

## Thermaltake TR2-600W

# Thermaltake TR2 600W ATX 12 V2.3 Power Supply User Manual

Model: TR2-600W

## 1. INTRODUCTION

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The Thermaltake TR2 600W ATX 12 V2.3 Power Supply is designed to provide stable and continuous power for computer systems. This power supply incorporates essential protections such as over-voltage, over-power, and short-circuit safeguards to ensure system safety. It features cable management optimized cables for improved thermal efficiency and a large 120mm fan with intelligent thermal control for quiet operation.

## 2. SAFETY INFORMATION

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**WARNING: Hazardous voltages are contained within this power supply. This unit is not user-serviceable. Do not attempt to open the power supply casing. Return to a service center for repair if necessary.**

- Ensure the power supply is disconnected from the main power outlet before installation or maintenance.
- Do not operate the power supply in high humidity or extreme temperature environments.
- Verify that your system's power requirements do not exceed the power supply's maximum output.
- Utilize proper grounding procedures during installation to prevent electrical hazards.

## 3. PACKAGE CONTENTS

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Upon opening the package, ensure all the following items are present:

- Thermaltake TR2 600W Power Supply Unit
- AC Power Cord
- Mounting Screws
- User Manual (this document)

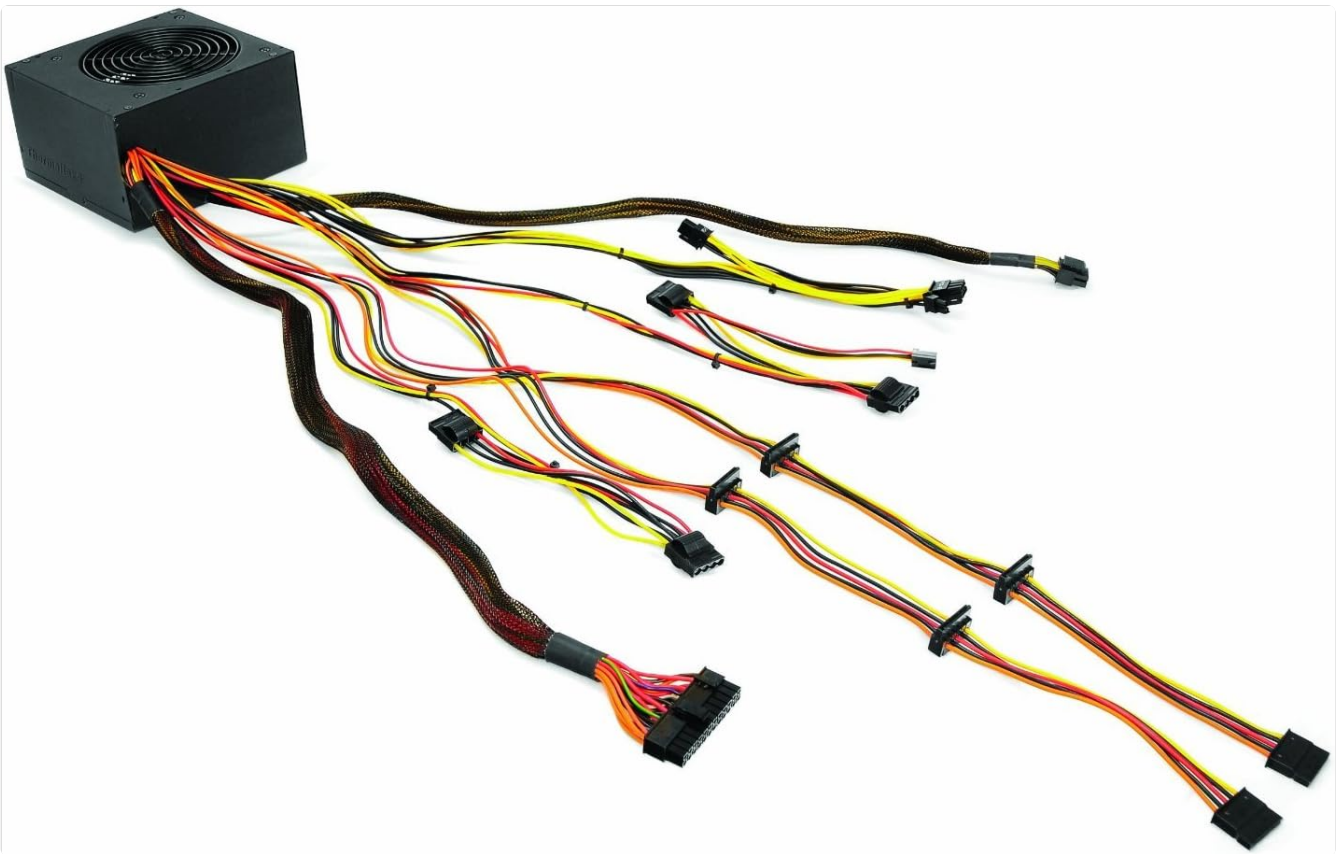


Figure 3.1: Thermaltake TR2 600W Power Supply and included accessories.

