

MSI MPG A850G PCIE 5

MSI MPG A850G 850W Power Supply User Manual

Model: MPG A850G PCIE 5

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your MSI MPG A850G 850W Power Supply. This power supply is designed for reliable operation in high-performance computing systems, featuring ATX 3.1 and PCIe 5.1 compatibility, a fully modular design, and 80 Plus Gold certification.

The unit incorporates 100% Japanese 105°C capacitors for enhanced stability and longevity. Its fully modular cable system simplifies PC assembly by allowing users to connect only the necessary cables, reducing clutter and improving airflow within the system.

2. SAFETY INFORMATION

- Always disconnect the AC power cord from the wall outlet before installing, removing, or cleaning the power supply.
- Do not open the power supply unit. High voltages are present inside, and opening the casing will void the warranty.
- Ensure the power supply is properly grounded to prevent electrical hazards.
- Use only the modular cables provided with this power supply. Using incompatible cables may cause damage to the power supply or connected components.
- Install the power supply in a well-ventilated area, ensuring proper airflow to prevent overheating.
- Keep the power supply away from water, moisture, and extreme temperatures.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- MSI MPG A850G 850W Power Supply Unit
- Modular Cable Set (including 24-pin ATX, 8-pin CPU, 6+2-pin PCIe, 12VHPWR PCIe 5.0, SATA, Molex cables)
- AC Power Cord
- Mounting Screws

- Cable Storage Bag



Image: MSI MPG A850G power supply shown with its complete set of modular cables and a dedicated storage bag for unused cables.

4. SETUP AND INSTALLATION

Follow these steps to install your MSI MPG A850G power supply:

1. **Preparation:** Ensure your computer is powered off and unplugged from the wall outlet. Open your PC case to access the power supply mounting area.
2. **Mounting the Power Supply:** Carefully slide the power supply into its designated bay in your PC case. Secure it with the provided mounting screws.
3. **Connecting Modular Cables:**
 - **Motherboard Power:** Connect the 24-pin ATX cable to the motherboard's main power connector. Connect the 8-pin CPU (EPS) cable to the motherboard's CPU power connector.
 - **Graphics Card Power:** For modern graphics cards, use the native 12VHPWR PCIe 5.0 connector. For other graphics cards, use the appropriate 6+2-pin PCIe cables. The power supply supports various GPU configurations.



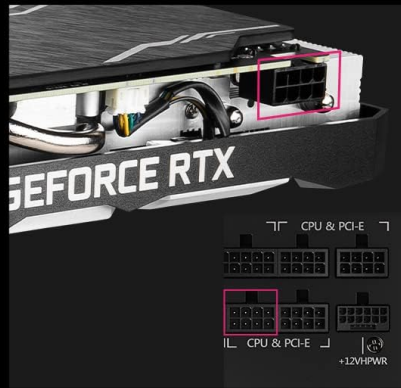
SINGLE-RAILED DESIGN

The single rail supply of power can properly deliver the power you need. For high-performance graphics cards and CPUs, this power supply's 5 CPU & PCI-E slots are more than plenty.



Image: The 16-pin PCIe 5.0 connector, providing up to 600W of power for compatible graphics cards.

GPU SUPPORT FOR ALL



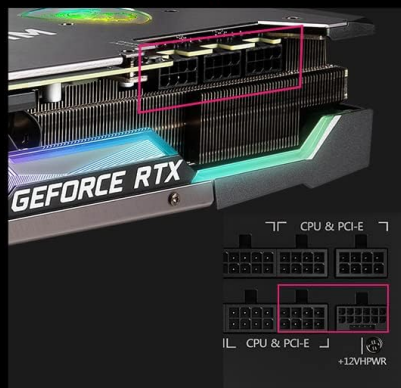
1 VGA Power Connector

Supports NVIDIA RTX 20/30 Series and AMD Graphics Cards



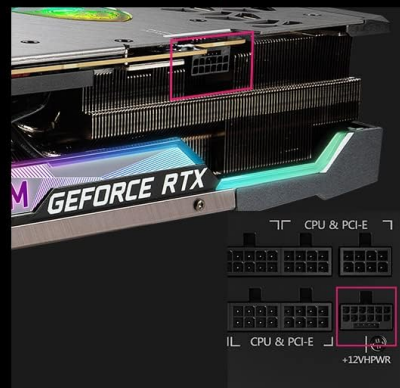
2 VGA Power Connector

Supports NVIDIA RTX 20/30 Series and AMD Graphics Cards



3 VGA Power Connector

Supports NVIDIA RTX 20/30 Series and AMD Graphics Cards



16 pin VGA Power Connector

Supports PCIe 5.0 Compatible NVIDIA RTX 40 Series Graphics Cards

Image: Various GPU power connector options supported by the power supply, including 1, 2, 3, and 16-pin VGA configurations.

- **Storage Device Power:** Connect SATA power cables to your SSDs and HDDs.
- **Peripheral Power:** Use Molex cables for any other peripherals requiring this connection type.

The fully modular design allows you to connect only the cables required for your system, reducing cable clutter and improving internal airflow.

4. **Final Checks:** Ensure all cables are securely connected to both the power supply and the respective components. Organize cables for optimal airflow and aesthetics.



Image: Front view of the MSI MPG A850G power supply, illustrating the modular cable ports and a connected 12VHPWR cable.

