ASUS ROG-THOR-1600T-GAMING

ASUS ROG Thor 1600W Titanium Power Supply Unit User Manual

Brand: ASUS | **Model:** ROG-THOR-1600T-GAMING

INTRODUCTION

The ASUS ROG Thor 1600W Titanium Power Supply Unit (PSU) is engineered to provide robust and efficient power for high-performance gaming systems and demanding computing environments. Designed with cutting-edge technology and premium components, it ensures stable power delivery, quiet operation, and long-term reliability. This manual provides essential information for setting up, operating, maintaining, and troubleshooting your ROG Thor 1600W Titanium PSU.
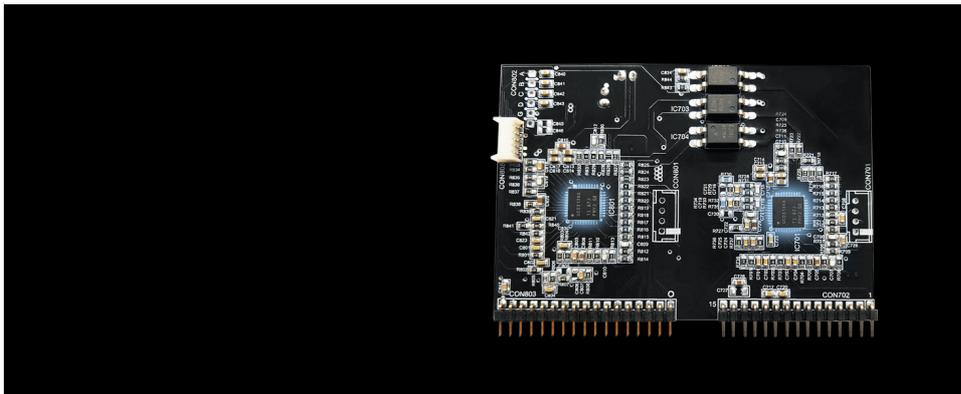
The ASUS ROG Thor 1600W Titanium Power Supply Unit (PSU) shown with its retail packaging, highlighting its premium design and branding.
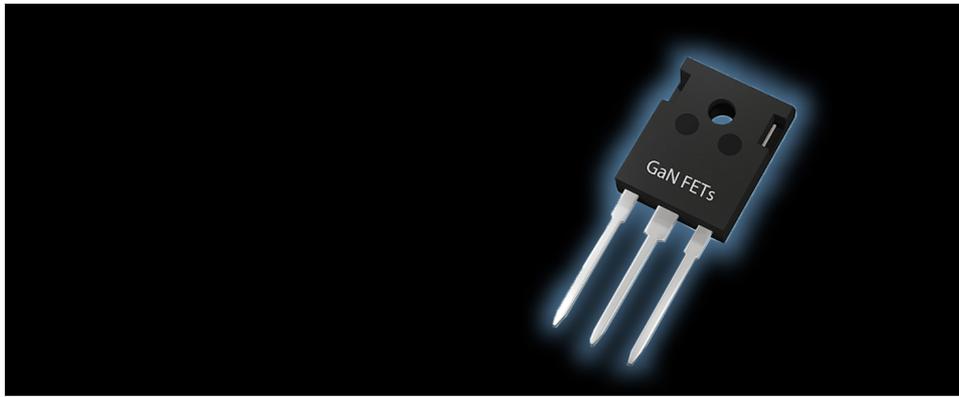
KEY FEATURES

