

GAMDIAS HELIOS P2-1000G

GAMDIAS HELIOS P2-1000G Power Supply User Manual

Model: HELIOS P2-1000G

1. INTRODUCTION

The GAMDIAS HELIOS P2-1000G is a fully modular power supply unit designed for high-performance computing systems. It features 80 Plus Gold certification for energy efficiency, supports ATX 3.1 and PCIe Gen 5.1 standards, and incorporates 100% Japanese capacitors for enhanced reliability. This manual provides essential information for the safe installation, operation, and maintenance of your power supply.



Image 1.1: Overview of the GAMDIAS HELIOS P2-1000G Power Supply.

2. SAFETY INFORMATION

- **High Voltage:** The power supply contains high voltage components. Do not open the power supply casing. There are no user-serviceable parts inside. Opening the unit will void the warranty and poses a risk of electric shock.
- **Proper Grounding:** Ensure the power supply is properly grounded using the provided power cord.
- **Ventilation:** Do not block the ventilation openings of the power supply. Ensure adequate airflow around the unit to prevent overheating.
- **Environment:** Avoid installing the power supply in environments with high humidity, extreme temperatures, or excessive dust.
- **Power Off:** Always disconnect the AC power cord from the wall outlet before installing, removing, or cleaning the power supply or any connected components.
- **Correct Wattage:** Ensure the power supply's wattage is sufficient for your system's components.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- GAMDIAS HELIOS P2-1000G Power Supply Unit
- Modular Cable Set (including 24-pin ATX, CPU, PCIe, SATA, Molex, and 12VHPWR cables)
- AC Power Cord
- Mounting Screws
- User Manual (this document)

4. PRODUCT FEATURES

The HELIOS P2-1000G power supply incorporates several features designed for performance and reliability:

- **80 PLUS Gold Certified Efficiency:** Achieves up to 92% efficiency at 50% load, reducing power consumption and heat generation.
- **ATX 3.1 and PCIe Gen 5.1 Ready:** Designed to meet the latest power standards, supporting next-generation graphics cards with up to 200% total power excursion.
- **Native 12VHPWR Cable:** Includes a native 16-pin (12VHPWR) PCIe connector capable of delivering up to 600W for PCIe 5.1 graphics cards.
- **Quiet Operation with 135mm Dual-Ball Bearing Smart Fan:** Features a high-quality 135mm fan with a dual-ball bearing design for durability and quiet operation. The smart fan control adjusts speed based on load to minimize noise.
- **Fully Modular Design:** Allows for connecting only the necessary cables, improving cable management and airflow within the PC case.
- **Premium Japanese Capacitors:** Built with 100% high-quality Japanese 105°C/221°F electrolytic capacitors for superior durability and power stability.
- **Comprehensive Protection Mechanisms:** Includes Over Current Protection (OCP), Over Temperature Protection (OTP), Over Voltage Protection (OVP), Over Power Protection (OPP), Under Voltage Protection (UVP), and Short Circuit Protection (SCP) to ensure system safety.

