

Cooler Master Elite 301

Cooler Master Elite 301 Micro-ATX PC Case Instruction Manual

Model: Elite 301 (E301-WGNN-S00)

Brand: Cooler Master

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Cooler Master Elite 301 Micro-ATX PC Case. Please read this manual thoroughly before beginning assembly to ensure proper setup and optimal performance of your system. The Elite 301 is designed for Micro-ATX and Mini-ITX motherboards, offering high airflow and a minimalist aesthetic.



The Cooler Master Elite 301 White Micro-ATX PC Case.

PRODUCT FEATURES

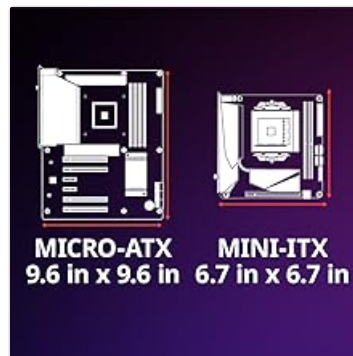
The Cooler Master Elite 301 PC Case incorporates several design elements to enhance your PC building experience and system performance:

- **Motherboard Compatibility:** Designed to accommodate Micro-ATX or Mini-ITX motherboards, providing a compact yet functional build.



Illustration of Micro-ATX (9.6 in x 9.6 in) and Mini-ITX (6.7 in x 6.7 in) motherboard sizes for compatibility.

- **GPU Clearance:** Supports graphics cards up to 365mm in length, allowing for installation of high-performance GPUs.



Internal view highlighting the maximum GPU length of 365mm.

- **Cooling Support:** Features support for a 280mm liquid cooler and up to six fans for optimal thermal management.

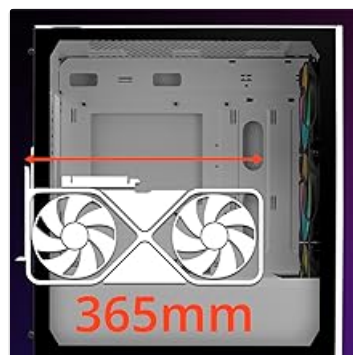
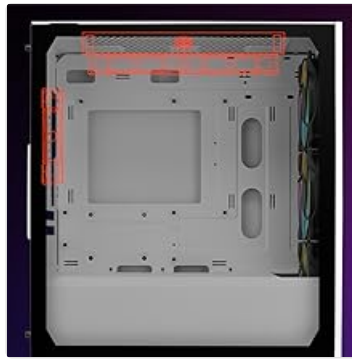


Diagram illustrating locations for 280mm liquid cooler and additional fan support.

- **Component Clearance:** Accommodates CPU coolers with a height of up to 163.5mm and power supply units (PSUs) up to 160mm in length.



Visual representation of CPU cooler height (163.5mm) and PSU length (160mm) limits.

- **Unrestricted Airflow:** Equipped with three 120mm ARGB PWM fans and a large intake grill to ensure efficient and unobstructed airflow.



Front view of the case showcasing the three 120mm ARGB PWM fans and airflow path.



Close-up of the large intake grill designed for maximum air intake.

- **USB Type-C Connectivity:** An integrated USB Type-C port on the I/O panel provides modern and fast connectivity options.



Detail of the top I/O panel featuring the USB Type-C port.

- **Breathable PSU Shroud:** The ventilated PSU cover efficiently cools the power supply unit, contributing to overall system thermal performance.



Internal view illustrating the ventilated PSU shroud and its role in cooling.

SETUP AND INSTALLATION

Follow these steps for assembling your PC components within the Cooler Master Elite 301 case. For a visual guide, please refer to the official build video below.

Video Guide: Elite 301 Build

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This video demonstrates the complete assembly process for the Cooler Master Elite 301 PC case, including motherboard, CPU, RAM, storage, PSU, liquid cooler, and GPU installation.

