

JDOUNFMO XY6008-W

JDOUNFMO XY6008-W Adjustable DC Power Supply User Manual

MODEL: XY6008-W

1. Introduction

The JDOUNFMO XY6008-W is an adjustable DC power supply module designed for constant voltage and constant current applications. It functions as a step-down converter, providing a stable output from a higher input voltage. This module is suitable for various maintenance and experimental tasks requiring precise power control. Key features include a color LCD display, full digital key operation, remote control capability, and network control via computer or mobile app (for the XY6008-W model).

XY6008 | XY6008-W

Constant Voltage and Constant Current DC Power Supply

60V

output voltage

8A

Output current

480W

Output Power



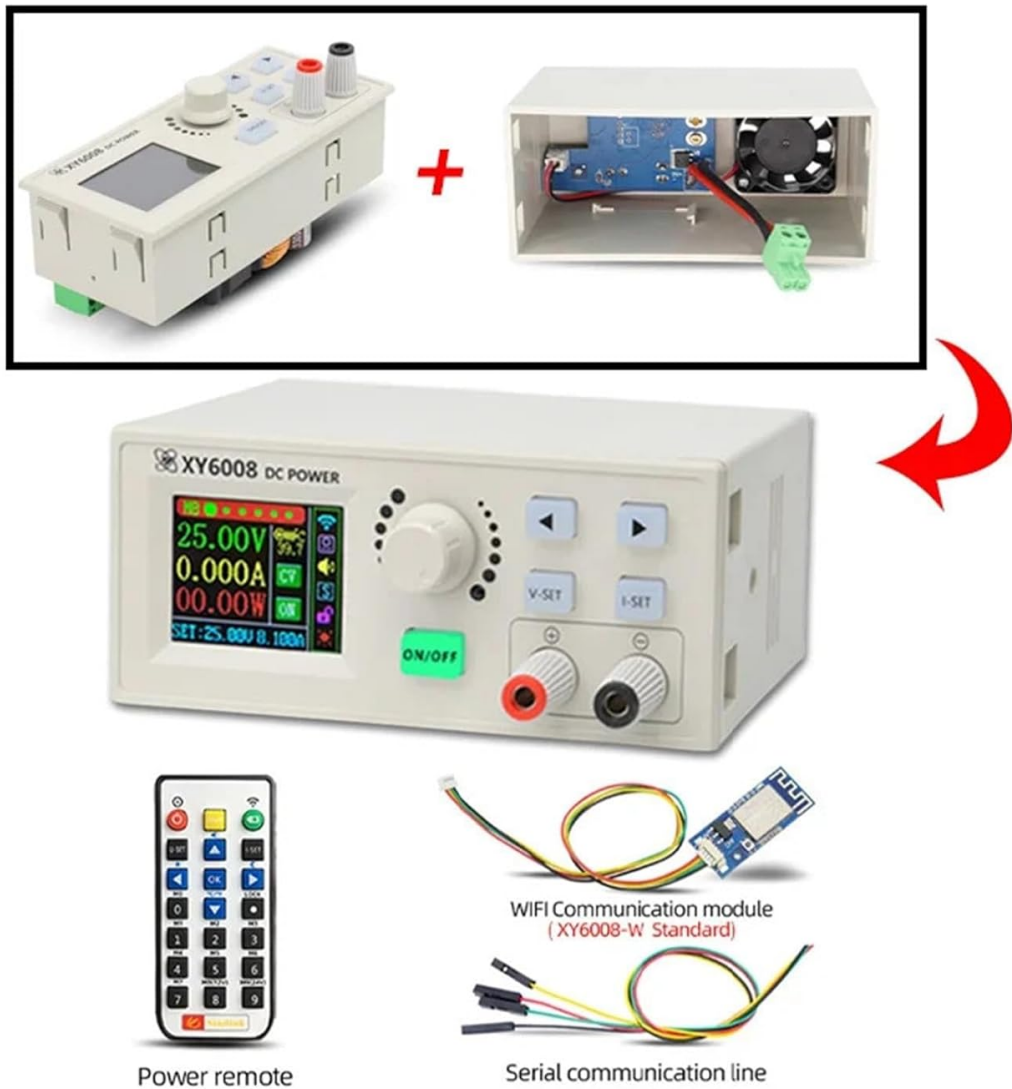
flame retardant material Silicone buttons MobileAPP PC upper computer Firmware upgrade Remote control, free interface color matching, email notification, Cloud record

Image 1: Overview of the XY6008-W DC Power Supply module, emphasizing its 60V, 8A, 480W capabilities.

