



Manuals.plus /

› Thermaltake /

› Thermaltake Toughpower Grand 1200W 80+ Gold Fully Modular Power Supply Instruction Manual PS-TPG-1200FPCGUS-1

Thermaltake PS-TPG-1200FPCGUS-1

Thermaltake Toughpower Grand 1200W 80+ Gold Fully Modular Power Supply Instruction Manual

Model: PS-TPG-1200FPCGUS-1

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your Thermaltake Toughpower Grand 1200W 80+ Gold Fully Modular Power Supply. This unit is designed to deliver stable and efficient power to high-performance computer systems, featuring an 80 PLUS Gold certification for energy efficiency and a fully modular cable design for improved cable management.



Image 1.1: Top-down view of the Thermaltake Toughpower Grand 1200W Power Supply, showcasing its gold fan grill and black casing.

2. SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating this power supply unit. Failure to comply with these instructions may result in electric shock, fire, or damage to the product and connected components.

- **Professional Installation:** Installation should be performed by qualified personnel.
- **Power Disconnection:** Always disconnect the AC power cord from the wall outlet before installing, removing, or cleaning the power supply.
- **Moisture and Liquids:** Do not expose the power supply to water, moisture, or any liquids. Operate in a dry environment.
- **Ventilation:** Ensure adequate ventilation around the power supply. Do not block any ventilation openings.
- **Grounding:** Ensure the power supply is properly grounded.
- **High Voltage:** The power supply contains high voltage components. Do not open the power supply casing. There are no user-serviceable parts inside.
- **Operating Environment:** Avoid operating the power supply in extremely high temperatures or humidity.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Thermaltake Toughpower Grand 1200W Power Supply Unit
- Modular Cable Set (various types for motherboard, CPU, PCIe, SATA, Peripheral)
- AC Power Cord
- Mounting Screws
- User Manual (this document)

4. SETUP AND INSTALLATION

Follow these steps to properly install your power supply:

1. Prepare Your System:

- Ensure your computer is powered off and the AC power cord is disconnected from the wall outlet.
- Open your computer case to access the power supply mounting area.

2. Mount the Power Supply:

- Carefully place the power supply into the designated bay in your computer case.
- Align the screw holes on the power supply with those on the case.
- Secure the power supply using the provided mounting screws.

3. Connect Modular Cables:

The Toughpower Grand 1200W features a fully modular design. Connect only the cables required for your system components.



Image 4.1: Side view of the power supply, illustrating the clearly labeled modular cable connection ports for Main Connector, CPU, Peripheral/SATA, and PCIe.

- **Main Connector (24-pin ATX):** Connect the 24-pin cable to the corresponding port on the power supply and the motherboard.
- **CPU Power (4+4-pin EPS/ATX 12V):** Connect the appropriate CPU power cable(s) to the power supply and the motherboard.
- **PCIe Power (6+2-pin):** Connect PCIe cables to the power supply and your graphics cards. Use separate cables for each high-power graphics card if possible.
- **SATA Power:** Connect SATA power cables to the power supply and your storage drives (HDDs, SSDs) and optical drives.
- **Peripheral Power (Molex):** Connect peripheral cables to the power supply and any other components requiring Molex connectors.

4. Connect AC Power:



Image 4.2: Rear view of the power supply, showing the AC power inlet and the main power switch.

- Ensure the power supply's main switch is in the OFF (0) position.
- Connect the AC power cord to the power supply's AC inlet.
- Plug the other end of the AC power cord into a grounded wall outlet.

5. Final Check:

- Double-check all cable connections to ensure they are secure.
- Ensure no loose cables are obstructing fans or airflow.

5. OPERATING INSTRUCTIONS

After successful installation, follow these steps to operate your system:

1. **Power On:** Flip the main power switch on the rear of the power supply to the ON (I) position.
2. **System Start-up:** Press the power button on your computer case to start the system.
3. **Fan Operation:** The power supply features an intelligent fan control system. The fan may not spin at low loads to maintain silent operation. It will activate automatically as the load increases to ensure optimal cooling.
4. **Power Off:** To shut down your system, use the operating system's shutdown procedure. Once the system is off, you can flip the power supply's main switch to the OFF (0) position for complete power

disconnection.

6. MAINTENANCE

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

- **Dust Removal:** Periodically clean the power supply's fan grill and ventilation openings to prevent dust buildup. Use compressed air to gently remove dust. Ensure the power supply is disconnected from AC power before cleaning.
- **Cable Management:** Organize internal cables to improve airflow within your computer case, which helps maintain lower operating temperatures for all components, including the power supply.
- **Environmental Conditions:** Operate the power supply in a clean, dry, and well-ventilated environment. Avoid extreme temperatures and humidity.

7. TROUBLESHOOTING

If you encounter issues with your power supply, refer to the following common problems and solutions:

- **No Power:**
 - Check if the AC power cord is securely connected to both the power supply and the wall outlet.
 - Ensure the power supply's main switch is in the ON (I) position.
 - Verify all modular cables are firmly connected to the power supply and system components.
 - Test the wall outlet with another device to confirm it has power.
- **System Instability/Random Shutdowns:**
 - Ensure the power supply is adequately rated for your system's total power consumption.
 - Check for proper ventilation and ensure the power supply fan is operating. Overheating can cause instability.
 - Verify all power connections to the motherboard, CPU, and graphics cards are secure.
- **Excessive Fan Noise:**
 - Clean any dust buildup from the fan and ventilation areas.
 - Ensure the power supply is not operating under excessive load, which can cause the fan to spin faster.

If problems persist after attempting these troubleshooting steps, contact Thermaltake customer support for further assistance.

8. SPECIFICATIONS

Key technical specifications for the Thermaltake Toughpower Grand 1200W Power Supply:



Image 8.1: Product label displaying detailed electrical specifications and certifications.

Feature	Specification
Model Number	PS-TPG-1200FPCGUS-1
Brand	Thermaltake
Output Wattage	1200 Watts
80 PLUS Certification	Gold
Form Factor	ATX
Modular Type	Fully Modular
Cooling Method	Air (14cm Fan)
Input Voltage	100-240V
Input Current	15A
Frequency	50Hz-60Hz
Dimensions (LxWxH)	7.09 x 5.91 x 3.39 inches (180 x 150 x 86 mm)
Item Weight	8.55 pounds (3.88 kg)
Capacitors	100% High Quality Japanese Capacitors
Dedicated +12V Output	Yes

9. WARRANTY AND SUPPORT

Thermaltake products are manufactured to high quality standards. For specific warranty terms and conditions, please refer to the warranty information provided with your product or visit the official Thermaltake website.

Keep your proof of purchase for warranty claims.

For technical support, product registration, or service inquiries, please visit the official Thermaltake support portal or contact their customer service department. Contact information can typically be found on the Thermaltake website or in the product packaging.

Thermaltake Official Website: www.thermaltake.com