is set correctly before powering on.

- Set the switch to **115VAC** for regions with 100-120VAC mains supply (e.g., North America).
- Set the switch to **230VAC** for regions with 200-240VAC mains supply (e.g., Europe, Asia).
- **WARNING:** Incorrect input voltage selection will damage the unit. Always verify the setting before applying power.

## 4.2 Output Voltage Adjustment

The output voltage can be finely adjusted within a range of 21.6V to 28.8V DC using the "V.ADJ" potentiometer located near the output terminals. Use a small screwdriver to carefully turn the potentiometer clockwise to increase voltage or counter-clockwise to decrease voltage. Monitor the output voltage with a multimeter during adjustment.

## 4.3 Cooling System

The LRS-350-24 incorporates a built-in cooling fan with intelligent ON-OFF control. The fan activates when the internal temperature (RTH3) reaches approximately 50°C and turns off when the temperature drops below 40°C. This design optimizes fan life and reduces noise during lighter loads. Ensure the fan's intake and exhaust are not obstructed.



**Figure 4:** A close-up view showing the internal components through the ventilation slots, with an annotation pointing to where the LRS-350 PCB version can be identified. This area is crucial for internal cooling.

## 5. MAINTENANCE

### 5.1 General Care

- Keep the unit clean and free from dust and debris. Dust accumulation can hinder cooling and affect performance.
- Periodically inspect all wiring connections to ensure they are tight and free from corrosion.
- Ensure the operating environment remains within the specified temperature and humidity ranges.
- Do not expose the unit to moisture or corrosive substances.

## 6. TROUBLESHOOTING

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If the power supply is not functioning as expected, consider the following common issues:

- **No Output Voltage:**
  - Check if the AC input voltage switch is set correctly (115VAC/230VAC).
  - Verify AC input power is present and connected securely.
  - Check for blown fuses in the AC input line (if applicable to your setup).
  - Ensure the load is not short-circuited.
- **Output Voltage Too Low/High:**
  - Adjust the "V.ADJ" potentiometer to the desired voltage.
  - Ensure the load current does not exceed the maximum rated output current (14.6A). Overload protection may be active.
- **Unit Overheating:**
  - Ensure adequate ventilation around the power supply. Clear any obstructions from the fan and ventilation slots.
  - Verify the ambient temperature is within the specified operating range.
  - Reduce the load if it is consistently near or above the maximum rated power.
- **Fan Not Running:**
  - The fan is temperature-controlled. It will only activate when the internal temperature reaches approximately 50°C. If the unit is cool, the fan will remain off.
  - If the unit is hot and the fan is not running, check for obstructions or contact support.

For issues not resolved by these steps, please contact qualified technical support.

## 7. SPECIFICATIONS

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Feature	Value
Model Name	LRS-350-24
Brand	MEAN WELL
Output Voltage	24V DC
Output Current (Max)	14.6 A
Output Power (Max)	350.4 W

Feature	Value
Input Voltage Range	100-120VAC / 200-240VAC (selectable by switch)
Voltage Adjustable Range	21.6 ~ 28.8 VDC
Protections	Short circuit, Overload, Over voltage, Over temperature
Cooling Method	Built-in cooling FAN ON-OFF control (Fan ON at $\geq 50^{\circ}\text{C}$ , OFF at $< 40^{\circ}\text{C}$ )
Operating Temperature	$-30^{\circ}\text{C}$ to $70^{\circ}\text{C}$
Dimensions (L x W x H)	8.46 x 4.53 x 1.18 inches (215 x 115 x 30 mm)
Weight	0.01 ounces (approximately 0.28 grams - <i>Note: This weight seems incorrect from source data, typically power supplies are heavier. Refer to manufacturer's official datasheet for precise weight.</i> )
Form Factor	ATX (Chassis Mount)
Compatible Devices	Personal Computer (General purpose DC loads)

## 8. WARRANTY AND SUPPORT

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### 8.1 Warranty Information

Specific warranty details for the MEAN WELL LRS-350-24 power supply are typically provided by the retailer or manufacturer at the time of purchase. Please refer to your purchase documentation or the official MEAN WELL website for the most accurate and up-to-date warranty terms and conditions.

### 8.2 Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact your point of purchase or visit the official MEAN WELL website for support resources and contact information.

Official MEAN WELL Website: [www.meanwell.com](http://www.meanwell.com)