Cooler Master MPE-A501-AFCAG-3US

Cooler Master MWE Gold 1050 V2 ATX3.0 Power Supply User Manual

Model: MPE-A501-AFCAG-3US

Introduction

The Cooler Master MWE Gold 1050 V2 ATX3.0 power supply is designed to deliver optimal performance for modern PC configurations. It features 80 PLUS Gold efficiency, fully modular cabling, and a quiet 140mm FDB fan, ensuring high efficiency and reliability for an enhanced PC experience.

Key Features:

- Fully support ATX3.0 with 600W 12VHPWR connectors.
- 80 PLUS Gold certification for a minimum efficiency of 90%.
- 140mm Two Ball Bearing Fan for effective and quiet cooling.
- 100% Japanese Capacitors for increased efficiency and reduced ripple noise.
- Fully Modular flat black cables for reduced clutter and improved airflow.

Setup and Installation

Proper installation of your power supply unit (PSU) is crucial for system stability and safety. Please follow these guidelines carefully.

Unboxing and Components:

Image: Cooler Master MWE Gold 1050 V2 ATX3.0 Power Supply and its packaging.

The package includes the MWE Gold 1050 V2 PSU, a power cable, mounting screws, and a set of fully modular flat black cables. These cables include ATX 24-pin, EPS (4+4) pin, EPS 8-pin, SATA, Peripheral 4-pin, and PCIe (6+2) pin connectors.

ATX 3.0 and Cable Connectivity:

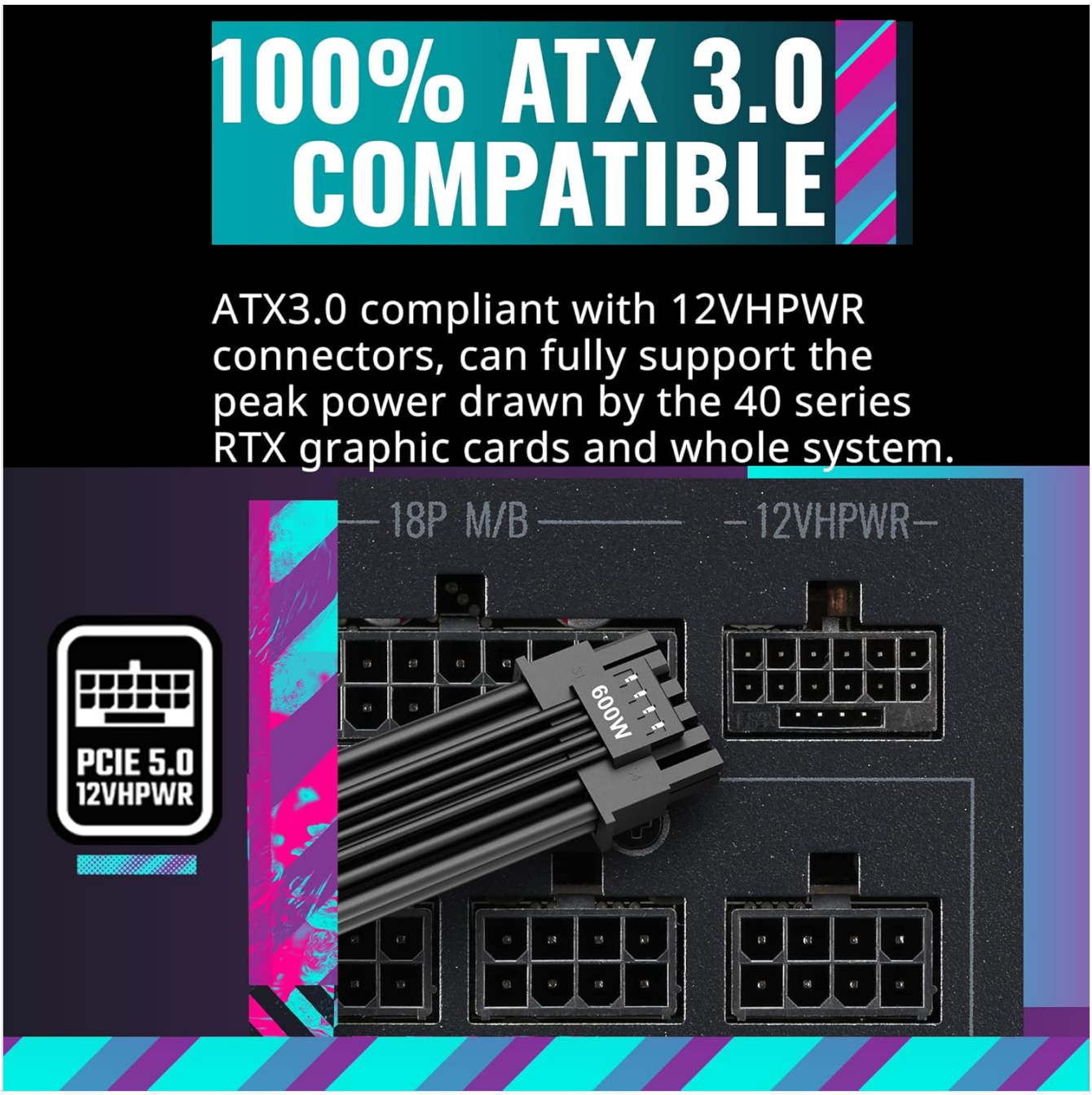

Image: Close-up of the 12VHPWR connector on the PSU, highlighting ATX 3.0 compatibility.

The MWE Gold 1050 V2 fully supports ATX3.0 with a dedicated 12VHPWR connector and a compact 12+4 pin cable, capable of delivering up to 600W of power to a GPU via a single cable. The thicker 16 AWG PCI-e cables ensure higher currents, less heat resistance, and improved overall efficiency for stable system operation.

Image: Diagram illustrating the various modular cables and their respective lengths.

The fully modular design allows you to connect only the cables your system requires, reducing cable clutter, increasing airflow within your PC case, and improving overall thermal performance.

Operation

The MWE Gold 1050 V2 is designed for efficient and reliable operation, even under demanding conditions.

Efficiency and Cooling:

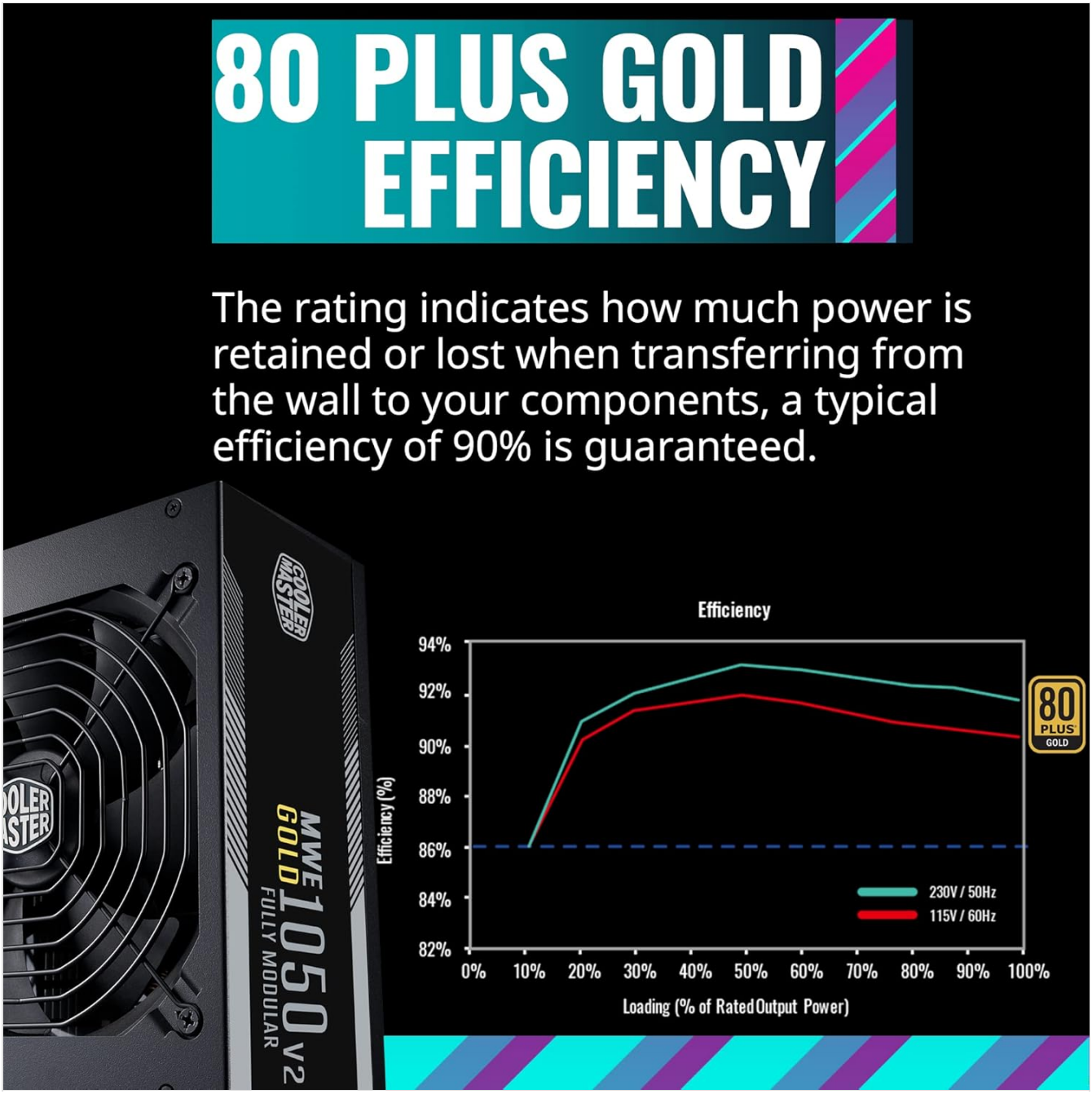

Image: 80 PLUS Gold certification logo, indicating high power efficiency.

The 80 PLUS Gold certification guarantees a minimum efficiency of 90%, meaning less power is wasted as heat and more is delivered to your components. The 140mm Two Ball Bearing Fan features Smart Thermal Control System (STCM), which means the fan will not spin until 40% of the output power is reached, ensuring quiet operation during low loads.

