



Manuals.plus /

- › **Cooler Master** /
- › Cooler Master V750 SFX Gold Power Supply User Manual

## Cooler Master MPY-7501-SFHAGV-3U1

# Cooler Master V750 SFX Gold Power Supply User Manual

Model: MPY-7501-SFHAGV

## INTRODUCTION

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The Cooler Master V SFX Gold power supply delivers high-performance power in a compact SFX form factor, ideal for mini-ITX builds. It features 80 Plus Gold efficiency, full-modular cabling, a Fluid Dynamic Bearing (FDB) fan, and 16AWG PCIe high-efficiency cables. This unit is designed for reliable and efficient power delivery to your PC components.

## PRODUCT OVERVIEW

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The V750 SFX Gold power supply is engineered for optimal performance and compatibility with various PC builds, especially those requiring a smaller footprint.



Figure 1: Front view of the Cooler Master V750 SFX Gold power supply, highlighting its modular cable connections.

# MIGHTY ITX DESIGN

As the leading SFX PSU, the V SFX Gold delivers high-performance power in a mini design, perfect sized for mini-ITX builds.

**ATX**



**SFX**



Figure 2: Size comparison illustrating the compact "Mighty ITX Design" of the SFX power supply compared to a standard ATX power supply.





Figure 3: Close-up view of the fully modular connection ports on the power supply, labeled for different cable types (M/B, PCIe/CPU, HDD/SATA).



Figure 4: Rear panel of the power supply, showing the main power input, on/off switch, and ventilation.