## 4. SETUP AND INSTALLATION

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Follow these steps to properly install your Thermaltake TR2 600W Power Supply into your computer case.

### 4.1. Physical Installation

1. Ensure your computer is powered off and unplugged from the wall outlet.
2. Open your computer case to access the power supply bay.
3. Carefully slide the Thermaltake TR2 600W Power Supply into the designated bay.
4. Align the screw holes on the power supply with those on the case.
5. Secure the power supply to the case using the provided mounting screws.

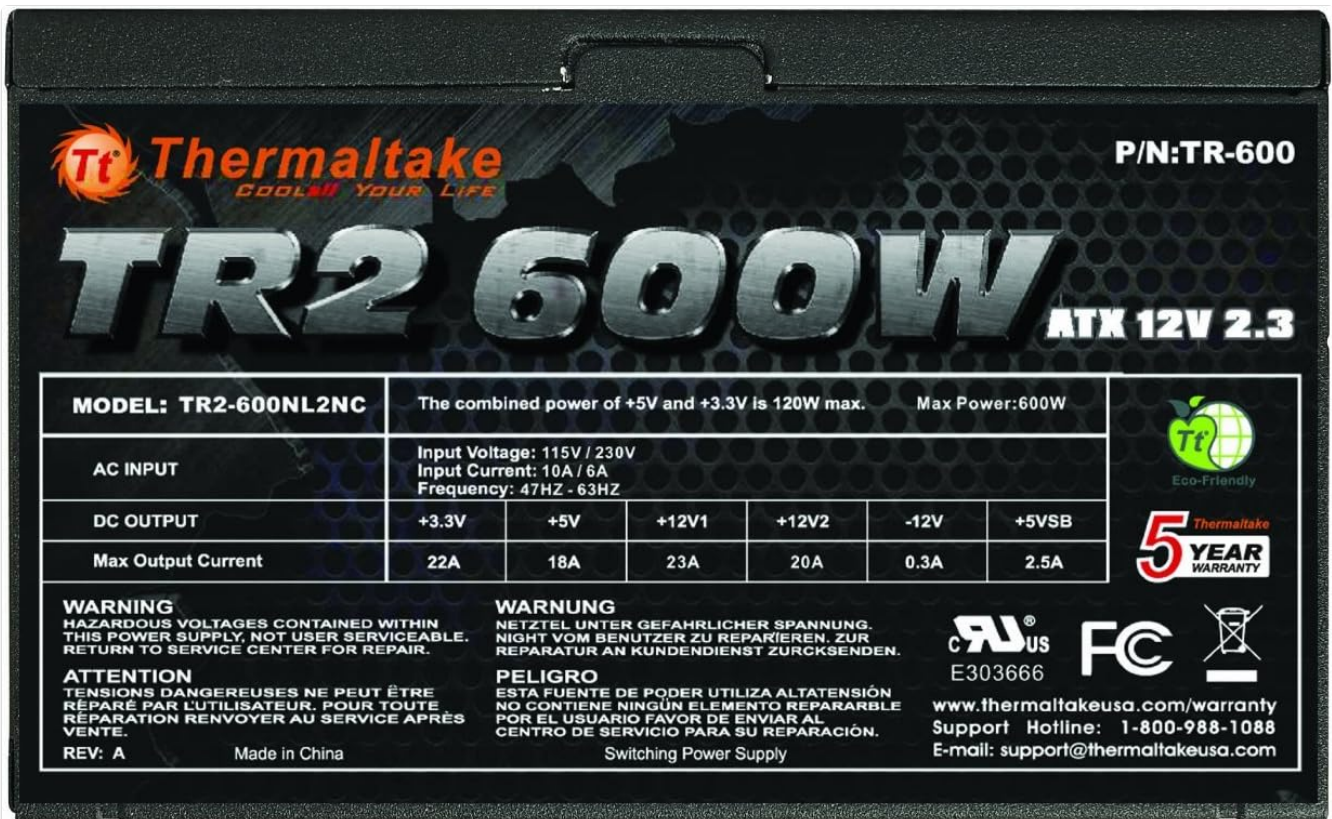


Figure 4.1: The Thermaltake TR2 600W Power Supply mounted in a PC case.

