

Thermaltake Smart BM3 750W

Thermaltake Smart BM3 750W 80Plus Bronze ATX 3.0 & PCIE 5.0 Ready Semi-Modular Power Supply Instruction Manual

Brand: Thermaltake | **Model:** Smart BM3 750W (P/N: PS-SPD-0750MNFABU-3)

1. INTRODUCTION

The Thermaltake Smart BM3 750W is an 80 PLUS Bronze certified semi-modular power supply designed to meet ATX 3.0 standards. It features a PCIe Gen 5.0 (12VHPWR) connector to support modern graphics cards, a 120mm Fluid Dynamic Bearing (FDB) fan with Smart Zero Fan function for quiet operation, and high-quality Japanese main electrolytic capacitors for enhanced durability. This power supply is built with industrial-grade protections to ensure stable and reliable performance for your system.



Figure 1: Thermaltake Smart BM3 750W Power Supply

Key Features:

- 80 PLUS Bronze certified for high efficiency.
- Fully compatible with Intel ATX 3.0 standards.
- PCIe Gen 5.0 compliant with one 12VHPWR connector (300W).
- High-quality Japanese 105°C/221°F main capacitor.
- 120mm Fluid Dynamic Bearing (FDB) fan with Smart Zero Fan function.
- Built-in Industrial Grade Protection (OCP/OVP/UVP/OPP/OTP/SCP).
- Semi-modular flat cable design for improved cable management.

2. SETUP AND INSTALLATION

This power supply features a semi-modular design, allowing you to connect only the necessary cables for your system, reducing clutter and improving airflow within your PC case. Ensure your system is powered off and unplugged before installation.

2.1. Power Supply Installation

1. Mount the power supply into the designated PSU bay in your PC case. Secure it with the provided screws.
2. Connect the 24-pin ATX main power cable to your motherboard.
3. Connect the 4+4-pin ATX 12V CPU power cable(s) to your motherboard.
4. Connect the appropriate PCIe 6+2-pin or 12+4-pin (12VHPWR) cables to your graphics card(s).
5. Connect SATA 5-pin cables to your storage devices (SSDs/HDDs) and peripheral 4-pin cables to other components as needed.
6. Ensure all connections are secure and properly seated.



Figure 2: Semi-Modular Flat Cable Design and Connector Quantities

Cable Description: The power supply includes flat, black cables for easy routing and improved aesthetics. The semi-modular design means you only attach the cables your system requires, minimizing internal clutter.

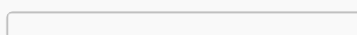
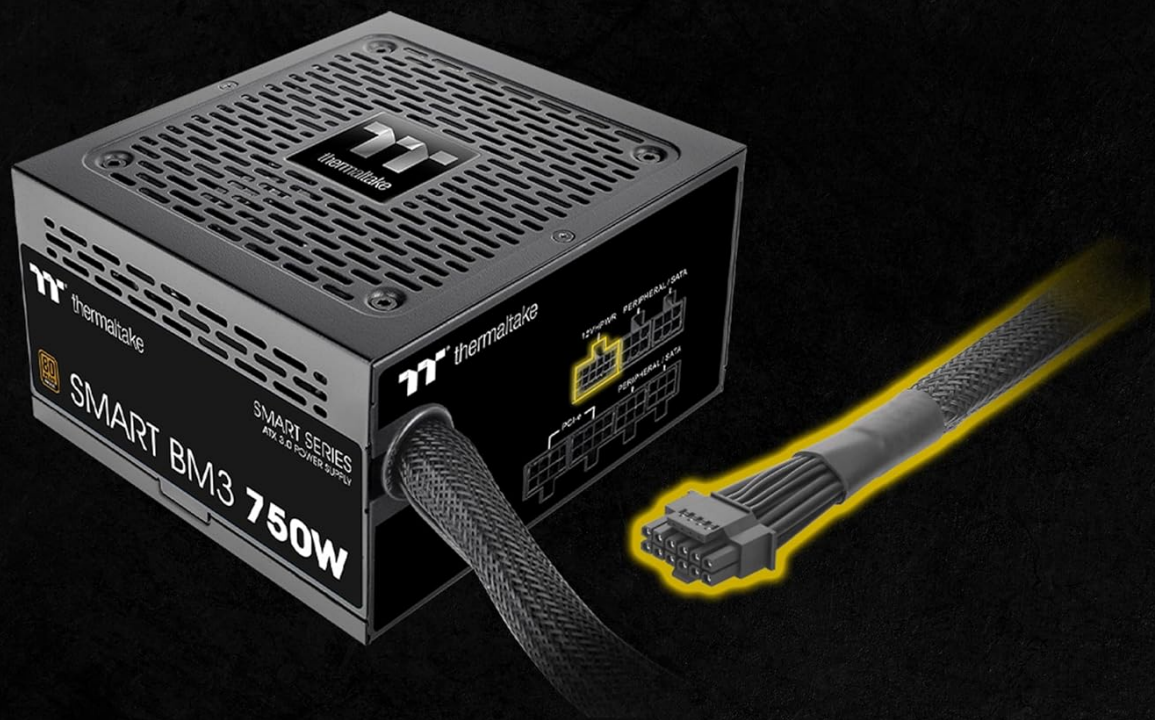