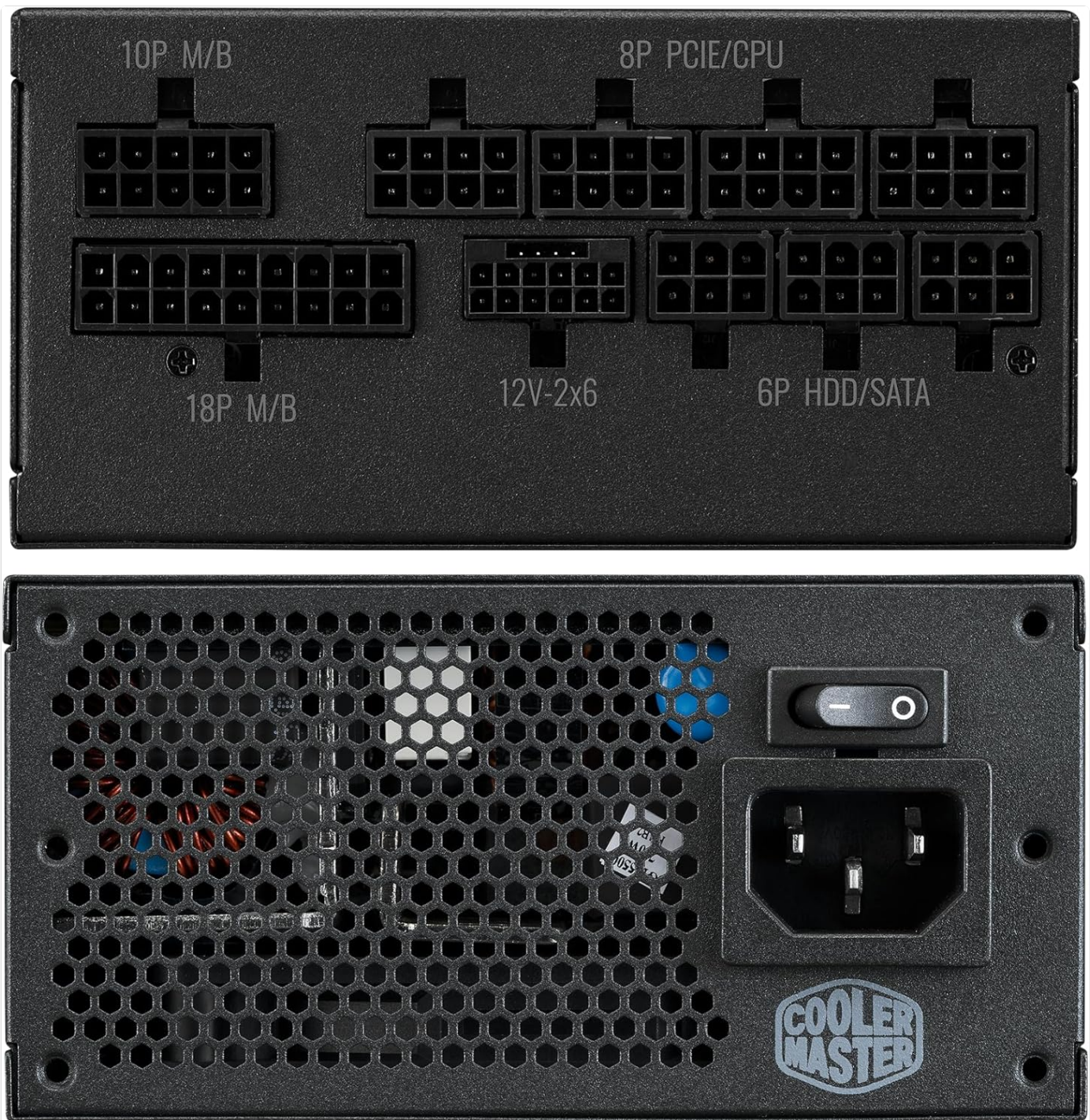


Figure 5: Exploded diagram illustrating the internal components, including the fan, casing, and circuit board.

## SETUP AND INSTALLATION

Follow these steps to properly install your Cooler Master V750 SFX Gold power supply into your system.

### 1. Mounting the Power Supply

The V SFX Gold is designed to fit perfectly in mini-ITX cases. Use the included bracket for compatibility with various system sizes. Secure the power supply in the designated PSU bay of your PC case using the provided screws.

### 2. Connecting Cables

This power supply features a fully modular design, allowing you to connect only the cables you need, reducing clutter and improving airflow. Identify the necessary cables for your motherboard, CPU, GPU, and storage devices.

- **MB 24-pin:** Connects to the main motherboard power port.

- **CPU 4+4 pin / CPU 8 pin:** Connects to the CPU power port on the motherboard.
- **PCI-e 6+2 pin:** For graphics cards requiring PCIe power.
- **12V-2x6 (12VHPWR):** Specifically for modern high-power GPUs, delivering up to 450W. This cable features a 90° connector for improved durability and safety.
- **Peripheral 4 pin:** For older peripherals or fan controllers.
- **SATA 15 pin:** For SATA hard drives, SSDs, and optical drives.

# CUSTOMIZED CABLE LENGTH

Customized cables with the latest **ATX 3.1** connector reduce clutter; **extended cables** may be needed for **larger cases**.

