

WHSTELENI 48V-42A

WHSTELENI 2000W Adjustable Switching Power Supply

Model: 48V-42A

1. PRODUCT OVERVIEW

The WHSTELENI 2000W Adjustable Switching Power Supply (Model: 48V-42A) is a high-reliability AC-DC power conversion unit designed for various industrial and DIY applications. It provides a stable and adjustable output voltage from 0 to 48V and an adjustable output current from 0 to 42A, with a maximum power output of 2000W. This power supply features a digital display for intuitive monitoring and adjustment of voltage and current, along with multiple built-in protection mechanisms to ensure safe operation.

2. SAFETY INFORMATION

WARNING: This is an industrial-grade product. Improper operation or dismantling by non-professionals may pose risks including electric shock or damage to the unit. Always ensure proper grounding and follow all electrical safety guidelines.

- Ensure the power supply is disconnected from the AC input before making any connections or adjustments.
- Verify the input voltage switch (110V/220V) is set correctly for your region's power supply before connecting.
- Always connect the ground (FG) terminal to a proper earth ground.
- Do not operate the power supply in wet or damp conditions.
- Ensure adequate ventilation around the unit to prevent overheating.
- Do not attempt to open or repair the unit if you are not a qualified professional.

3. SETUP AND INSTALLATION

3.1. Input Voltage Selection

Locate the red switch on the side of the power supply. Ensure it is set to the correct voltage for your region (110V for North America, 220V for most other regions). Incorrect setting can cause damage to the unit.

3.2. AC Input Connection

Connect the AC power source to the input terminals labeled 'L' (Live), 'N' (Neutral), and 'FG' (Frame Ground). Use appropriate gauge wiring for the 2000W capacity. Ensure all connections are secure.

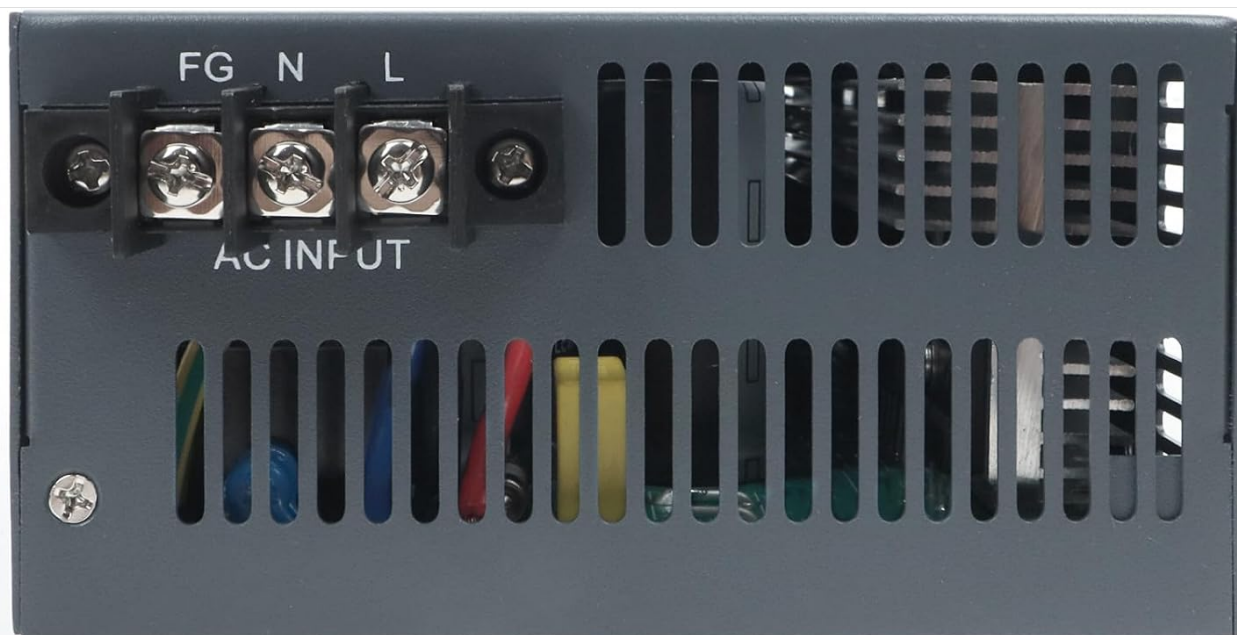


Figure 3.2.1: AC Input Terminals. This image displays the rear panel of the power supply, highlighting the screw terminals for AC input: FG (Frame Ground), N (Neutral), and L (Live). Proper connection to these terminals is crucial for safe operation.

3.3. DC Output Connection

Connect your load to the DC output terminals labeled 'POS(+)' for positive and 'NEG(-)' for negative. Ensure polarity is correct for your device. The terminals are designed for secure wire connections.



