

TEPU HU460AM-01

TEPU HU460AM-01 460W Power Supply User Manual

Model: HU460AM-01 | Brand: TEPU

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your TEPU HU460AM-01 460W Power Supply. Please read these instructions carefully before installation and operation. This power supply is designed for compatibility with various Dell XPS and Alienware Aurora R5 series desktop computers.

2. SAFETY INFORMATION

- Always disconnect power from the computer before installing or removing the power supply.
- Ensure proper grounding to prevent electrical shock.
- Do not open the power supply unit; there are no user-serviceable parts inside. Opening the unit voids the warranty and poses a risk of electric shock.
- Avoid exposing the power supply to moisture or extreme temperatures.
- Handle with care to prevent damage to components and connectors.

3. PRODUCT OVERVIEW

3.1 Key Features

- **460W Output:** Provides stable and reliable power for your system.
- **Temperature-Controlled Silent Fan:** Features a 9cm fan that automatically adjusts speed based on CPU temperature, ensuring quiet operation.
- **Durable Construction:** Built with electroplated material for enhanced longevity.
- **Wide Compatibility:** Designed for various Dell XPS and Alienware Aurora R5, R6, R7 models.

3.2 Components and Connectors

The TEPU HU460AM-01 power supply includes a variety of connectors to support your computer's components. Refer to

the image below for a visual guide to the main connectors.

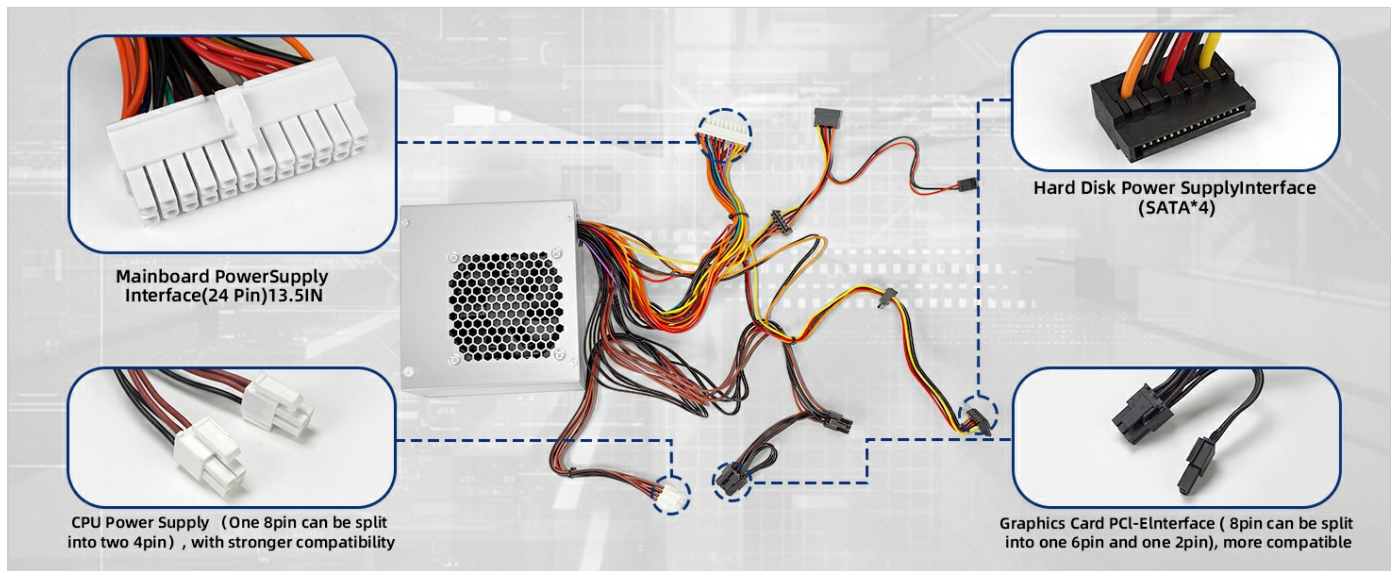


Figure 1: Overview of TEPU HU460AM-01 Power Supply Connectors.