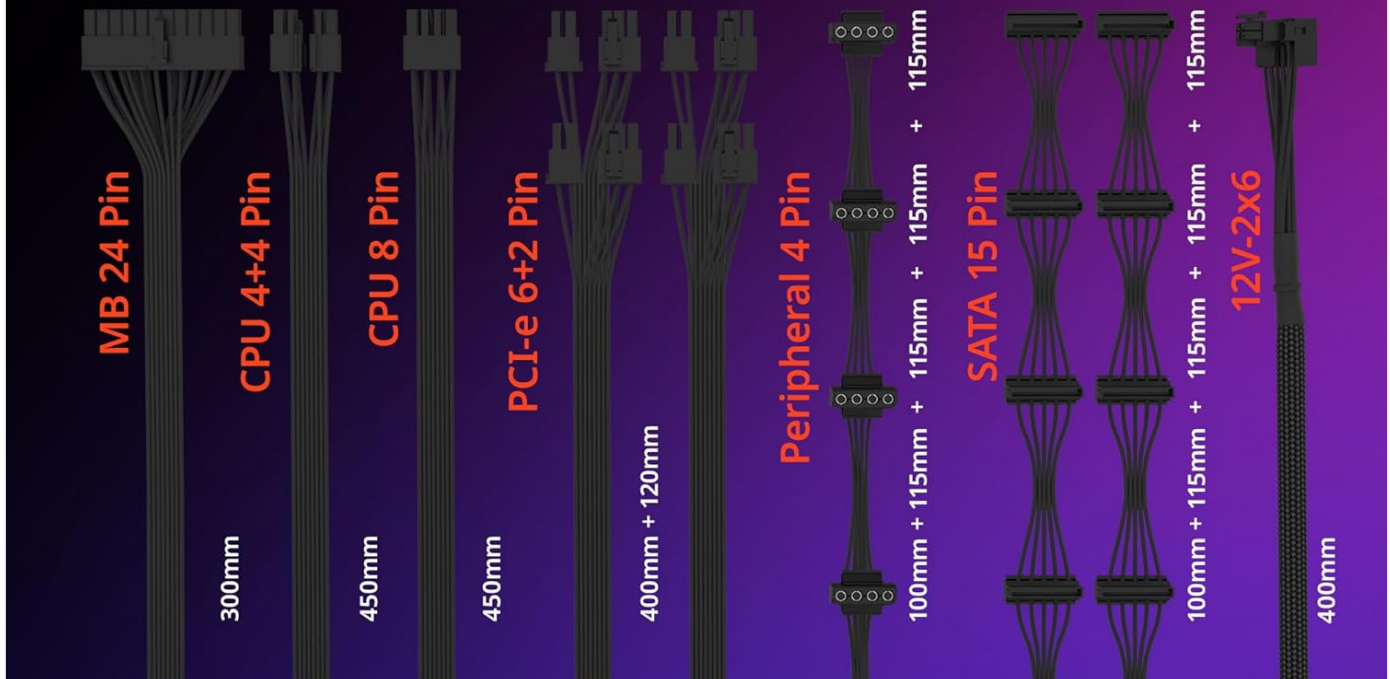


Figure 6: Overview of the customized cable lengths provided with the power supply, designed to reduce clutter in compact cases.

# 90° DURABLE CABLES

Featuring a 90° 12V-2x6 PCIe 5.1 connector, for improved electrical durability and safety.