Step-by-Step Installation Overview:

1. **Prepare Motherboard:** Install the CPU, CPU cooler (if air cooler), RAM, and M.2 SSDs onto the motherboard outside the case.
2. **Install Power Supply (PSU):** Mount the PSU into its designated compartment at the bottom rear of the case. Secure it with screws.
3. **Mount Motherboard:** Carefully align and install the prepared motherboard into the case, securing it with standoffs and screws.
4. **Install Liquid Cooler (if applicable):** If using a liquid cooler, mount the radiator and fans to the top panel of the case, then attach the pump/cold plate to the CPU.
5. **Install Graphics Card (GPU):** Insert the GPU into the primary PCIe slot on the motherboard and secure it with the retention mechanism and screws.
6. **Connect Cables:** Connect all necessary power cables from the PSU to the motherboard, GPU, and other components. Connect front panel I/O cables (USB, audio, power/reset switches, RGB).
7. **Cable Management:** Route cables neatly behind the motherboard tray to ensure optimal airflow and a clean interior.
8. **Close Case:** Reattach the side panels, ensuring they are securely fastened.

OPERATING INSTRUCTIONS

Once your system is fully assembled and all connections are secure, you can power on your PC. The Cooler Master Elite 301 case is designed for straightforward operation.

- **Power On:** Ensure the PSU switch is in the 'On' position (usually 'I'). Press the power button on the top I/O panel of the case.
- **ARGB Fan Control:** The included 120mm ARGB PWM fans can be controlled via your motherboard's RGB software (if connected to an ARGB header) or a compatible ARGB controller. Refer to your

motherboard manual for specific software instructions.

- **USB Ports:** Utilize the front panel USB 3.0 and USB Type-C ports for convenient access to peripherals and external storage.

MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your PC components.

- **Dust Filter Cleaning:** The Elite 301 features removable dust filters on the top and front panels. Regularly remove and clean these filters with compressed air or water (ensure they are completely dry before reinstallation) to prevent dust buildup and maintain airflow.
- **Interior Cleaning:** Periodically open the side panels and use compressed air to remove dust from internal components, especially CPU coolers, GPU heatsinks, and case fans.
- **Cable Management Check:** Ensure all cables remain neatly routed and do not obstruct airflow or fan operation.

TROUBLESHOOTING

If you encounter issues during or after assembly, consider the following common troubleshooting steps:

- **No Power:** Check if the PSU is properly connected to the wall outlet and the PSU switch is 'On'. Verify all power cables (24-pin ATX, 8-pin CPU, PCIe power) are securely connected to the motherboard and GPU.
- **Fans Not Spinning/No Display:** Ensure the CPU is correctly seated and the CPU cooler is properly installed. Check RAM modules are fully seated in their slots. Verify the GPU is correctly installed and receiving power.
- **Front Panel I/O Issues:** Double-check that all front panel connectors (USB, audio, power/reset switches) are correctly plugged into the motherboard headers according to your motherboard manual.
- **Overheating:** Confirm all case fans and CPU/GPU coolers are spinning correctly. Ensure dust filters are clean and not obstructing airflow. Verify thermal paste application on the CPU.

SPECIFICATIONS

Feature	Specification
Model Name	Elite 301
Item Model Number	E301-WGNN-S00
Case Type	Mini-Tower
Motherboard Compatibility	Micro ATX, Mini-ITX
Dimensions (L x W x H)	15.35 x 8.01 x 16.92 inches (389.9 x 203.5 x 429.7 mm)
Item Weight	9.8 pounds (4.45 kg)
Materials	Metal, Plastic, Tempered Glass
GPU Clearance	Up to 365mm

Feature	Specification
CPU Cooler Height	Up to 163.5mm
PSU Length	Up to 160mm
Pre-installed Fans	3x 120mm ARGB PWM Fans (Front)
Fan Support (Top)	2x 120mm / 2x 140mm
Fan Support (Rear)	1x 120mm
Radiator Support (Top)	120mm, 140mm, 240mm, 280mm
Radiator Support (Rear)	120mm
I/O Panel	1x USB 3.0, 1x USB Type-C, Audio In/Out
Power Supply Mounting Type	Bottom Mount

WARRANTY AND SUPPORT

For warranty information, technical support, or further assistance, please visit the official Cooler Master website or contact their customer service department. Keep your proof of purchase for warranty claims.

Cooler Master Official Website: www.coolermaster.com