2. Package Contents

Please verify that all items listed below are included in your package:

- 1 x XY6008-W Adjustable DC Power Supply Module
- 1 x Power Remote Control (battery CR2025 not included)
- 1 x Serial Communication Line
- 1 x WIFI Communication Module (for XY6008-W standard)



Finished XY6008-W(With WiFi communication)

Image 2: Contents of the XY6008-W package, showing the main module, fan housing, remote, WiFi module, and serial cable.

3. Setup

Follow these steps to set up your XY6008-W DC Power Supply:

1. **Input Power Connection:** Connect your DC input power source (6-70V) to the input terminals of the module. Ensure correct polarity.
2. **Output Load Connection:** Connect your load to the output terminals. Observe correct polarity (red for positive, black for negative).
3. **WiFi Module Installation (XY6008-W only):** If using the WiFi communication feature, connect the provided WiFi module to the designated port on the main unit using the serial communication line.
4. **Remote Control Battery:** Insert a CR2025 battery into the remote control unit.



Image 3: Front panel of the XY6008-W, illustrating the display, control interface, and output connections.

4. Operating Instructions

The XY6008-W features a user-friendly interface for precise control.

- **Power On/Off:** Press the **ON/OFF** button to toggle the output power.
- **Setting Voltage (V-SET):** Press the **V-SET** button. Use the rotary encoder or the arrow buttons (▲ / ▼) to adjust the desired output voltage. Press **V-SET** again to confirm or exit.
- **Setting Current (I-SET):** Press the **I-SET** button. Use the rotary encoder or the arrow buttons (▲ / ▼) to adjust the desired output current limit. Press **I-SET** again to confirm or exit.
- **Display Navigation:** The 1.8-inch color LCD display shows real-time voltage, current, and power. Use the rotary encoder to navigate through different display modes or settings.
- **Screen Rotation:** The display supports four-way rotation for flexible viewing angles.
- **Display Color Customization:** Eight color options are available for the display screen, allowing for personalized visual settings.
- **Remote Control:** The included remote control provides convenient wireless operation for setting parameters and controlling the output.
- **Network Control (XY6008-W only):** For the XY6008-W model, the device can be controlled via a computer or mobile application (Android/iOS) through the WiFi communication module. This enables real-time communication and control without distance limitations.

5. Maintenance

To ensure optimal performance and longevity of your XY6008-W power supply, observe the following maintenance guidelines:

- **Cleaning:** Keep the device clean and free from dust. Use a soft, dry cloth for cleaning. Avoid liquid cleaners.
- **Cooling Fan Operation:** The internal cooling fan activates automatically under specific conditions to prevent overheating. It turns on when the output current exceeds 2A, or output power exceeds 50W, or

the internal temperature exceeds 50°C. It turns off when current is below 1.5A, power is below 45W, and temperature is below 45°C. Ensure adequate ventilation around the module.

- **Over Temperature Protection:** The device includes an over-temperature protection feature, defaulting to 110°C, to safeguard against thermal damage.
- **Storage:** Store the device in a dry, cool environment when not in use.



Image 4: Internal components of the XY6008-W module, including the cooling fan and main circuit board.

6. Troubleshooting

If you encounter issues with your XY6008-W power supply, consider the following:

- **No Power/Display:** Check the input power connections and ensure the input voltage is within the specified range (6-70V).
- **Incorrect Output:** Verify that the voltage and current settings are correctly configured. Ensure the load is properly connected and not short-circuited.
- **Overheating:** Check for obstructions around the cooling fan. Ensure the ambient temperature is within the operating range (-10°C to 40°C).
- **Remote Control Not Responding:** Check the CR2025 battery in the remote control. Ensure there are no obstructions between the remote and the module.
- **WiFi Connection Issues:** Ensure the WiFi module is correctly installed and connected. Refer to the specific instructions for the mobile/computer application for connection procedures.

7. Specifications

Technical specifications for the JDOUNFMO XY6008-W Adjustable DC Power Supply:

Parameter	Value
Product Number	XY6008-W
Input Voltage Range	6-70.00V

Parameter	Value
Output Voltage Range	0-60.00V
Output Current Range	0-8.000A
Output Power Range	0-480.0W
Input Voltage Measurement Resolution	0.01V
Output Voltage Setting/Measurement Resolution	0.01V
Current Setting/Measurement Resolution	0.001A
Input Voltage Measurement Accuracy	$\pm(1\%+5 \text{ words})$
Output Voltage Setting/Measurement Accuracy	$\pm(0.4\%+1 \text{ words})$
Output Current Setting/Measurement Accuracy	$\pm(0.5\%+3 \text{ words})$
Typical Output Ripple	100mV VPP
Product Working Temperature Range	-10°C to 40°C
Capacity Measurement Range	0-99999Ah
Energy Measurement Range	0-99999Wh
Statistical Error of Capacity and Energy	$\pm 2\%$
Running Time Measurement Range	0-1000h
Maximum Output Voltage	(Input voltage \div 1.1) - 2V
Cooling Fan Activation	Current > 2A OR Power > 50W OR Temperature > 50°C
Cooling Fan Deactivation	Current < 1.5A AND Power < 45W AND Temperature < 45°C
Over Temperature Protection Default	110°C
Screen Brightness Setting	0-5 (6 levels total)
Display Screen	1.8 inch Color LCD Display
Product Size	125mm x 55mm x 35mm