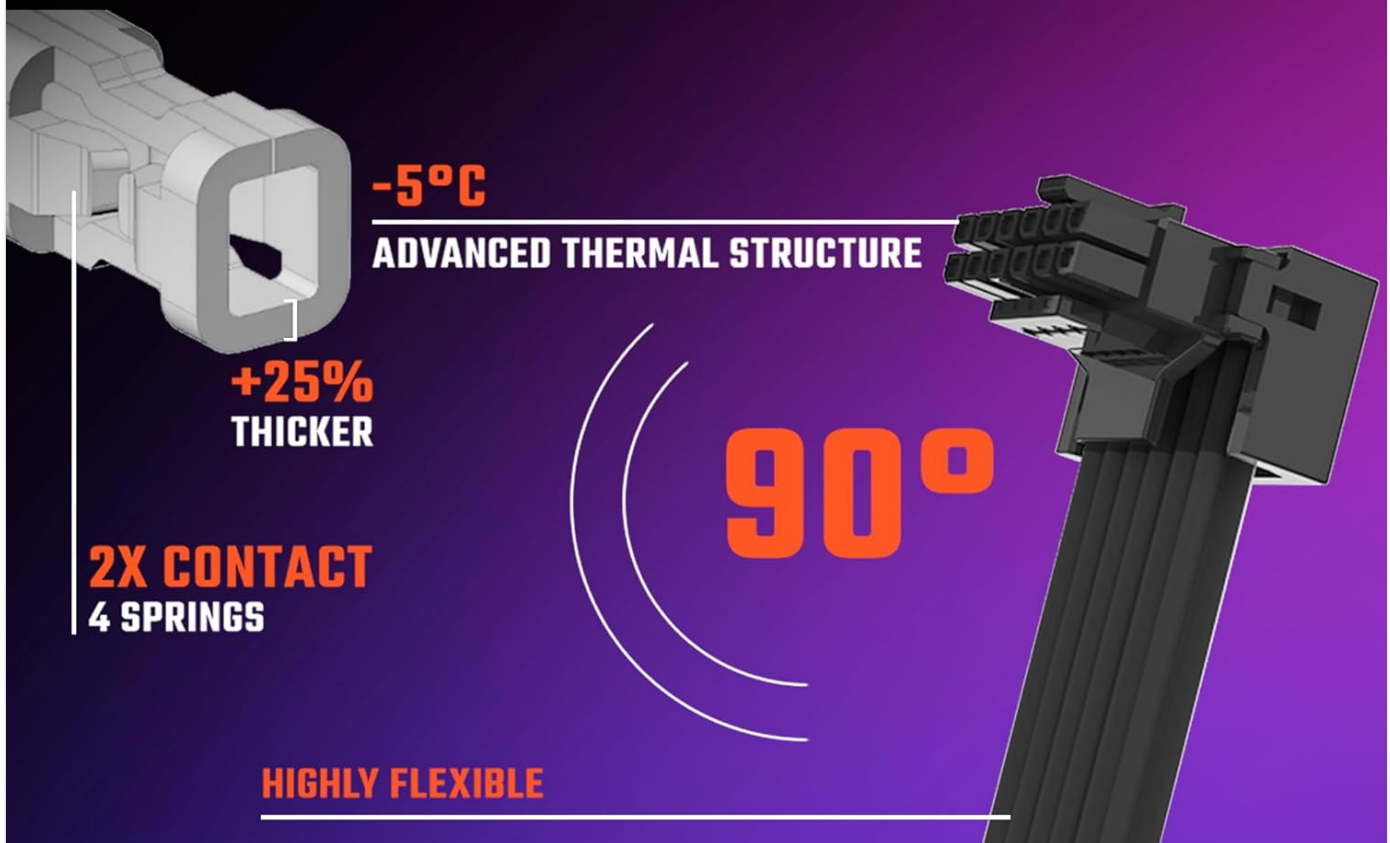


Figure 7: Detail of the 90° 12VHPWR PCIe 5.1 connector, designed for enhanced durability and thermal performance.

# ATX 3.1 CABLES

The **ATX 3.1** delivers up to **450W** power to your GPU.



Figure 8: The power supply with the ATX 3.1 12VHPWR cable connected, ready to deliver up to 450W to a GPU.

### 3. Powering On

Once all connections are secure, connect the main power cord to the power supply and a wall outlet. Flip the power switch on the back of the power supply to the 'ON' position. Your system is now ready to be powered on.