Figure 3: Various GPU Power Connector Configurations

2.2. PCIe Gen 5.0 (12VHPWR) Connector

The Smart BM3 750W is equipped with a native 16-pin (12VHPWR) PCIe connector capable of delivering up to 300W for PCIe 5.0 graphics cards. This ensures compatibility with next-generation GPUs.



PCIe GEN 5.0 READY

Smart BM3 Bronze series comes with a 16-pin connector to offer powerful and stable performance allowing the PSU to natively run next-generation GPUs.

The wattage marked on the 12VHPWR's connector is the recommended wattage. (Ref. Intel design guideline)

The native 16-pin (12VHPWR) PCIe connector of the Smart BM3 650W can deliver up to 300W for PCIe 5.0 graphics cards.

Figure 4: PCIe Gen 5.0 Ready Power Supply

2.3. ATX 3.0 Compatibility

This power supply is fully compatible with Intel ATX 3.0 specifications, supporting up to 200% power excursion and achieving 60% low load efficiency, while complying with required power supply timing standards.



Figure 5: ATX 3.0 Compatibility Features

3. OPERATING INSTRUCTIONS

3.1. Smart Zero Fan Function

The Smart Zero Fan function ensures silent operation by preventing the 120mm FDB fan from spinning until the power supply load exceeds 20%. This minimizes undesired noise during low-load conditions. A physical switch on the back of the PSU allows you to enable or disable this function.



BE SMART, STAY QUIET

Featuring a 120mm FDB fan to deliver excellent airflow. Furthermore, with the Smart Zero Fan function the fan will not spin until the load exceeds 20% of the power supply, minimizing undesired noise.

Figure 6: Smart Zero Fan Switch

3.2. Power On/Off

After all components are securely connected, plug the AC power cord into the power supply and a wall outlet. Flip the main power switch on the PSU to the 'ON' position to power your system.

4. MAINTENANCE

To ensure optimal performance and longevity of your power supply:

- Keep the power supply and surrounding area free from dust and debris. Use compressed air to clean the fan and vents periodically.
- Ensure adequate airflow within your PC case to prevent overheating.
- Avoid operating the power supply in high humidity or extreme temperature environments.

5. TROUBLESHOOTING

If you encounter issues with your power supply, consider the following:

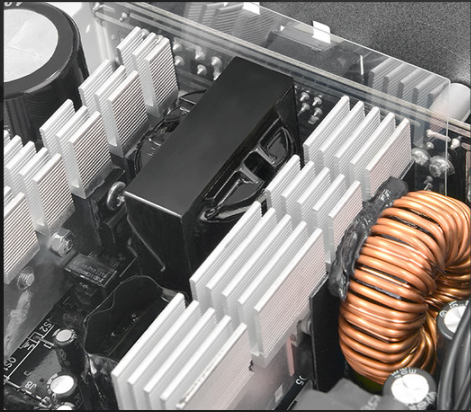
- **No Power:** Double-check all power connections, including the AC power cord, 24-pin ATX, and CPU power cables. Ensure the main power switch on the PSU is in the 'ON' position.
- **System Instability:** Verify that all modular cables are correctly and firmly plugged into the power supply and components. Ensure your system's power requirements do not exceed the PSU's capacity.
- **Fan Not Spinning:** If the Smart Zero Fan function is enabled, the fan will not spin until the PSU load exceeds 20%. This is normal operation. If the fan never spins under load, check the Smart Zero Fan switch position.
- **Overheating:** Ensure proper ventilation in your PC case. Clean any dust buildup on the PSU fan and vents.