- **80 Plus Titanium Certification:** Built with 100% Japanese capacitors and other premium components to achieve 80 Plus Titanium Certification, ensuring exceptional energy efficiency and reduced heat generation.
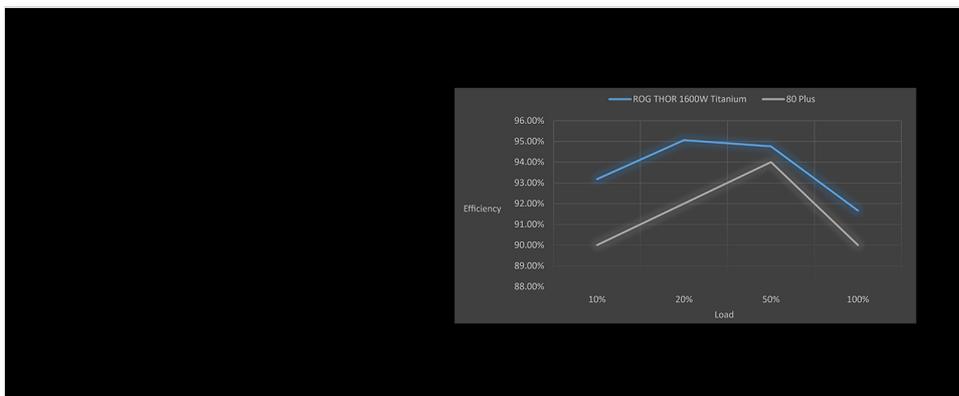

This graph illustrates the superior efficiency of the ROG Thor 1600W Titanium PSU, demonstrating its 80 Plus Titanium certification across various load percentages compared to standard 80 Plus units.

- **Gallium Nitride (GaN) MOSFETs:** Features advanced GaN MOSFETs that boast lower switching losses and improved efficiency compared to conventional silicon transistors, contributing to the PSU's high performance.
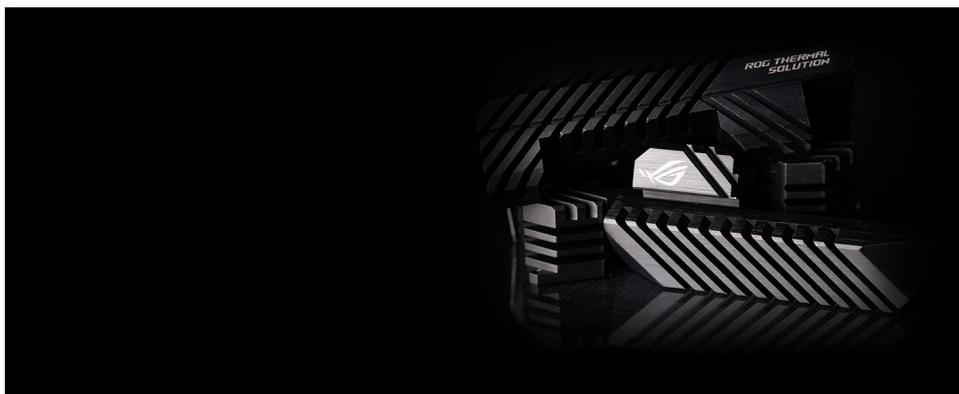
A detailed view of the Gallium Nitride (GaN) MOSFETs, which are advanced transistors that contribute to the PSU's lower switching losses and improved efficiency compared to traditional silicon transistors.

- **Digital Power Control:** A digital controller facilitates lightning-fast response to load changes, ensuring stable and reliable power delivery to your components.
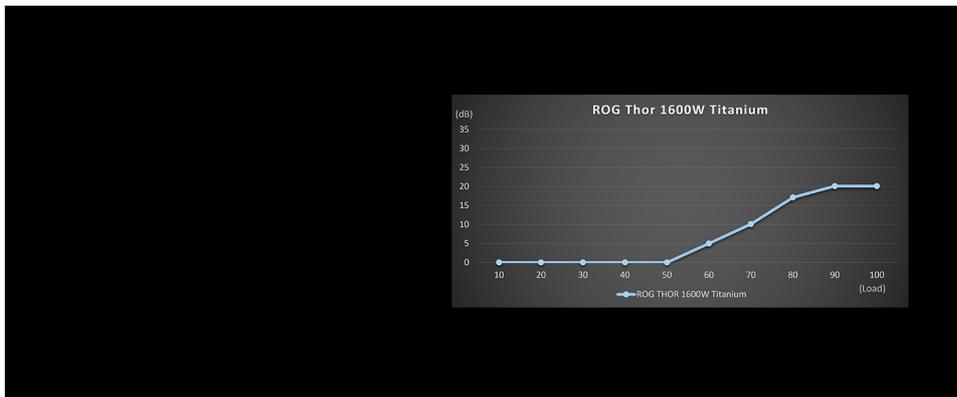

An image of the internal circuit board, highlighting the digital power control components that enable lightning-fast response to load changes, ensuring stable and reliable power delivery.