1000W Gold Modular PSU

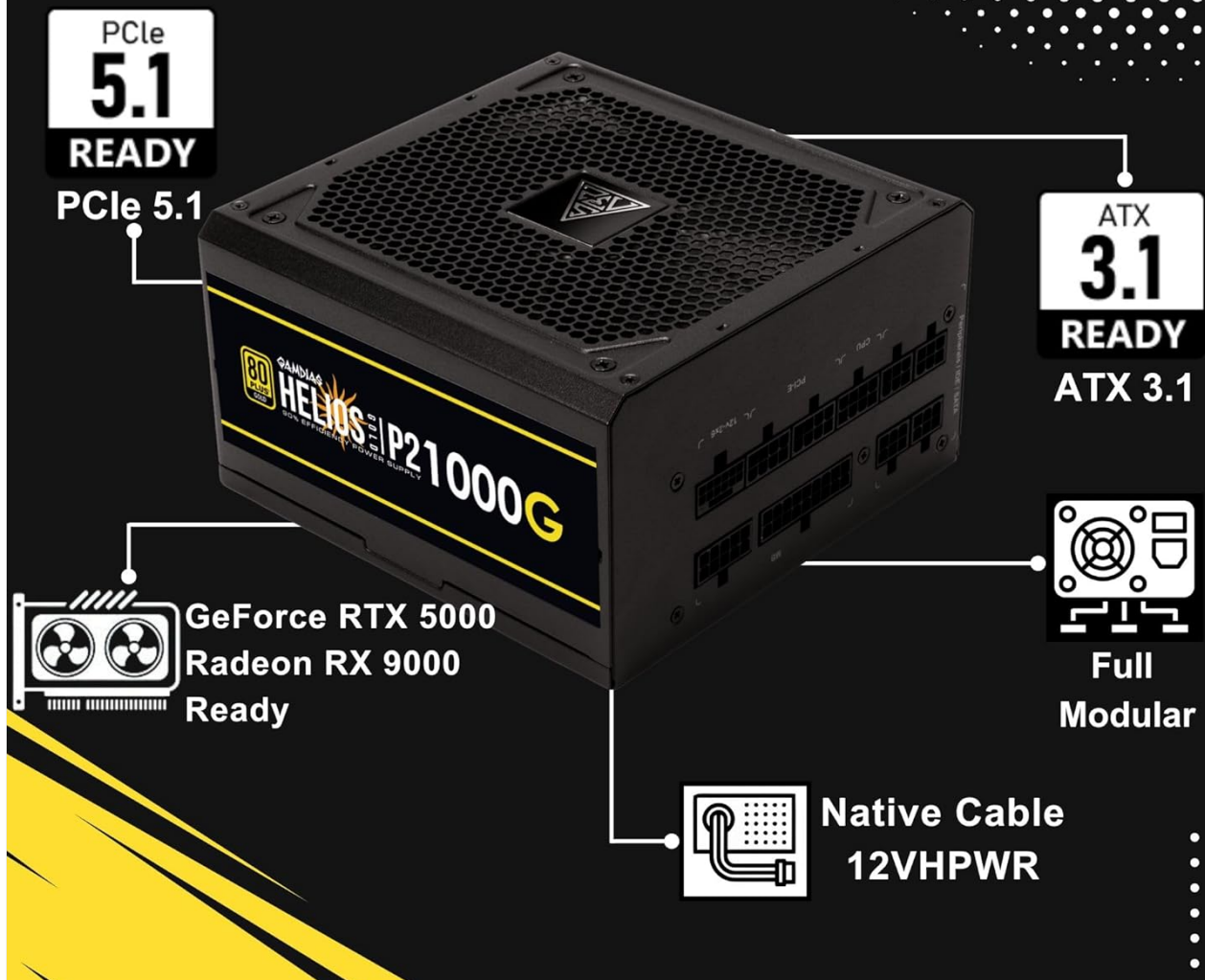


Image 4.1: Key features of the HELIOS P2-1000G, including PCIe 5.1 and ATX 3.1 readiness.

80 + GOLD CERTIFIED

Designed to meet 80 PLUS Gold level, providing stable power output up to 92% efficiency at 50% load reducing carbon footprint and power consumption.



Image 4.2: The 80 Plus Gold certification ensures high energy efficiency.

ATX 3.1 & PCIe GEN 5.1 READY

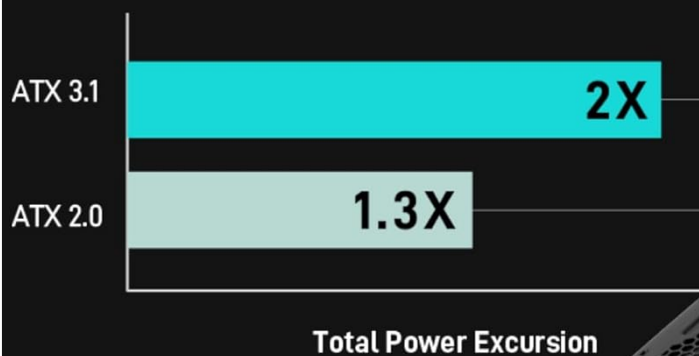


Image 4.3: The power supply is ready for ATX 3.1 and PCIe Gen 5.1, offering improved power excursion.

HIGH QUALITY CAPACITOR

This PSU offers complete protection, meeting full demands to help the system operate safely and stably.



