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› Cooler Master MWE 650 Gold Power Supply User Manual

Cooler Master 650 V1 MWE Gold (MPY-6501-AFAAG-US)

Cooler Master MWE 650 Gold Full Modular Power Supply User Manual

Model: 650 V1 MWE Gold (MPY-6501-AFAAG-US)

Brand: Cooler Master

1. INTRODUCTION AND OVERVIEW

The Cooler Master MWE 650 Gold is a highly efficient, fully modular power supply designed to provide stable and reliable power for your computer system. It features an 80 Plus Gold certification, ensuring a minimum of 90% efficiency under typical loads. This power supply is engineered for quiet operation and durability, utilizing high-quality, heat-resistant components and a Silencio fan with LDB bearings.

Key Features:

- **Full Modular Flat Cables:** Simplifies installation, reduces cable clutter, and enhances airflow within the PC case.
- **80 Plus Gold Certified:** Guarantees a minimum typical efficiency of 90%, leading to less heat generation and lower energy consumption.
- **Durable and Silent LDB Bearing:** Incorporates Silencio technology with sealed LDB bearings and quiet fan blades for long-lasting, quiet cooling performance.
- **Proven Thermal Resistance:** Designed to operate at full performance in temperatures up to 45°C, ensuring reliability in various environmental conditions.
- **High Efficiency and Stable Output:** Features a full-bridge design coupled with LLC, synchronous, and DC to DC topology technologies for consistent and stable voltage outputs.

2. PACKAGE CONTENTS

Verify that all items are present in the package before proceeding with installation.

- Cooler Master MWE 650 Gold Power Supply Unit
- Modular Cable Set (including ATX 24-pin, CPU 4+4-pin, PCIe 6+2-pin, SATA, and Peripheral cables)

- AC Power Cord
- Mounting Screws



The Cooler Master MWE 650 Gold power supply unit, shown alongside its retail packaging, highlighting its modular design and 80 Plus Gold certification.



A comprehensive display of all the modular cables provided with the power supply, including main ATX, CPU, PCIe, SATA, and peripheral connectors, designed for flexible system building.

3. SETUP INSTRUCTIONS

Pre-Installation Checklist:

- Ensure your computer case is compatible with ATX power supplies.
- Gather necessary tools: Phillips head screwdriver.
- Unplug your computer from the wall outlet and discharge any residual power by pressing the power button several times.
- Work in a well-lit, static-free environment. Consider using an anti-static wrist strap.

Installation Steps:

1. **Mount the Power Supply:** Carefully slide the MWE 650 Gold into the power supply bay of your computer case. Ensure the fan is facing the correct direction (typically downwards if your case has a bottom vent, or upwards if it's a top-mounted PSU). Secure it with the provided mounting screws.