Product Size

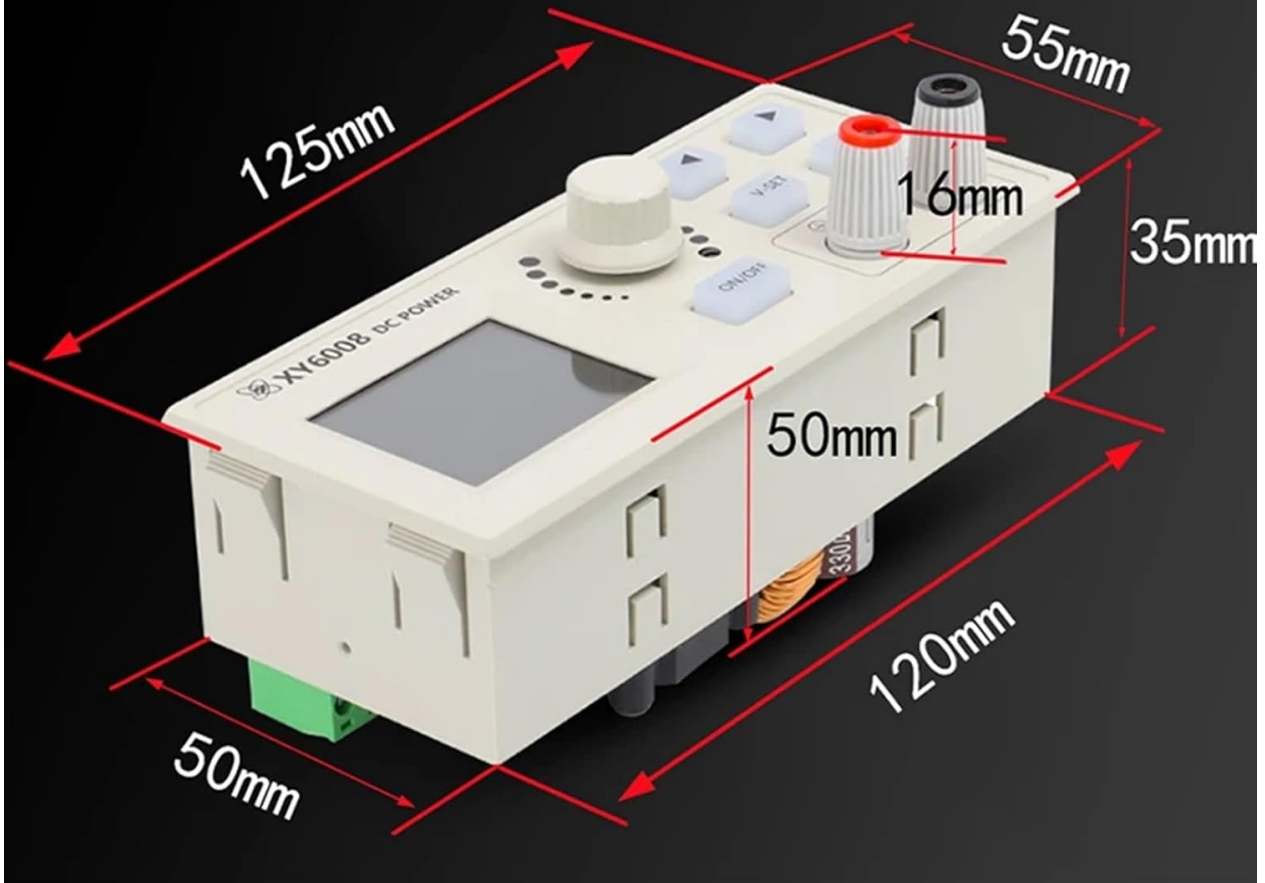


Image 5: Dimensional drawing of the XY6008-W module.

8. Support

For further assistance or technical support, please refer to the manufacturer's official website or contact their customer service department. Keep your product model number (XY6008-W) and purchase details readily available when seeking support.