OCP

Over Current
Protection



OTP

Over Temperature
Protection



OVP

Over Voltage
Protection



OPP

Over Power
Protection



UVP

Under Voltage
Protection



SCP

Short Circuit
Protection

Image 4.4: Icons representing the various protection features integrated into the power supply.

5. SETUP AND INSTALLATION

5.1 Physical Installation

1. **Prepare Your System:** Ensure your computer is completely powered off and unplugged from the wall outlet.
2. **Mount the PSU:** Carefully slide the HELIOS P2-1000G into the power supply bay of your PC case. Ensure the fan is oriented correctly (typically facing downwards for bottom-mounted PSUs, or upwards if your case design requires it for optimal airflow).
3. **Secure the PSU:** Use the provided mounting screws to secure the power supply to the PC case from the rear.

5.2 Cable Connections

The HELIOS P2-1000G is fully modular. Connect only the cables required for your system components.

1. **24-pin ATX Motherboard Cable:** Connect the large 24-pin cable to the corresponding port on your motherboard. Ensure it clicks into place.
2. **CPU (EPS) Cable:** Connect the 4+4-pin or 8-pin CPU cable to the CPU power connector(s) on your motherboard.

High-end motherboards may require two 8-pin connectors.

3. PCIe Graphics Card Cables:

- **12VHPWR Cable:** For compatible PCIe 5.1 graphics cards, connect the native 16-pin 12VHPWR cable directly to the GPU. Ensure a firm connection.
- **6+2-pin PCIe Cables:** For other graphics cards, connect the 6+2-pin PCIe cables to the GPU power connectors.

4. **SATA Power Cables:** Connect SATA power cables to your SSDs, HDDs, and other SATA-powered devices.

5. **Peripheral (Molex) Cables:** Connect Molex cables for any legacy peripherals that require them.

6. **AC Power Cord:** Once all internal connections are made, connect the AC power cord to the power supply and then to a grounded wall outlet.

NATIVE 12VHPWR CABLE

The native 16 PIN (12VHPWR) PCIe connector can deliver up to 600W for PCIe 5.1 graphics cards, providing powerful and stable performance and allowing the PSU to natively run high power GPUs.



Image 5.1: The native 16-pin 12VHPWR cable for direct connection to PCIe 5.1 graphics cards.

EXTENSIVE GPU SUPPORT

The HELIOS P2 is designed to support new NVIDIA and AMD graphics cards with increased power demands and different connectors, with additional support to a 12+4-pin VGA power connector (12VHPWR) and two 6+2-pin VGA power connectors.



Image 5.2: Illustration of the fully modular design, showing various cable connections.

6. OPERATING INSTRUCTIONS

6.1 Powering On Your System

After ensuring all cables are securely connected, flip the power switch on the back of the power supply to the 'ON' (I) position. You can then power on your computer using the case's power button.

6.2 Smart Fan Control

The HELIOS P2-1000G features a smart fan control system. The 135mm fan will adjust its speed automatically based on the power supply's load and internal temperature. This ensures optimal cooling while minimizing noise during lighter loads.

SMART SILENT FAN

Featuring a high-quality 135mm fan, providing excellent thermals, silent acoustics, and high reliability to ensure longevity at near-silent operation. Furthermore, the smart fan will adjust the fan speed and minimizes undesired noise.

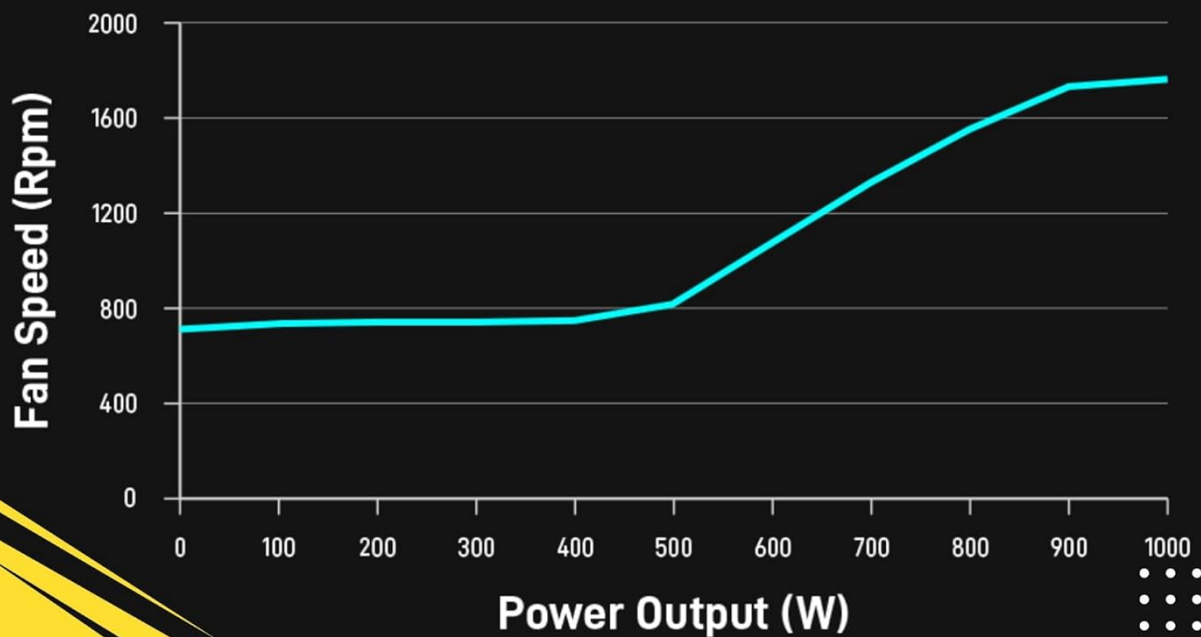


Image 6.1: Graph illustrating the smart fan's speed adjustment relative to power output.

7. MAINTENANCE

7.1 Cleaning

To maintain optimal performance and longevity, periodically clean the power supply:

- **Disconnect Power:** Always unplug the AC power cord from the wall outlet and the power supply before cleaning.
- **Dust Removal:** Use compressed air to gently blow dust out of the fan grille and ventilation openings. Hold the fan blades to prevent them from spinning rapidly during cleaning, which can damage the bearings.
- **Exterior Cleaning:** Wipe the exterior of the power supply with a soft, dry cloth. Do not use liquid cleaners or solvents.

7.2 Storage

If storing the power supply, keep it in a cool, dry environment, away from direct sunlight and extreme temperatures. Use its original packaging if available to protect it from dust and physical damage.

8. TROUBLESHOOTING

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

- **No Power:**
 - Ensure the AC power cord is securely connected to both the power supply and the wall outlet.
 - Check that the power switch on the back of the PSU is in the 'ON' (I) position.
 - Verify all modular cables are firmly seated in both the power supply and the components.
 - Test the wall outlet with another device to confirm it has power.
- **System Instability/Crashes:**
 - Ensure your system's power requirements do not exceed the PSU's 1000W capacity.
 - Check for loose cable connections, especially to the motherboard and graphics card.
 - Ensure adequate ventilation within your PC case to prevent overheating of components, including the PSU.
- **Loud Fan Noise:**
 - The fan speed adjusts based on load. High system load will naturally increase fan speed.
 - Check for dust accumulation in the fan or vents and clean as described in the Maintenance section.

If issues persist after performing these steps, contact GAMDIAS customer support.

9. SPECIFICATIONS

Feature	Specification
Model Name	HELIOS P2-1000G
Brand	GAMDIAS
Output Wattage	1000 Watts
Form Factor	ATX
Efficiency Certification	80 PLUS Gold
Cooling Method	Air (135mm Dual-Ball Bearing Smart Fan)
Connector Type	ATX, PCI Express (Native 12VHPWR)
Compatible Devices	Personal Computer
Product Dimensions (L x W x H)	12.8 x 8.27 x 4.13 inches
Item Weight	7.28 pounds (3300 Grams)
Date First Available	April 19, 2023

10. WARRANTY INFORMATION

GAMDIAS products are manufactured to the highest quality standards. For detailed warranty terms and conditions, please refer to the official GAMDIAS website or the warranty card included with your product. Keep your proof of purchase for

warranty claims.

11. CUSTOMER SUPPORT

If you require technical assistance or have questions regarding your GAMDIAS HELIOS P2-1000G power supply, please visit the official GAMDIAS support website or contact their customer service department. Contact information can typically be found on the GAMDIAS website or in the product packaging.