## 4.2. Cable Management

The TR2 600W power supply features elongated cables designed for optimal routing, which helps improve airflow and overall thermal efficiency within your computer case. Route cables neatly to avoid obstructing airflow.



Figure 4.2: Overview of the power supply cables.

## 4.3. Connecting to Motherboard and Peripherals

Connect the power supply cables to your motherboard and other components. Refer to your motherboard and component manuals for specific connector locations.

- **Main ATX Power:** Connect the 20+4 pin ATX connector to the corresponding port on your motherboard.
- **CPU Power:** Connect the 4-pin or 8-pin (if applicable) CPU power connector to the motherboard.
- **PCIe Power:** For graphics cards requiring additional power, connect the 6-pin or 8-pin PCIe connectors.
- **SATA Power:** Connect SATA power cables to SSDs, HDDs, and optical drives.
- **Molex Power:** Connect Molex power cables to older peripherals or case fans if needed.

*Video 4.3: This video demonstrates the installation of a Thermaltake TR2 500W power supply, which shares a similar installation process to the 600W model. It covers mounting the PSU, routing cables, and connecting main power connectors to the motherboard and peripherals like SSDs and optical drives.*

## 5. OPERATING INSTRUCTIONS

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After successful installation, ensure all connections are secure. Plug the AC power cord into the power supply and then into a wall outlet. Flip the power switch on the back of the power supply to the 'ON' position. You can then power on your computer system.

- **Intelligent 120mm Cooling Fan:** The integrated 120mm fan features intelligent thermal control, automatically adjusting its speed based on system load. This ensures efficient cooling during intensive tasks and maintains quiet operation during lighter activities.
- **Power Protections:** The power supply is equipped with over-voltage protection (OVP), over-power protection (OPP), and short-circuit protection (SCP) to safeguard your components from electrical anomalies.

## 6. MAINTENANCE

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Regular maintenance helps ensure the longevity and optimal performance of your power supply.

- **Dust Removal:** Periodically clean the power supply's fan and vents to prevent dust buildup, which can impede airflow and lead to overheating. Use compressed air for best results.
- **Airflow:** Ensure that the computer case has adequate airflow and that the power supply's intake and exhaust vents are not blocked.
- **Cable Check:** Occasionally check all power connections to ensure they remain secure and free from damage.



Figure 6.1: Top view of the power supply, highlighting the 120mm cooling fan.

## 7. TROUBLESHOOTING

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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.
  - Verify that the power switch on the back of the power supply is in the 'ON' position.
  - Check all internal power connections (20+4 pin ATX, CPU, PCIe) to ensure they are firmly seated.
  - Test the wall outlet with another device to confirm it is receiving power.
- **System Instability/Random Shutdowns:**
  - Ensure your system's power draw does not exceed the power supply's capacity.
  - Check for proper ventilation and ensure the power supply fan is operating correctly.
  - Verify that all power connectors are properly seated.
- **Loud Fan Noise:**
  - Clean the fan and vents to remove any dust buildup.
  - Ensure the power supply is not under excessive load, which can cause the fan to spin faster.

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

## 8. SPECIFICATIONS

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Key technical specifications for the Thermaltake TR2 600W Power Supply:

Feature	Specification
Model Name	600W CABLE MANAGEMENT POWER SUPPLY
Brand	Thermaltake
Compatible Devices	Personal Computer
Connector Type	ATX
Output Wattage	600 Watts
Form Factor	ATX
Cooling Method	Air
Item Dimensions (L x W x H)	9 x 7 x 7 inches
Item Weight	1 Pounds
Number of Fans	1
Fan Size	120 Millimeters
Maximum Input Voltage	230 Volts (AC)
Minimum Input Voltage	115 Volts (AC)
System Bus Connector Type	20+4 Pin



Figure 8.1: Product label displaying electrical specifications and certifications.

## 9. WARRANTY AND SUPPORT

The Thermaltake TR2 600W Power Supply comes with a manufacturer-backed **5-year warranty**, ensuring peace of mind regarding its reliability and performance.

For technical support or warranty inquiries, please contact Thermaltake customer service:

- **Support Hotline:** 1-800-988-1088
- **E-mail:** [support@thermaltakeusa.com](mailto:support@thermaltakeusa.com)
- **Website:** [www.thermaltakeusa.com/warranty](http://www.thermaltakeusa.com/warranty)