



Manuals.plus /

› **Cooler Master** /

› Cooler Master X Silent MAX Platinum 1300 ATX 3.1 Full Modular PSU User Manual

## Cooler Master X Silent MAX Platinum 1300

# Cooler Master X Silent MAX Platinum 1300 ATX 3.1 Full Modular PSU User Manual

Model: X Silent MAX Platinum 1300

## 1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Cooler Master X Silent MAX Platinum 1300 ATX 3.1 Full Modular Power Supply Unit (PSU). Please read this manual thoroughly before installation and use to ensure proper functionality and safety.

## 2. SAFETY INFORMATION

- Always disconnect the power cord from the wall outlet before installing, removing, or cleaning the PSU.
- This PSU is designed for use in desktop computers. Do not use it for any other purpose.
- Do not open the PSU casing. High voltages are present inside, and opening the unit will void the warranty.
- Ensure proper grounding of your computer system.
- Avoid exposing the PSU to moisture, dust, or extreme temperatures.
- Use only the modular cables provided with this PSU. Using incompatible cables may cause damage.

## 3. PACKAGE CONTENTS

Verify that all items are present in your package:

- Cooler Master X Silent MAX Platinum 1300 PSU Unit
- Modular Cable Set (including 90° 12VHPWR PCIe 5.1 cable)
- AC Power Cord
- Mounting Screws
- User Manual



Image: All modular cables included with the Cooler Master X Silent MAX Platinum 1300 PSU.

## 4. PRODUCT OVERVIEW

The Cooler Master X Silent MAX Platinum 1300 is a high-performance, fully modular power supply designed for demanding PC systems. Key features include:

### 4.1 Modular Connectors



Image: Overview of the PSU's modular connector panel, showing ports for M/B, PCIe/CPU, 12V-2x6, HDD/SATA, PMBus, and USB Protocol.

### 4.2 Ultra-Quiet Mobius Fan

The PSU features an ultra-quiet Mobius fan designed for efficient heat dissipation while maintaining low noise

levels, typically under 25dBA. It supports a Zero-RPM mode when cooling demand is low.



Image: Exploded view illustrating the Mobius fan component within the PSU structure.

### **4.3 Aluminum Thermal Structure**

An advanced aluminum thermal mold efficiently dissipates heat, contributing to superior thermal control and extended product longevity.

# ALUMINUM THERMAL STRUCTURE

Our **Patented Aluminum Thermal Mold** efficiently dissipates heat, ensuring superior thermal control, and longevity in demanding environments.



Image: Internal view detailing the aluminum thermal structure and various components such as EMI choke, active bridge rectifier, and transformers.

## 4.4 Active Bridge Rectifier with Infineon CoolMOS

Equipped with an Active Bridge Rectifier featuring Infineon CoolMOS technology, this PSU conserves electricity and reduces power loss, promoting high efficiency.

# ACTIVE BRIDGE RECTIFIER



Featuring **Infineon CoolMOS**, it conserves electricity and reduces power loss, ideal for high-efficiency, eco-friendly applications.

Image: Detailed view of the Active Bridge Rectifier board with Infineon CoolMOS components.

## 4.5 Digital Power Management (MasterCTRL Software)

The PSU integrates with Cooler Master's MasterCTRL software, allowing real-time monitoring of temperature, load, fan speed, and overall efficiency for precise control.

# DIGITAL POWER MANAGEMENT

Equipped with MCUs and MasterCTRL software, our reliable PSU monitors **temperature, load, and efficiency** in real-time for precise control.



Image: A user monitoring PSU performance using the MasterCTRL software interface.

## 4.6 90° Durable 12VHPWR PCIe 5.1 Cable

The included 90° 12VHPWR PCIe 5.1 connector enhances electrical durability and safety, and its angled design helps prevent cable wear in tight spaces.

# 90° DURABLE CABLES

Featuring a 90° 12VHPWR PCIe 5.1 connector, for improved electrical durability and safety.