### OPERATING PRINCIPLES

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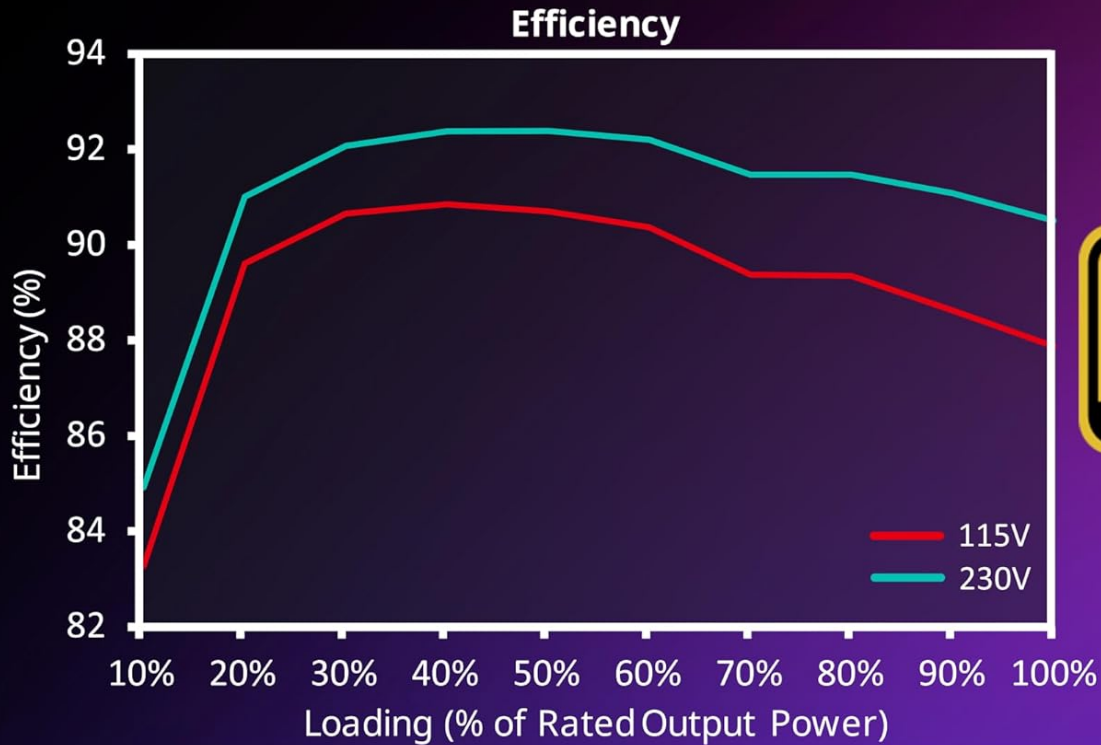
The Cooler Master V750 SFX Gold operates with high efficiency and advanced thermal management to ensure stable and reliable power delivery.

### 80 Plus Gold Efficiency

This power supply is 80 Plus Gold certified, meaning it achieves 90% efficiency at typical loads (50% load at 230V). This high efficiency minimizes wasted energy as heat, leading to lower operating temperatures and reduced electricity bills.

# 80+ GOLD EFFICIENCY

With **Gold-level** performance at **90% efficiency**, it ensures effective power transfer from the wall to your components.



The Eff. curve is tested under ambient temperature of 25 degrees C.

Figure 9: Graph illustrating the 80 Plus Gold efficiency curve, showing performance at different load percentages for 115V and 230V inputs.

## Japanese Capacitors

The V750 SFX Gold utilizes high-quality 100% Japanese capacitors, which contribute to improved efficiency and reduced ripple noise, ensuring stable and clean power output.

# JAPANESE CAPACITORS

High-quality **100% Japanese capacitors**, we improve efficiency and **reduce ripple noise**.