- **Mainboard Power Supply Interface (24-Pin):** Connects to the motherboard. Cable length is approximately 13.5 inches.
- **CPU Power Supply (8-Pin):** Can be split into two 4-pin connectors for broader compatibility.
- **Graphics Card PCI-E Interface (8-Pin):** Can be split into one 6-pin and one 2-pin connector for various graphics card requirements.
- **Hard Disk Power Supply Interface (SATA*4):** Four SATA power connectors for storage devices.

4. INSTALLATION GUIDE

Follow these steps to install the TEPU HU460AM-01 Power Supply into your compatible Dell or Alienware desktop computer.

4.1 Before You Begin

1. **Power Off:** Shut down your computer completely and disconnect the power cord from the wall outlet.
2. **Open Case:** Open your computer case according to its manufacturer's instructions.
3. **Grounding:** Touch a metal part of the computer chassis to discharge any static electricity.

4.2 Removing the Old Power Supply

1. **Disconnect Cables:** Carefully disconnect all power cables from the motherboard, graphics card, hard drives, optical drives, and any other components. Note their connections for reinstallation.
2. **Unscrew PSU:** Locate and remove the screws securing the old power supply to the computer chassis.
3. **Remove PSU:** Gently slide the old power supply out of the case.

4.3 Installing the New Power Supply

1. **Insert New PSU:** Slide the TEPU HU460AM-01 power supply into the designated bay in your computer case.
2. **Secure PSU:** Secure the new power supply with screws to the computer chassis.
3. **Connect Cables:** Connect the power cables to your components:

- Connect the 24-pin mainboard connector to the motherboard.
- Connect the 8-pin CPU connector (or two 4-pin connectors) to the CPU power socket on the motherboard.
- Connect the 8-pin PCI-E connector (or 6+2 pin configuration) to your graphics card, if applicable.
- Connect the SATA power connectors to your hard drives, SSDs, and optical drives.

4. **Cable Management:** Organize cables to ensure proper airflow within the case.
5. **Close Case:** Close your computer case and secure it.
6. **Power On:** Reconnect the power cord to the wall outlet and power on your computer.

For a visual guide on the installation process, please refer to the video below:

Your browser does not support the video tag.

Video 1: Unboxing and Installation Guide for TEPU HU460AM-01 Power Supply.

5. OPERATING INSTRUCTIONS

The TEPU HU460AM-01 Power Supply operates automatically once installed correctly. It provides consistent power to your system components.

- **Power On/Off:** The power supply will power on and off with your computer system.
- **Fan Operation:** The integrated 9cm fan will activate and adjust its speed based on the internal temperature of the power supply and CPU load to maintain optimal cooling and quiet operation.
- **Power Output:** The unit delivers a maximum of 460W, distributed across various voltage rails as detailed in the specifications section.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your power supply.

- **Dust Removal:** Periodically clean dust from the power supply's fan and vents using compressed air. Ensure the computer is powered off and unplugged before cleaning.
- **Environmental Conditions:** Operate the power supply in a well-ventilated area, free from excessive dust, humidity, and extreme temperatures.
- **Cable Inspection:** Occasionally check all power cable connections to ensure they are secure and free from damage.

7. TROUBLESHOOTING

If you encounter issues with your power supply, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Computer does not power on.	Power cord not connected, power switch off, loose internal connections, faulty component.	Check power cord connection. Ensure PSU switch is ON. Verify all internal power cables are securely connected. Test with a known good power outlet.

Problem	Possible Cause	Solution
System powers on but shuts down unexpectedly.	Overheating, insufficient power, faulty components.	Ensure proper ventilation and clear dust from vents. Verify power supply wattage meets system requirements. Check for other failing components.
Loud fan noise from PSU.	Excessive dust, fan malfunction, high system load.	Clean fan and vents. If noise persists and is unusual, contact support. Note that fan speed increases with system load.
Peripherals (e.g., hard drive) not detected.	Loose power connection to peripheral.	Ensure the SATA power cable is firmly connected to the device.