- **ROG Heatsinks:** Customized ROG heatsinks cover critical components, delivering lower temperatures and reduced noise, contributing to a longer lifespan and quieter operation.

Customized ROG heatsinks are shown, which cover critical components to effectively dissipate heat, leading to lower operating temperatures and reduced fan noise for extended lifespan.

- **135mm Axial-tech Fan with PWM Control:** A large 135mm Axial-tech fan with Pulse-Width Modulation (PWM) control delivers optimal airflow while maintaining low noise levels, ensuring efficient cooling when needed and silent operation under light loads.

A view of the 135mm Axial-tech fan with PWM control, engineered to deliver efficient cooling with lower noise levels, maintaining optimal thermal performance.

- **OLED Panel:** An integrated OLED display monitors power draw in real time, providing instant visual feedback on your system's power consumption.

The integrated OLED display panel on the side of the PSU, which provides real-time monitoring of power draw, allowing users to see the current wattage consumption of their system.

- **PCIe Gen 5.0 Ready:** Each ROG Thor 1600W Titanium PSU is bundled with a 16-pin PCIe cable that can pipe up to 600W of power to PCIe Gen 5.0 graphics cards, ensuring compatibility with next-generation
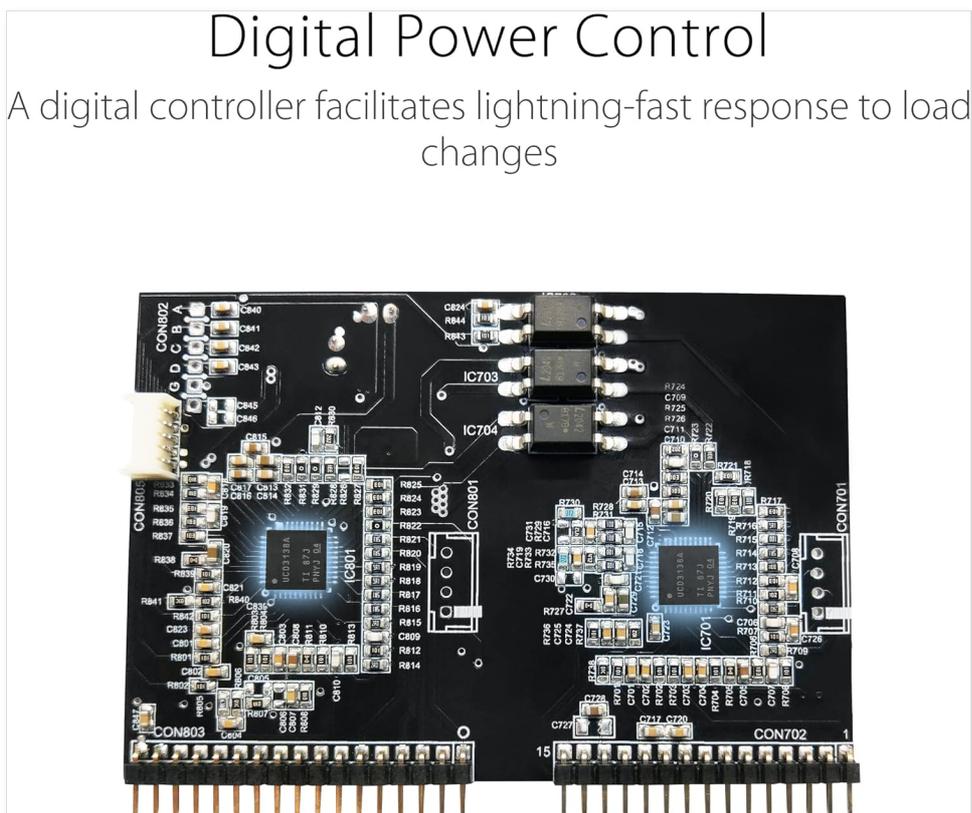
hardware.