LEVEL UP YOUR GAME

With **native 16 PIN PCIe connector** the power supply is ready for Nvidia® GeForce RTX® 40 Series graphics cards. It can freely pipe up to 600W of power to PCIe 5.0 graphics cards.



Image: This power supply is ATX 3.0 compatible, supporting up to 2X total power excursion and 3X GPU power excursion.

5. OPERATING INSTRUCTIONS

After installation, connect the AC power cord to the power supply and then to a wall outlet. Flip the power switch on the back of the power supply to the 'ON' (I) position. Your system is now ready to be powered on.

5.1. 80 PLUS Gold Certification

The MSI MPG A850G is 80 PLUS Gold certified, indicating high power efficiency. This means the power supply converts a high percentage of AC power into usable DC power, reducing wasted energy and heat generation.

GPU SUPPORT FOR ALL

The gaming power supply can support the NVIDIA and AMD graphics cards. Prepared for the highest of requirements, the MPG power supply's IO supports can support different and versatile ways of connection according to the power connector design of different graphics cards.

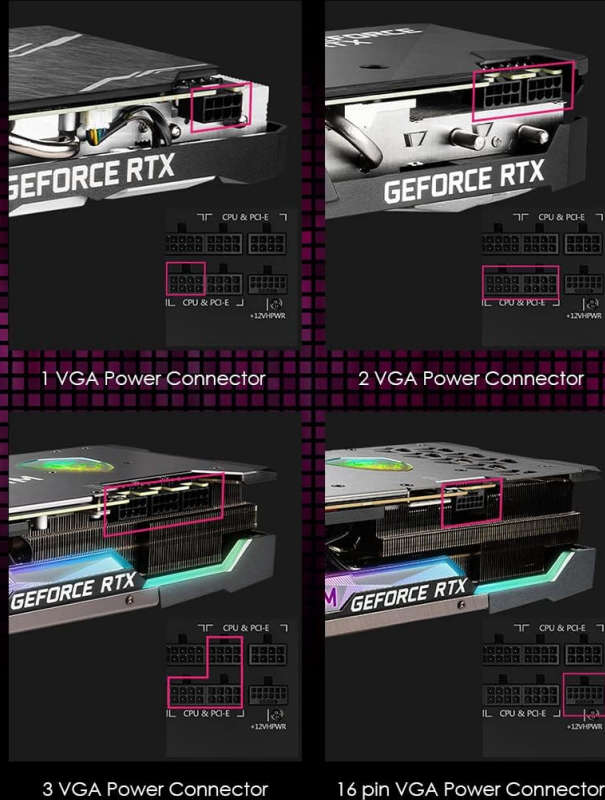


Image: The 80 PLUS Gold certification logo on the MSI MPG A850G power supply, signifying high energy efficiency.

5.2. Fan Operation (Zero RPM Mode)

This power supply features a Zero RPM mode, where the fan remains off under low load conditions for silent operation. The fan will automatically activate when the load increases to maintain optimal operating temperatures.

6. MAINTENANCE

- **Dust Cleaning:** Periodically clean the exterior of the power supply and its fan grille to prevent dust buildup, which can impede airflow and lead to overheating. Use compressed air or a soft brush. Ensure the power supply is unplugged before cleaning.
- **Airflow:** Ensure that the power supply's intake and exhaust vents are not obstructed by cables or other components within the PC case.
- **Cable Management:** Maintain tidy cable management to promote good airflow throughout the system, including around the power supply.

7. TROUBLESHOOTING

- **No Power:**
 - Check if the AC power cord is securely connected to both the power supply and the wall outlet.

- Ensure the power switch on the back of the power supply is in the 'ON' (I) position.
 - Verify that all modular cables are correctly and firmly seated in both the power supply and the components.
 - Test the wall outlet with another device to confirm it is supplying power.
- **System Instability or Random Shutdowns:**
 - Ensure your system's total power consumption does not exceed the power supply's 850W capacity.
 - Check for any loose cable connections, especially to the motherboard and graphics card.
 - Verify that the power supply has adequate ventilation and is not overheating.
- **Unusual Noises:**
 - If you hear unusual fan noises, ensure the fan is not obstructed by cables or dust.
 - If the noise persists, contact MSI support.

8. SPECIFICATIONS

Feature	Specification
Model Name	MPG A850G PCIE 5
Wattage	850 Watts
Efficiency	80 PLUS Gold Certified
Form Factor	ATX
Dimensions (L x W x H)	5.91 x 5.91 x 3.39 inches (150 x 150 x 86 mm)
Capacitors	100% Japanese 105°C Capacitors
PFC	Active PFC
Cooling Method	Air (with Zero RPM mode)
Connectors	ATX 24-pin, EPS 8-pin, PCIe 6+2-pin, PCIe 12VHPWR, SATA, Molex
Standards	ATX 3.1, PCIe 5.1
Protections	OCP, OVP, OPP, OTP, SCP, UVP



Image: The MSI MPG A850G 850W Power Supply with its packaging, highlighting its features.



Image: Key features of the power supply, including 2X total power excursion, 3X GPU power excursion, 100% Japanese capacitors, flat cables, and a single rail design.

9. WARRANTY AND SUPPORT

The MSI MPG A850G Power Supply comes with a 10-year limited warranty, ensuring long-term reliable operation. For warranty claims, technical support, or further assistance, please visit the official MSI support website.

An official user manual in PDF format is also available for download:

[Download User Manual \(PDF\)](#)