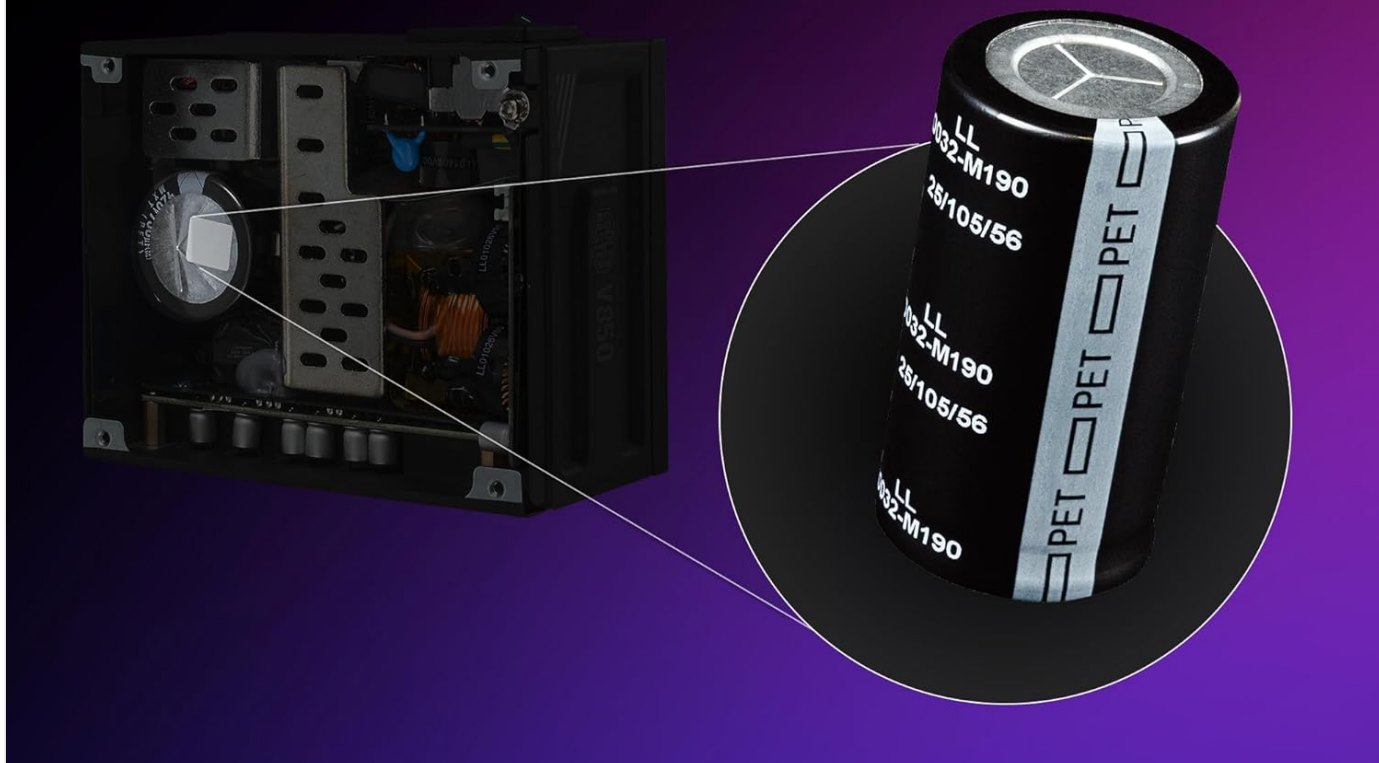


Figure 10: Illustration highlighting the high-quality Japanese capacitors used in the power supply for enhanced reliability.

## High Power Density

With a power density of 15.5W/IN<sup>3</sup>, the V750 SFX Gold offers significant power output in a small volume, making it highly efficient for compact builds.

# HIGH POWER DENSITY

With **160% more power density** than the MWE 750 V3, it's among the **industry's highest**.