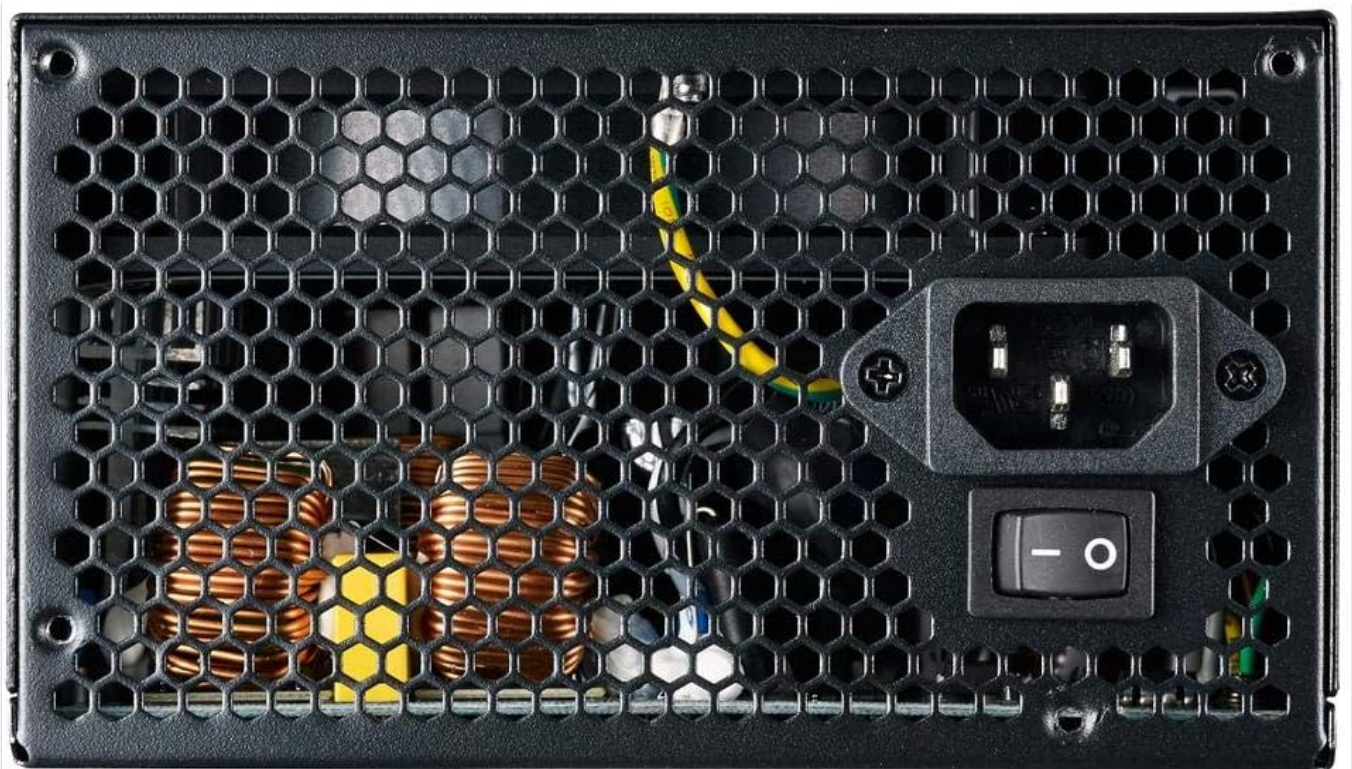
A top-down view of the power supply, featuring the large cooling fan with its protective grille and the Cooler Master brand emblem at its center.

2. **Connect Modular Cables:** Identify the necessary cables for your components (motherboard, CPU, graphics card, storage drives). Connect one end of each required modular cable to the corresponding port on the power supply. The ports are clearly labeled (e.g., ATX 18P, ATX 10P, CPU/PCI-E, IDE/SATA).



This view highlights the fully modular design of the power supply, with clearly labeled ports for various cables such as ATX, CPU/PCI-E, and IDE/SATA.

3. **Connect to Components:** Route the cables neatly through your case and connect the other end of each cable to the respective component (e.g., 24-pin ATX to motherboard, 8-pin CPU to motherboard, 6+2-pin PCIe to graphics card, SATA to SSD/HDD).
4. **Connect AC Power Cord:** Plug the AC power cord into the power supply's input socket. Ensure the power switch on the back of the PSU is in the 'O' (off) position.



The rear panel of the power supply, displaying the AC power input socket and the main power on/off switch, along with a honeycomb ventilation pattern.

5. **Final Check:** Double-check all connections to ensure they are secure. Close your computer case.

4. OPERATION

After successful installation, connect the AC power cord from the power supply to a wall outlet. Flip the power switch on the back of the power supply to the 'I' (on) position. You can then power on your computer using the case's power button. The MWE 650 Gold is designed for continuous operation within its specified wattage and temperature limits.

5. MAINTENANCE

Proper maintenance ensures 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.
- **Cable Management:** Maintain good cable management within your PC case to ensure proper airflow and prevent overheating of components, including the PSU.
- **Environmental Conditions:** Operate the power supply in a well-ventilated area, away from direct sunlight, excessive heat, or moisture.

6. TROUBLESHOOTING

If you encounter issues with your power supply, consider the following common troubleshooting steps:

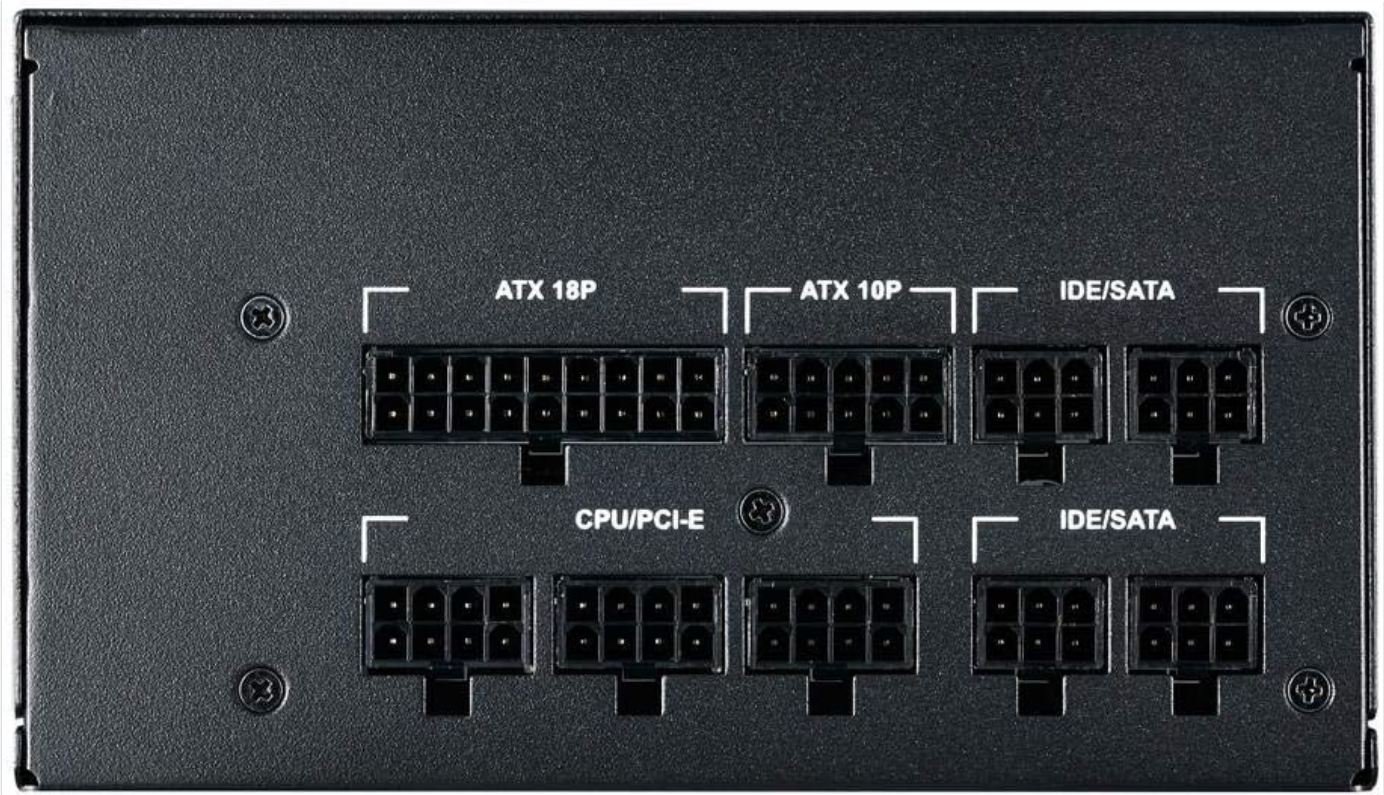
- **No Power:** Ensure the AC power cord is securely plugged into both the PSU and the wall outlet. Check that the power switch on the PSU is in the 'I' (on) position. Verify the wall outlet is functional.
- **System Instability/Crashes:** This could indicate insufficient power or a faulty component. Ensure all power cables are securely connected to your components. If issues persist, consult a professional.
- **Unusual Noises:** A rattling or grinding noise may indicate a fan issue. Disconnect power and inspect the fan for obstructions.

For more detailed troubleshooting, please refer to the official [Troubleshooting Guide \(PDF\)](#).

7. TECHNICAL SPECIFICATIONS

Feature	Specification
Brand	Cooler Master
Model Number	MPY-6501-AFAAG-US
Output Wattage	650 Watts
80 PLUS Certification	Gold

Feature	Specification
Form Factor	ATX
Cooling Method	Air
Item Dimensions (LxWxH)	5.91 x 6.3 x 3.39 inches
Item Weight	4.87 pounds (2210 Grams)
Date First Available	October 16, 2018



A close-up of the power supply's technical label, detailing input/output voltages, amperages, total power output (650W), and 80 Plus Gold certification.

8. WARRANTY AND SUPPORT

The Cooler Master MWE 650 Gold Power Supply comes with a **5-year warranty** from the date of purchase, covering defects in materials and workmanship under normal use. For warranty claims, technical support, or further assistance, please visit the official Cooler Master support website or contact their customer service.

For additional resources, you may refer to the official [User Guide \(PDF\)](#) and [Instructions for Use \(IFU\) \(PDF\)](#).

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

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