

## Supermicro PWS-0054

# Supermicro 300W 1U Power Supply PWS-0054 User Manual

Model: PWS-0054

## 1. INTRODUCTION

---

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Supermicro 300W (SP302-1S) 1U Power Supply, model PWS-0054. Please read this manual thoroughly before attempting any installation or operation.

## 2. SAFETY INFORMATION

---

**WARNING: Risk of electric shock. Do not open the power supply unit. There are no user-serviceable parts inside. Refer all servicing to qualified service personnel.**

- Ensure the power supply is disconnected from the AC power source before installation or removal.
- This device is designed for use with personal computers and compatible systems.
- Do not operate the power supply in high humidity or extreme temperature environments.
- Ensure proper grounding to prevent electrical hazards.
- Use only the specified power cables and connectors.

## 3. PRODUCT OVERVIEW

---

The Supermicro PWS-0054 is a 300W 1U form factor power supply designed for server and workstation applications. It provides stable and reliable power to your system components. The unit features a cooling fan and standard ATX connectors for broad compatibility.



Image: Supermicro 300W 1U Power Supply PWS-0054. This image shows the power supply unit with its metal casing, cooling fan, AC input, and attached multi-colored power cables with various connectors.

## 4. SETUP AND INSTALLATION

---

Follow these steps to properly install your Supermicro PWS-0054 power supply:

1. **Preparation:** Ensure your computer system is completely powered off and disconnected from the AC power outlet. Open the computer case according to its manufacturer's instructions.
2. **Remove Old Power Supply (if applicable):** Disconnect all power cables from the motherboard, graphics card, drives, and other components. Unscrew and remove the old power supply from the chassis.
3. **Install New Power Supply:** Carefully place the Supermicro PWS-0054 into the power supply bay of your computer case. Align the screw holes and secure the power supply with the appropriate screws.
4. **Connect Power Cables:**
  - Connect the main 20+4 pin ATX power connector to the motherboard.
  - Connect the 4-pin or 8-pin CPU power connector to the motherboard.
  - Connect SATA power connectors to your hard drives, SSDs, and optical drives.
  - Connect PCIe power connectors (if available and needed) to your graphics card.
  - Connect Molex connectors to any other peripherals requiring power.
5. **Cable Management:** Route cables neatly to ensure proper airflow within the case.
6. **Close Case and Connect AC Power:** Close the computer case. Connect the AC power cord to the power supply and then to a grounded electrical outlet.

## 5. OPERATING INSTRUCTIONS

---

Once the Supermicro PWS-0054 power supply is correctly installed and connected, it will provide power to

your system upon startup. No specific user interaction is required for its operation beyond ensuring proper connections and a stable AC power source.

- Turn on your computer system using the power button on the case.
- The power supply will automatically regulate and deliver the necessary power to your components.
- Ensure adequate ventilation around your computer case to prevent overheating.

## 6. MAINTENANCE

---

The Supermicro PWS-0054 power supply is designed for minimal maintenance. However, periodic checks can help ensure its longevity and optimal performance:

- **Dust Removal:** Periodically clean dust from the power supply's fan and vents using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Cable Connections:** Occasionally check that all power cable connections are secure and have not come loose.
- **Environment:** Operate the power supply in a clean, dry, and well-ventilated environment.

## 7. TROUBLESHOOTING

---

If you encounter issues with your Supermicro PWS-0054 power supply, consider the following troubleshooting steps:

- **No Power:**
  - Check if the AC power cord is securely connected to both the power supply and the wall outlet.
  - Verify that the wall outlet is functional by plugging in another device.
  - Ensure the power switch on the back of the power supply (if present) is in the 'ON' position.
  - Confirm all internal power connectors (20+4 pin ATX, CPU, PCIe, SATA) are firmly seated.
- **System Instability/Random Shutdowns:**
  - This could indicate an overloaded power supply or a faulty unit. Ensure your system's power requirements do not exceed the 300W capacity.
  - Check for proper ventilation and ensure the power supply fan is operating.
  - If issues persist, consider testing with a different power supply if available, or consult a qualified technician.
- **Unusual Noises:**
  - A grinding or loud fan noise may indicate a failing fan. Clean the fan blades of any dust.
  - If the noise continues, the power supply may require replacement.

If these steps do not resolve the issue, contact Supermicro support or a qualified service professional.

## 8. SPECIFICATIONS

---

Feature	Specification
Brand	Supermicro
Model Name	PWS-0054

Output Wattage	300 Watts
Form Factor	1U
Connector Type	ATX
Compatible Devices	Personal Computer
Cooling Method	Air
Product Dimensions (L x W x H)	10 x 4 x 2 inches
Item Weight	2.5 pounds

## 9. WARRANTY AND SUPPORT

---

For warranty information and technical support, please refer to the official Supermicro website or contact your point of purchase. Keep your proof of purchase for warranty claims.

**Manufacturer:** Supermicro

**Date First Available:** August 2, 2011