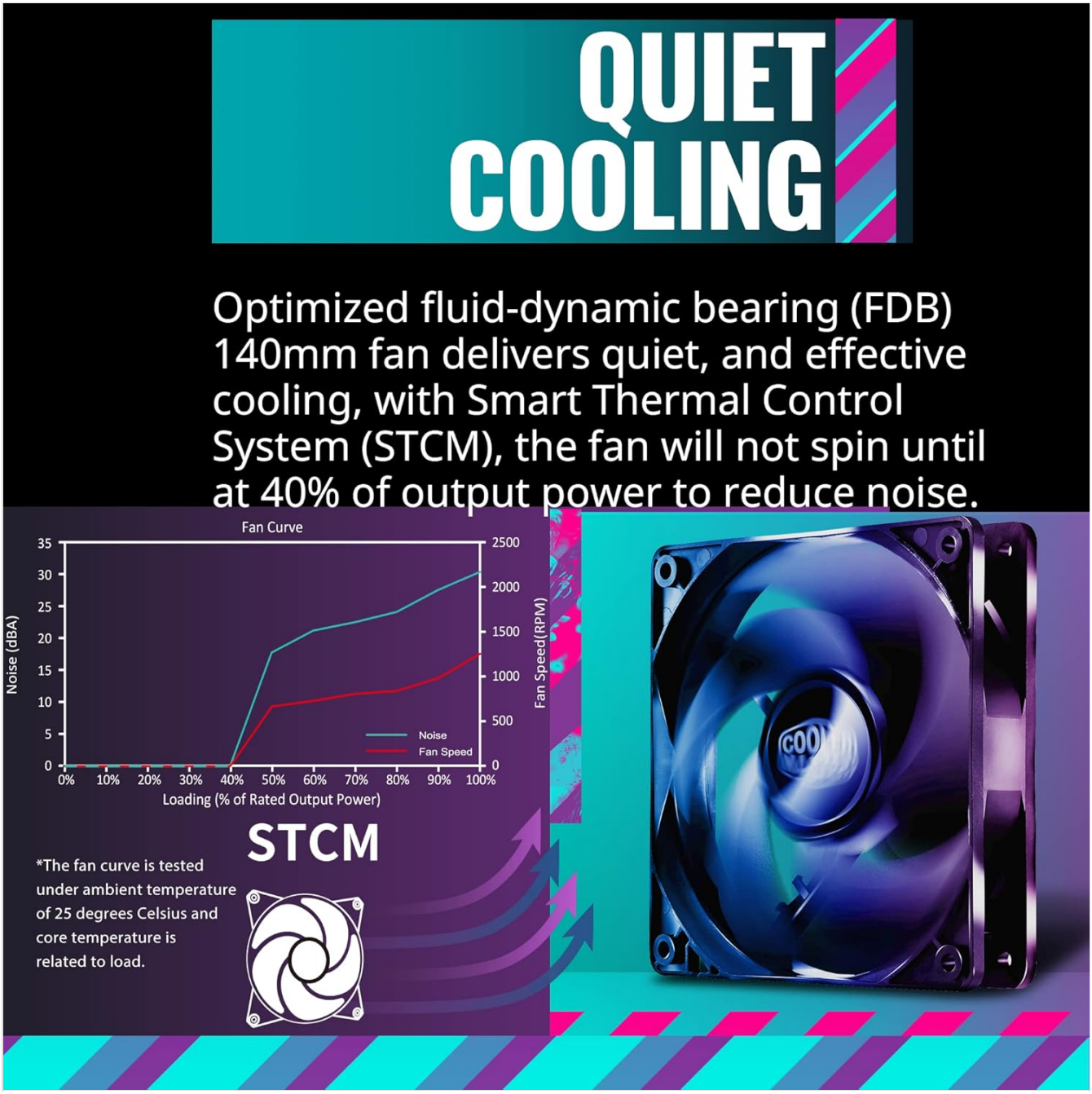

Image: Diagram illustrating the PSU's temperature resilience, operating safely up to 50 degrees Celsius ambient.

The industrial-grade temperature resilience allows the PSU to operate safely at up to 50 degrees Celsius ambient, making it suitable for high-end computers, overclocking, and other high-intensity applications.

Maintenance

To ensure the longevity and optimal performance of your Cooler Master MWE Gold 1050 V2 power supply, regular maintenance is recommended.

- Keep the PSU and surrounding area clean and free of dust. Use compressed air to gently clear dust from the fan grille and vents periodically.
- Ensure proper airflow within your PC case. Avoid blocking the PSU's intake or exhaust vents.
- Periodically check all cable connections to ensure they are secure.

Troubleshooting

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

- **No Power:** Ensure the power cable is securely plugged into both the PSU and the wall outlet. Check the power switch on the back of the PSU to ensure it is in the 'On' position.
- **System Instability:** Verify all modular cables are correctly seated into the PSU and connected to your components (motherboard, GPU, drives). Ensure your system's power requirements do not exceed the PSU's capacity.
- **Fan Not Spinning:** As per the STCM feature, the fan will only activate when the PSU reaches approximately 40% load. This is normal behavior and not an indication of a fault.
- **Unusual Noises:** If you hear unusual noises, ensure no cables are obstructing the fan. If the noise persists, contact Cooler Master support.

Specifications

Feature	Detail
Brand	Cooler Master
Series	MWE Gold 1050
Model Number	MPE-A501-AFCAG-3US
Form Factor	ATX
Wattage	1050W (600W Output Wattage for 12VHPWR)
Efficiency Certification	80 PLUS Gold
Fan Size	140mm
Cooling Method	Air
Capacitors	100% Japanese Capacitors
Modular	Fully Modular
Dimensions (LxWxH)	7.09 x 5.91 x 3.39 inches
Item Weight	8.12 pounds (3.69 Kilograms)
Country of Origin	China
Date First Available	February 14, 2023

Warranty and Support

The Cooler Master MWE Gold 1050 V2 ATX3.0 Power Supply comes with a 5-year warranty, ensuring long-term reliability and peace of mind. For technical support, troubleshooting assistance, or warranty claims, please visit the official Cooler Master support website or contact their customer service.
The use of 100% Japanese capacitors further enhances the product's durability and stability, contributing to its long operational lifespan.