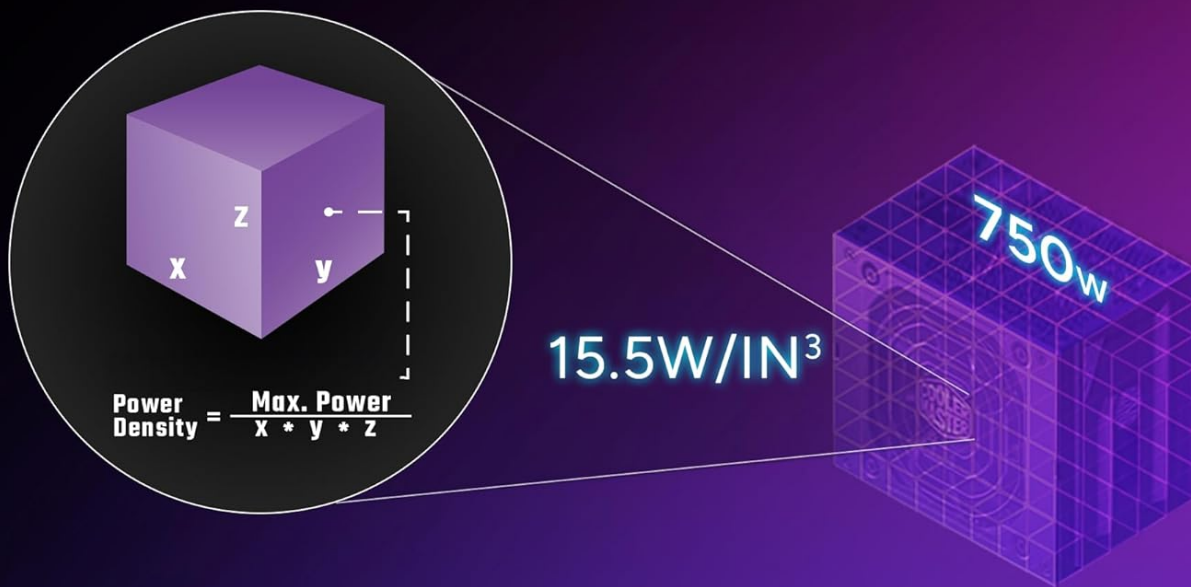


Figure 11: Diagram illustrating the high power density of the V750 SFX Gold, showing 15.5W/IN<sup>3</sup>.

## MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your power supply.

### Fluid Dynamic Bearing (FDB) Fan

The 92mm FDB fan provides reliable and efficient cooling with a self-lubricating design, requiring minimal maintenance. Keep the fan intake and exhaust areas clear of dust and obstructions to ensure proper airflow.

# FLUID DYNAMIC BEARING (FDB) FAN

The 92mm fan offers reliable, efficient cooling with a self-lubricating, low-maintenance design.

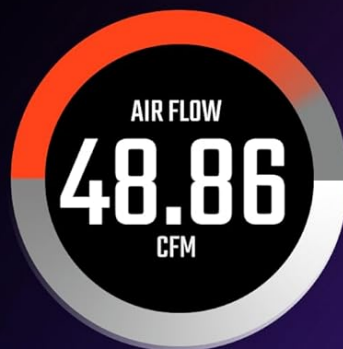


Figure 12: Specifications of the 92mm Fluid Dynamic Bearing fan, including speed, airflow, and noise level.

## Cleaning

Periodically clean the exterior of the power supply and the fan grille using a soft, dry cloth. For internal cleaning, it is recommended to use compressed air to remove dust from the heatsinks and fan blades. Always disconnect the power supply from the wall outlet and your system before cleaning.

## TROUBLESHOOTING

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

- **No Power:** Ensure all cables are securely connected, including the main power cord to the wall outlet and the power supply. Check the power switch on the back of the PSU is in the 'ON' position.
- **System Instability:** Verify that your power supply wattage is sufficient for all your components. Ensure all modular cables are fully seated into both the power supply and the respective components.
- **Unusual Noises:** Check for any loose screws or components inside your PC case. If the fan is making excessive noise, ensure it is free from obstructions.

- **Overheating:** Ensure adequate airflow within your PC case. Check that the power supply's fan is spinning freely and not obstructed.

If problems persist after basic troubleshooting, consult the Cooler Master support website or contact their customer service for further assistance.

## SPECIFICATIONS

Feature	Detail
Brand	Cooler Master
Series	V750 SFX Gold
Model Number	MPY-7501-SFHAGV-3U1
Item Weight	3.13 pounds
Product Dimensions (LxWxH)	3.94 x 4.92 x 2.5 inches
Color	Black Edition
Voltage	120 Volts
Output Wattage	700 Watts
Form Factor	SFX
Cooling Method	Air
Efficiency Certification	80 Plus Gold
Modular	Full Modular
Fan Type	Fluid Dynamic Bearing (FDB)
PCIe Connector	90° 12VHPWR PCIe 5.1 (450W)

## WARRANTY AND SUPPORT

Cooler Master provides a 10-year warranty for the V750 SFX Gold power supply, ensuring long-term reliability and peace of mind. For detailed warranty terms and conditions, please refer to the official Cooler Master website or the included warranty card.

For technical support, product registration, or to download the latest drivers and software, please visit the official Cooler Master support page. You can also find additional resources and FAQs on their [Amazon Store](#).

Protection plans are also available for extended coverage:

- 3-Year Protection Plan
- 4-Year Protection Plan
- Complete Protect (monthly plan covering eligible purchases)

For the official user manual in PDF format, please refer to [this link](#).