The included 16-pin PCIe Gen 5.0 cable, designed to deliver up to 600W of power to the latest graphics cards, ensuring future compatibility and robust power delivery.

SETUP GUIDE

Proper installation of your ASUS ROG Thor 1600W Titanium PSU is crucial for optimal performance and safety. Follow these steps carefully:

1. **Prepare Your System:** Ensure your computer case is compatible with ATX form factor PSUs and has adequate space for the ROG Thor 1600W Titanium. Disconnect all power from your system and discharge any residual power by holding the power button for a few seconds.

2. **Mount the PSU:** Carefully slide the PSU into its designated bay in your computer case. Secure it using the provided screws. Ensure the fan is oriented correctly for optimal airflow (typically facing downwards if your case has a bottom vent, or upwards if not).

3. **Connect Modular Cables:** The ROG Thor 1600W Titanium is fully modular. Connect only the necessary cables for your components. This reduces cable clutter and improves airflow within your case. Refer to the labels on the PSU and cables for correct connections.

A view of the fully modular cable connection ports on the PSU, allowing users to connect only the necessary cables for a cleaner build and improved airflow.

4. **Main Power Connections:** Connect the 24-pin ATX motherboard power cable and the 8-pin (or 4+4-pin) CPU power cable(s) to your motherboard.

5. **Graphics Card Power:** Connect the appropriate PCIe power cables (including the 16-pin PCIe Gen 5.0 cable for compatible GPUs) to your graphics card(s).

6. **Peripheral Connections:** Connect SATA power cables to your storage drives (SSDs, HDDs) and Molex cables to any other peripherals requiring power.

7. **Cable Management:** Route cables neatly to ensure proper airflow and a clean aesthetic. Use cable ties or Velcro straps to secure them.

8. **Final Checks:** Double-check all connections to ensure they are secure and correctly seated. Ensure no loose cables are obstructing fans or airflow.

OPERATING INSTRUCTIONS

Once installed, operating your ROG Thor 1600W Titanium PSU is straightforward:

1. **Power On:** Connect the AC power cord to the PSU and a wall outlet. Flip the power switch on the back of the PSU to the 'ON' position.

2. **System Boot-up:** Press the power button on your computer case to start your system. The PSU will initiate and provide power to all connected components.

3. **OLED Display Monitoring:** The integrated OLED panel on the side of the PSU will display real-time power consumption. This allows you to monitor your system's power draw during various tasks, from idle to heavy gaming or rendering.

4. **0dB Mode:** The PSU features a 0dB mode, where the fan stops completely under light loads (typically below 50% of maximum wattage). This ensures silent operation when your system doesn't require active cooling. The fan will automatically spin up as the load increases.

5. **Aura Sync RGB Lighting:** The ROG Thor 1600W Titanium supports ASUS Aura Sync, allowing you to customize the RGB lighting effects on the PSU to synchronize with other Aura Sync-compatible components in your system. This can be managed through ASUS Armoury Crate software.

Product Overview Video

Watch this official product overview video to get a comprehensive look at the ASUS ROG Thor 1600W Titanium Power Supply Unit, its features, and design.

MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your PSU:

- **Dust Removal:** Periodically clean dust from the PSU's fan and vents. Use compressed air to gently blow dust out of the unit. Ensure the system is powered off and unplugged before cleaning.

- **Cable Management Check:** Occasionally check your cable management to ensure no cables have come loose or are obstructing airflow. Proper cable routing is essential for efficient cooling.

- **Environmental Conditions:** Ensure the PSU operates in a well-ventilated environment. Avoid placing your computer in enclosed spaces that can trap heat. Maintain a stable room temperature to prevent overheating.

TROUBLESHOOTING

If you encounter issues with your ROG Thor 1600W Titanium PSU, consider the following common troubleshooting steps:

- **No Power/System Not Starting:**

    - Ensure the AC power cord is securely plugged into both the PSU and the wall outlet.
    - Verify the power switch on the back of the PSU is in the 'ON' position.
    - Check the wall outlet by plugging in another device.
    - Confirm all modular cables are correctly and firmly connected to the PSU and components.