Figure 3.3.1: DC Output Terminals and Controls. This image shows the front panel of the power supply, featuring the red positive (POS+) and black negative (NEG-) output terminals, a cooling fan, and small potentiometers for voltage (V-ADJ) and current (I-ADJ) adjustment, along with an ON/SET/OFF switch.

3.4. Initial Adjustment

Before powering on, ensure the ON/SET/OFF switch is in the 'OFF' position. For initial setup, you may switch to 'SET' to pre-adjust voltage and current using the V-ADJ and I-ADJ potentiometers. The factory default settings are 48V and 42A.



Figure 3.4.1: Overall View of Power Supply. This image provides an angled view of the WHSTELENI 2000W power supply, showcasing its robust casing, digital display, output terminals, and integrated cooling fan.

3.5. Connection Demonstration Video

Video 3.5.1: 48V 2000W Switching Power Supply Connection Methods. This video demonstrates various connection methods for a 48V 2000W switching power supply, including inserting metal rods, connecting clamps, and tightening terminal screws. It provides visual guidance for safely connecting the power supply to a load.

4. OPERATING INSTRUCTIONS

4.1. Power On/Off

After all connections are secure and the input voltage switch is correctly set, move the ON/SET/OFF switch to the 'ON' position to power on the unit. To power off, move the switch to 'OFF'.

4.2. Adjusting Output Voltage and Current

The power supply features a digital display for real-time monitoring of output voltage and current. To adjust these values:

1. Move the ON/SET/OFF switch to the 'SET' position. The display will show the preset values.
2. Use the **V-ADJ** (Voltage Adjustment) potentiometer to set the desired output voltage (0-48V).
3. Use the **I-ADJ** (Current Adjustment) potentiometer to set the desired output current limit (0-42A).
4. Once adjustments are complete, move the switch to the 'ON' position. The display will now show the real-time output voltage and current delivered to your load.



Figure 4.2.1: Digital Display and Adjustment Controls. This image provides a close-up of the power supply's digital display, clearly showing the output voltage (48.0V) and current (42.0A). The V-ADJ and I-ADJ potentiometers, along with the ON/SET/OFF switch, are also visible for precise control.



Figure 4.2.2: Detailed View of Controls. A slightly different angle of the digital display and control knobs, emphasizing the user interface for setting and monitoring the power supply's output.

5. MAINTENANCE

- **Cleaning:** Regularly clean the exterior of the power supply with a soft, dry cloth. Do not use liquid cleaners or solvents.
- **Ventilation:** Ensure the cooling fan and ventilation openings are free from dust and obstructions to maintain optimal performance and prevent overheating.
- **Inspection:** Periodically check all wiring connections for tightness and signs of wear or damage.
- **Professional Service:** For any internal maintenance or repairs, contact qualified service personnel. Do not attempt to open the casing yourself.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
No power/Display off	• AC input not connected or loose. • Input voltage switch incorrect. • Internal fuse blown.	• Check AC power cord and connections. • Verify 110V/220V switch setting. • Contact service for fuse replacement.
No output voltage/current	• Output terminals loose or incorrect polarity. • ON/SET/OFF switch in 'SET' or 'OFF' position. • Overload/Overcurrent protection activated.	• Check DC output connections and polarity. • Ensure switch is in 'ON' position. • Reduce load or check for short circuit.
Unit overheats	• Poor ventilation. • Excessive load.	• Clear obstructions from fan/vents. • Reduce load to within specifications.

7. TECHNICAL SPECIFICATIONS

Feature	Specification
Model	48V-42A
Input Voltage	AC 110V~ 50/60Hz (Normal operating range: 100-130V~)
Output Voltage	Adjustable 0-48V
Output Current	Adjustable 0-42A
Output Wattage	2000W
Display	Digital Voltage & Current Display
Protection Features	Power on/off switch, Temperature Protection, Short Circuit Protection, Input Low Voltage Protection, Overload Protection, Overcurrent Protection
Cooling Method	Air Cooling (Integrated Fan)
Item Weight	5.39 pounds
Package Dimensions	13.74 x 5.63 x 3.07 inches
Applications	Motors, LEDs, Battery Charging/Activation, Heaters, Distribution Cabinets, Servo Drives, Maintenance Industry, Electronic DIY, Educational Use

8. WARRANTY AND SUPPORT

This WHSTELNI power supply comes with an **18-month warranty** from the date of purchase. If you encounter any issues with the product during this period, please contact the seller or manufacturer's customer support for assistance.

For technical support, troubleshooting, or warranty claims, please refer to the contact information provided with your purchase or visit the official WHSTELNI website.

Note: The warranty may be voided if the product is dismantled or modified by unauthorized personnel.

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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