6. SPECIFICATIONS

Feature	Detail
P/N	PS-SPD-0750MNFABU-3
Model	SPD-750AH2CLB
Watts	750W
Max Output Capacity	750W
Color	Black
Dimensions (WxHxD)	150mm x 86mm x 140mm
PFC (Power Factor Correction)	Active PFC
Power Good Signal	100-150 msec
Hold Up Time	17msec
Input Current	15A-6A
Input Frequency Range	50Hz/60Hz
Input Voltage	100-240V~
Operating Temperature	5°C to + 40°C
Operating Humidity	20% to 85%, non-condensing
Storage Temperature	-40°C to + 55°C
Storage Humidity	10% to 95%, non-condensing
Cooling System	12cm FDB Fan
Efficiency	Meet 80 PLUS® Bronze at 115Vac input
MTBF	100,000 hrs minimum
Safety Approval	FCC/ICES/CB/cTUVus/S-mark

Feature	Detail
PCI-E 6+2PIN Connectors	4
PCI-E 12+4PIN (12VHPWR) Connector	1 (300W)
Protection Features	OCP/OVP/UVP/OPP/OTP/SCP

Output Specification



HIGH AMPERAGE SINGLE +12V RAIL & DC TO DC DESIGN

Top-end build quality with low ripple noise. All ripples are lower than 30mV on +12V, +5V or +3.3V from 0% to 100% load to ensure a stable operation and keep your performance-critical components to function reliably for longer.

AC INPUT	Input Voltage: 100-240V ~ Input Current: 15A-6A Frequency: 50Hz/60Hz				
DC OUTPUT	+3.3V	+5V	+12V	-12V	+5VSB
Max Output Current	18A	18A	62.5A	0.3A	3A
Max Output Power	110W		750W	3.6W	15W
Total Power	750W				

Figure 7: Detailed Output Specification Table

7. WARRANTY AND SUPPORT

The Thermaltake Smart BM3 750W Power Supply comes with a **5-year warranty**, ensuring long-term reliability and peace of mind. For technical support, warranty claims, or additional product information, please visit the official Thermaltake website or contact their customer service.

Safety Information: High voltages exist inside the power supply. Do not open the power supply case unless you are an authorized service technician or electrician. Doing so will void the warranty. Ensure all cables are plugged in properly. Loose and improper connections could damage the power supply and your system. Please use only genuine Thermaltake modular cables with Thermaltake power supply models. Third-party cables might not be compatible and could cause serious damage to your system and power supply.

8. OFFICIAL PRODUCT VIDEOS

8.1. RAPID REVIEW Thermaltake Smart BM3 850W Power Supply

Your browser does not support the video tag.

Video Description: A detailed review of the Thermaltake Smart BM3 850W Power Supply, highlighting its features and performance. This video is relevant for the 750W model as it shares similar features and design.

8.2. Thermaltake Smart RGB Silent Power Supply

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Video Description: This video showcases the Thermaltake Smart RGB Silent Power Supply, demonstrating its quiet operation and

RGB lighting features. While this specific model is RGB, the video provides insight into the quiet fan technology also present in the Smart BM3 series.

8.3. Thermaltake GT Snow PSU Unboxing & PC Installation

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Video Description: An unboxing and PC installation guide for the Thermaltake GT Snow PSU. This video offers visual guidance on the installation process that is generally applicable to other Thermaltake power supplies, including the Smart BM3 series.



Related Documents - Smart BM3 750W

	<p>Thermaltake SMART 700W/600W/500W Power Supply User Manual</p> <p>Thermaltake SMART 700W, 600W, and 500W Power Supply Units (PSUs): This user manual provides essential safety information, detailed installation instructions, comprehensive technical specifications, and troubleshooting tips for Thermaltake's SMART series power supplies. Learn about connector types, electrical characteristics, protection features, and certifications like cTUVus, FCC, and S-mark.</p>
	<p>Thermaltake SMART BM3 Series 850W/750W/650W/550W Power Supply User Manual</p> <p>User manual and technical specifications for the Thermaltake SMART BM3 series of 80+ Bronze certified, ATX 3.0 compatible power supply units, detailing features, installation, and safety information.</p>
	<p>Thermaltake Toughpower GX3 850W / 750W Power Supply Unit Manual</p> <p>Comprehensive guide for the Thermaltake Toughpower GX3 850W and 750W power supply units, covering installation, safety precautions, troubleshooting, output specifications, and protection features.</p>
	<p>Thermaltake TOUGHPower GF1 ARGB 850W/750W/650W Power Supply User Manual</p> <p>Comprehensive user manual for the Thermaltake TOUGHPower GF1 ARGB series power supplies (850W, 750W, 650W), covering safety precautions, component checks, connector details, output specifications, installation steps, fan features, protections, certifications, environmental information, troubleshooting, and support.</p>
	<p>Thermaltake Toughpower GT 850W/750W/650W Power Supply Unit Manual</p> <p>Comprehensive guide for Thermaltake Toughpower GT series power supply units (850W, 750W, 650W), covering safety warnings, component checks, installation steps, output specifications, protection features, and troubleshooting.</p>
	<p>Thermaltake Toughpower PF3 Series 750W-1200W Power Supply Unit Manual</p> <p>User manual and technical specifications for the Thermaltake Toughpower PF3 series of power supply units, including models 750W, 850W, 1050W, and 1200W. Covers installation, troubleshooting, safety, and output specifications.</p>