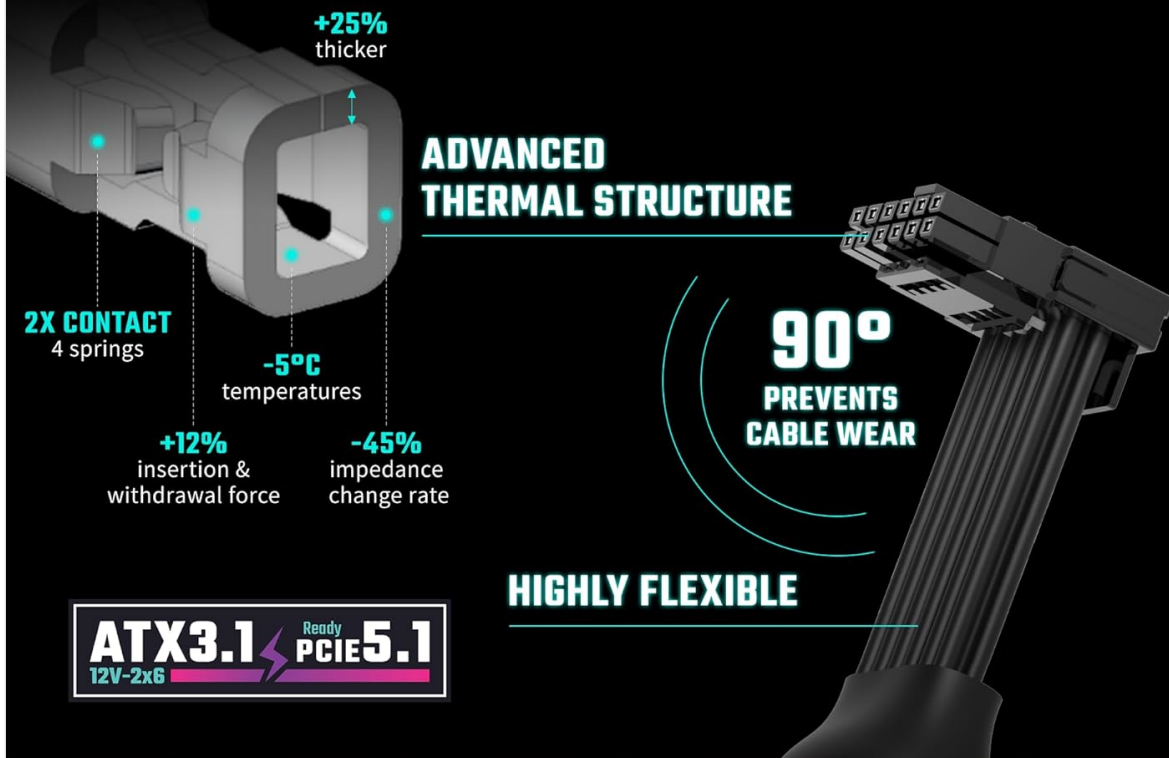


Image: Diagram highlighting the design and benefits of the 90° 12VHPWR cable.

## 4.7 ATX 3.1 Cables

The PSU is fully compliant with ATX 3.1 standards, delivering up to 600W power to your GPU via the 12VHPWR cable.

# ATX 3.1 CABLES

The **ATX 3.1** delivers up to **850W** power to your GPU.



Image: The PSU connected with ATX 3.1 cables, ready for integration with a GPU.

## 4.8 80 PLUS Platinum Efficiency

Achieving Platinum-Level performance with 92% efficiency, the PSU ensures effective power transfer from the wall outlet to your computer components, minimizing energy waste.

# 80+ PLATINUM EFFICIENCY

With **Platinum-Level** performance at **92% efficiency**, it ensures effective power transfer from the wall to your components.



Image: The PSU unit displaying the 80 PLUS Platinum efficiency logo.

## 4.9 PMBus Port Support

A server-level standard PMBus port allows for monitoring of efficiency, fan speed, temperatures, current load, and overall performance. The USB Protocol port connects to MasterCTRL software for enhanced control and data logging.

# PMBus PORT SUPPORT

Server-level standard port monitors efficiency, fan speed, temperatures, current load, and overall performance.

The USB Protocol is connected to MasterCTRL.

Server-level standard port monitors efficiency, fan speed, temperatures, current load, and overall performance.

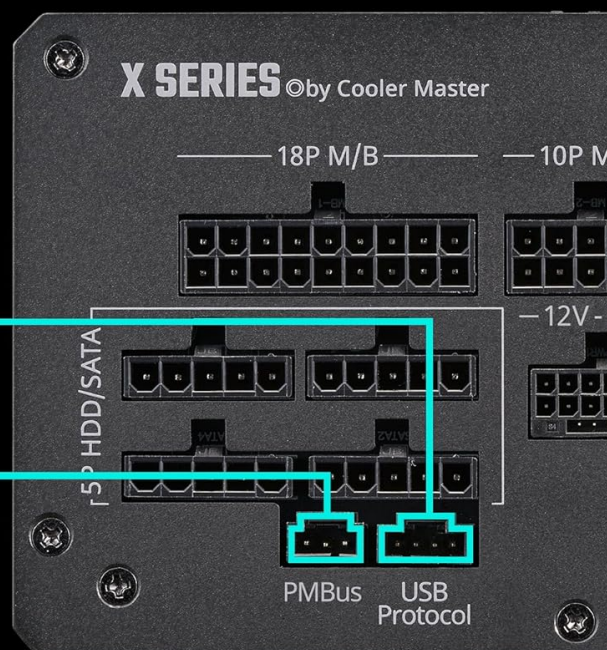


Image: Detailed view of the PMBus and USB Protocol connectors on the PSU.