- **System Instability/Random Shutdowns:**

    - Ensure your system's power requirements do not exceed the PSU's capacity.
    - Check for loose cable connections, especially to the motherboard and graphics card.
    - Monitor the PSU's temperature and ensure adequate ventilation within the case.
    - Update your motherboard's BIOS and graphics card drivers.

- **Excessive Fan Noise:**

    - Clean any dust buildup from the PSU fan and vents.
    - Ensure the PSU is not operating under excessively high loads for prolonged periods.
    - Verify that the 0dB mode is functioning correctly under light loads.

- **OLED Display Not Working:**

    - Ensure the PSU is powered on and receiving power.
    - Check for any software conflicts if you are using ASUS Armoury Crate to control the display.

If issues persist after following these steps, please refer to the official ASUS support resources or contact customer service.

SPECIFICATIONS

Attribute	Value
Brand	ASUS
Model Name	ROG-THOR-1600T-GAMING
Output Wattage	1600 Watts
Form Factor	ATX
Efficiency Certification	80 Plus Titanium
Cooling Method	Air (135mm Axial-tech fan)
Modular	Fully Modular
Special Features	OLED Panel, GaN MOSFETs, ROG Heatsinks, 0dB Mode, Aura Sync RGB

Attribute	Value
Product Dimensions	7.4 x 5.9 x 3.3 inches
Item Weight	12.98 pounds (5.9 Kilograms)
Date First Available	February 23, 2023

WARRANTY AND SUPPORT

Your ASUS ROG Thor 1600W Titanium PSU is backed by comprehensive warranty and support services:

- **Limited Warranty:** The core product operation is guaranteed for 10 years. The OLED panel and RGB LEDs are subject to a 3-year warranty.

The ASUS ROG Thor 1600W Titanium PSU comes with a 10-year limited warranty, ensuring long-term reliability and peace of mind for users. Note: OLED panel and RGB LEDs are subject to a 3-year warranty.

- **User Manual (PDF):** For detailed instructions and diagrams, you can download the official user manual in PDF format from the ASUS support website or via this direct link: Download User Manual.

- **ASUS Support:** For further assistance, technical support, or warranty claims, please visit the official ASUS support website or their brand store: ASUS Brand Store on Amazon.

Related Documents - ROG-THOR-1600T-GAMING

	ASUS ROG Thor Power Supply Unit Quick Start Guide and Specifications This document provides a quick start guide, package contents, specifications, cable descriptions, and safety information for the ASUS ROG Thor Power Supply Unit, available in 850W and 1200W models.
	ASUS ROG Strix 1200W Platinum Power Supply Unit - Features and Specifications Explore the features and specifications of the ASUS ROG Strix 1200W Platinum power supply unit, including GaN MOSFET, Intelligent Voltage Stabilizer, ROG Heatsinks, ATX 3.1 compatibility, and 10-year warranty.

[ASUS ROG Thor Power Supply Unit Quick Start Guide](#)

Quick start guide for the ASUS ROG Thor Power Supply Unit, covering product overview, installation, and safety instructions.

[ASUS ROG Swift OLED PG39WCDM User Guide](#)

Comprehensive user guide for the ASUS ROG Swift OLED PG39WCDM monitor, detailing setup, features, OSD navigation, gaming enhancements like GameVisual and Aura Sync, specifications, and troubleshooting tips.

[ROG SWIFT OLED PG32UCDMR: Руководство пользователя ASUS](#)

Подробное руководство пользователя для игрового OLED-монитора ASUS ROG SWIFT OLED PG32UCDMR. Информация о настройке, функциях, технических характеристиках и устранении неполадок.

[ASUS ROG Strix XG32UCDS OLED Monitor User Guide](#)

This user guide provides essential information for the ASUS ROG Strix XG32UCDS OLED monitor, covering setup, operation, and maintenance. Discover its advanced OLED display technology, gaming features like GamePlus and GameVisual, versatile connectivity, and ergonomic design.