If the problem persists after attempting these solutions, please contact TEPU customer support for further assistance.

8. SPECIFICATIONS

Detailed technical specifications for the TEPU HU460AM-01 460W Power Supply.

HU460AM-01 460W Power Supply Parameters



Model	AC Input					
	Voltage	Frequency	Current			
HU460AM-01	100V-240V	50-60HZ	8A			
DC Output						
+3.3V	+5V	+12VC	+12VB	+12VA	+5Vaux	Rated Power
17A	25A	8A	16A	18A	3.0A	460W
+5V AND +3.3V SHALL NOT EXCEED 142W +12VA, +12VB AND +12VC SHALL NOT EXCEED 385W						

Figure 2: AC Input and DC Output Parameters.

General Specifications	
Model Name	HU460AM-01
Brand	TEPU
Output Wattage	460 Watts (Maximum)
Input Voltage	100-240V~5A, 50/60Hz
Form Factor	ATX
Cooling Method	9cm Temperature-Controlled Silent Fan
Power Supply Design	Non-Modular
Current Rating	25 Amps

General Specifications	
Dimensions (L x W x H)	5.51 x 5.9 x 3.39 inches
Weight	2.8 Pounds



Figure 3: Physical Dimensions and Weight.

8.1 Output Details

- +12VA: 18.0A
- +12VB: 16.0A
- +12VC: 8.0A
- +3.3V: 17A
- +5V: 25A
- +5V aux: 3.0A

- Combined Power (+5V and +3.3V): Shall not exceed 142W
- Combined Power (+12VA, +12VB, and +12VC): Shall not exceed 385W

9. COMPATIBILITY

The TEPU HU460AM-01 460W Power Supply is compatible with a range of Dell desktop models. Please verify your system's requirements before installation.

Compatible with DELL XPS and T series

DELL XPS Series

8000 8100 8300 8500 8700
8900 8910 8920 8930

T Series

R5 R6 R7

Figure 4: Compatible Dell XPS and T Series Models.

9.1 Compatible Dell XPS Series

- Dell XPS 8930
- Dell XPS 8920
- Dell XPS 8910
- Dell XPS 8900

- Dell XPS 8700
- Dell XPS 8500
- Dell XPS 8300
- Dell XPS 8100
- Dell XPS 8000

9.2 Compatible Alienware Aurora Series

- Alienware Aurora R5
- Alienware Aurora R6
- Alienware Aurora R7

9.3 Compatible Dell Power Supply Part Numbers

This power supply is a compatible replacement for the following Dell power supply models and part numbers:

Compatible with DELL and Alienware
Model Number & PN#

COMPATIBLE MODEL NUMBER			
AC460AM-01	HU460AD-01	H460EGM-01	D460AM-02
AC460AM-00	H460AD-00	DPS-460DBA	D460AM-03
AC460AD-00	HU460AM-01	D460AM-01	L350AM-00

COMPATIBLE PART NUMBER					
DM1RW	7P3WV	7YC7C	15D8R	WY7XX	GJXN1
WC1T4	1KG21	PC9004	CN-0WC1T4	FVGCW	

Figure 5: Compatible Model and Part Numbers.

- AC460AM-01, AC460AM-00, AC460AD-00
- HU460AD-01, H460AD-00, HU460AM-01, H460EGM-01
- DPS-460DBA, D460AM-01, D460AM-02, D460AM-03
- L350AM-00, DM1RW, WC1T4, 7P3WV, 1KG21
- 7YC7C, PC9004, 15D8R, CN-0WC1T4, WY7XX, FVGCW, GJXN1

10. WARRANTY AND SUPPORT

TEPU is committed to providing high-quality products and excellent customer service. If you encounter any quality issues with your HU460AM-01 power supply during use, we offer support for replacement or refund requests. Your satisfaction is our priority. For any questions or assistance, please contact TEPU customer support.