## 5. SETUP AND INSTALLATION

Follow these steps to install your Cooler Master X Silent MAX Platinum 1300 PSU:

- 1. Prepare Your System:** Ensure your computer is powered off and unplugged from the wall outlet. Open your computer case.
- 2. Remove Old PSU (if applicable):** Disconnect all cables from your old PSU and remove it from the case.
- 3. Mount the New PSU:** Place the Cooler Master X Silent MAX Platinum 1300 into the PSU bay of your computer case. Secure it with the provided mounting screws.
- 4. Connect Modular Cables:** Identify the necessary cables for your motherboard, CPU, GPU, and other peripherals. Connect them to the corresponding modular ports on the PSU. Refer to the port labels on the PSU for correct connections (e.g., 18P M/B, 10P M/B, 8P PCIe/CPU, 12V-2x6, 5P HDD/SATA).
- 5. Connect to Components:** Route the connected modular cables neatly through your case and connect them to your motherboard (24-pin and 8-pin EPS), CPU (4+4 pin or 8-pin), GPU (using the 90° 12VHPWR PCIe 5.1 cable for compatible GPUs, or standard PCIe 6+2 pin cables), SATA devices, and other peripherals.
- 6. PMBus/USB Protocol Connection (Optional):** If you intend to use the MasterCTRL software for

monitoring, connect the USB Protocol cable from the PSU to an available USB header on your motherboard.

7. **Close Case and Connect Power:** Once all internal connections are secure, close your computer case. Connect the AC power cord to the PSU and then to a wall outlet.
8. **Power On:** Flip the power switch on the back of the PSU to the 'On' position and power on your computer.

## 6. OPERATING INSTRUCTIONS

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### 6.1 Basic Operation

After successful installation, the PSU will provide power to your system. The Mobius fan operates intelligently, adjusting its speed based on the thermal load. In low-load scenarios, the fan may enter Zero-RPM mode for silent operation.

### 6.2 MasterCTRL Software (Optional)

For advanced monitoring and control, download and install the Cooler Master MasterCTRL software from the official Cooler Master website. Ensure the USB Protocol cable is connected between the PSU and your motherboard. The software allows you to:

- Monitor real-time power efficiency.
- View fan speed and temperature readings.
- Check current load on various rails.
- Access overall PSU performance data.

## 7. MAINTENANCE

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To ensure optimal performance and longevity of your PSU:

- **Dust Removal:** Periodically clean dust from the PSU's fan grille and vents using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Cable Management:** Maintain good cable management within your PC case to ensure proper airflow and prevent overheating.
- **Environmental Conditions:** Operate the PSU in a well-ventilated area, away from direct sunlight, heat sources, and excessive humidity.

## 8. TROUBLESHOOTING

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

- **No Power:**
  - Check if the AC power cord is securely connected to both the PSU and the wall outlet.
  - Ensure the power switch on the back of the PSU is in the 'On' position.
  - Verify all modular cables are correctly and firmly seated in both the PSU 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 1300W capacity.
- Check for loose cable connections.
- Monitor PSU voltages and temperatures using MasterCTRL software to identify anomalies.

- **Fan Noise:**

- The Mobius fan is designed for quiet operation, including a Zero-RPM mode. However, under load, the fan will activate.
- Some users have reported aggressive fan activation cycles even at idle. If this behavior is disruptive, consult Cooler Master support for further assistance or to verify expected fan profiles.
- Ensure the PSU fan intake/exhaust is not obstructed.

- **Burning Smell/Smoke:**

- Immediately power off and unplug the system. Do not attempt to restart.
- Contact Cooler Master support for assistance.

## 9. SPECIFICATIONS

Feature	Specification
Brand	Cooler Master
Series	X Silent MAX Platinum 1300
Model Number	MPS-D001-AFAP-BUS
Output Wattage	1300 Watts
Efficiency Rating	80 PLUS Platinum (92% efficiency)
Form Factor	ATX
ATX Version	ATX 3.1
PCIe Version	PCIe 5.1 (with 90° 12VHPWR 600W connector)
Cooling Method	Air (Mobius 120 Fan with Zero-RPM mode)
Modular	Full Modular
Dimensions (LxWxH)	7.08 x 5.9 x 3.38 inches
Weight	9.92 pounds
Special Features	Aluminum Thermal Structure, Infineon CoolMOS, PMBus Port, USB Protocol for MasterCTRL

## 10. WARRANTY AND SUPPORT

The Cooler Master X Silent MAX Platinum 1300 PSU comes with a **15-year warranty**, reflecting its robust design and high-quality components.

For technical support, warranty claims, or further inquiries, please visit the official Cooler Master support website:

