Cooler Master Elite 301

Cooler Master Elite 301 PC Case User Manual

Model: Elite 301 (E301-KGNN-S00)
Brand: Cooler Master

Introduction

The Cooler Master Elite 301 is a Micro-ATX PC case designed for high airflow and a minimalist aesthetic. It offers a cost-effective and space-saving solution for various computing needs, including gaming. Key features include a large intake grill, pre-installed 120mm ARGB PWM fans, and a PSU cover for clean cable management. This manual provides essential information for setting up, operating, and maintaining your Elite 301 PC case.



Image: Cooler Master Elite 301 PC Case - A full view of the case highlighting its design and front panel fans.

Setup and Installation

Proper installation ensures optimal performance and longevity of your PC components. Follow these steps for a smooth build process.

Component Compatibility

- **Motherboard Support:** Designed to accommodate Micro-ATX or Mini-ITX motherboards.
- **GPU Clearance:** Supports graphics cards up to 365mm in length, allowing for high-performance GPUs.
- **CPU Cooler Height:** Accommodates CPU coolers with a maximum height of 163.5mm.
- **PSU Length:** Supports power supply units up to 160mm in length.
- **Cooling System:** Supports 280mm liquid coolers and up to six fans for efficient thermal management.

Installation Steps

1. **Prepare the Case:** Unpack the Cooler Master Elite 301 case. Remove side panels and any internal packaging.
2. **Install Power Supply Unit (PSU):**

   Locate the PSU mounting area at the bottom of the case. Secure the PSU with screws. Ensure all necessary cables are routed through the designated cutouts for efficient cable management.

   Your browser does not support the video tag.

   Video: Elite 301 Panda Build Video - This video demonstrates the installation process for various components, including the power supply unit.

3. **Install Motherboard:**

   Carefully align your Micro-ATX or Mini-ITX motherboard with the standoffs inside the case. Secure it with the provided screws. Connect the front panel headers (USB, audio, power, reset) to the motherboard.



Image: Motherboard Compatibility - Illustrates the dimensions for Micro-ATX and Mini-ITX motherboards, ensuring a perfect fit within the case.

4. **Install CPU and Cooler:**

   Install your CPU onto the motherboard socket. Apply thermal paste if not pre-applied on your cooler. Mount your CPU cooler (air or 280mm liquid cooler) ensuring proper contact and secure fastening. The case supports CPU coolers up to 163.5mm in height.



Image: Cooling System Support - Shows the internal layout with highlighted areas for 280mm liquid cooler and fan placements, ensuring optimal thermal efficiency.

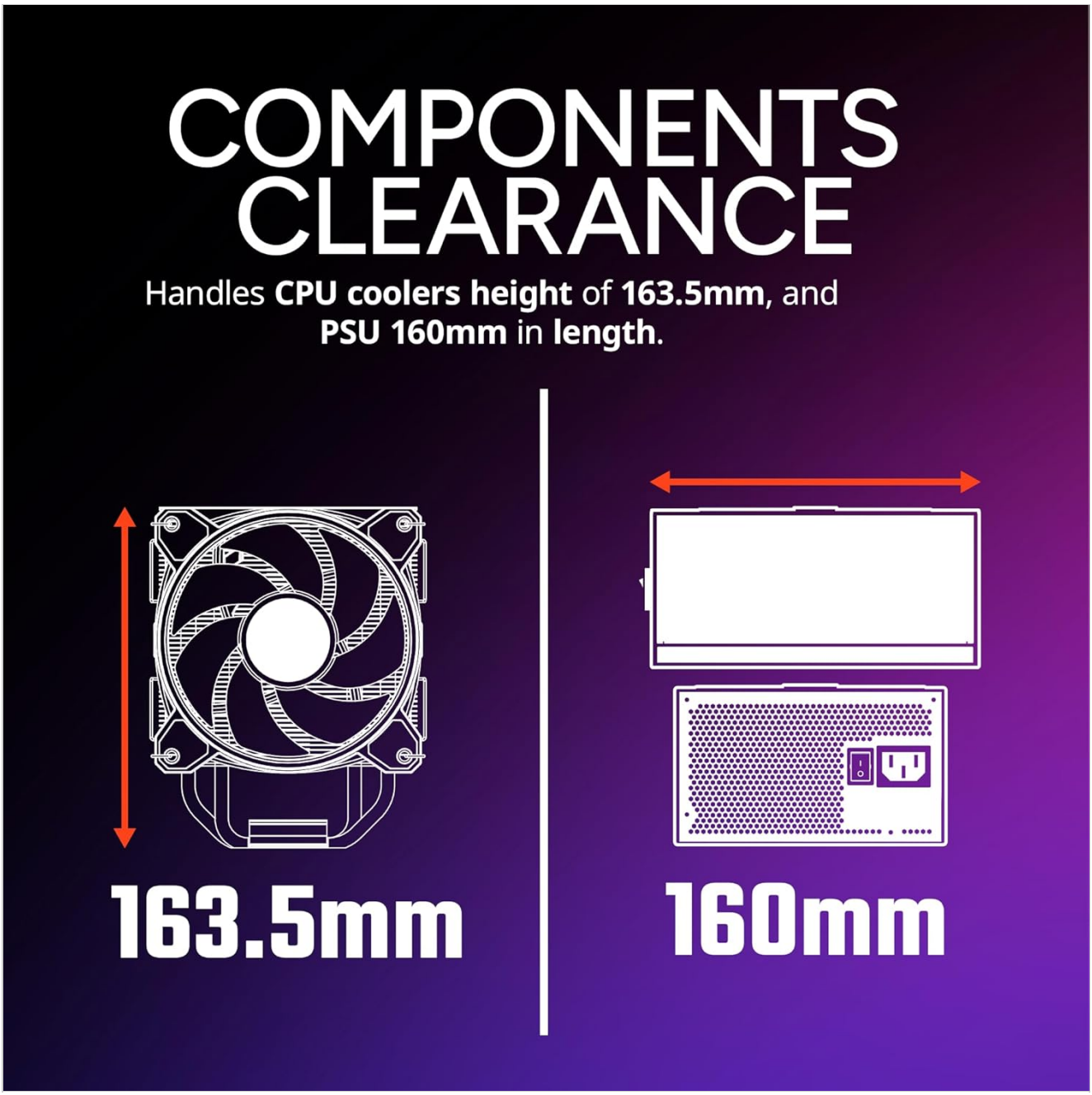


Image: Component Clearance - Visual representation of maximum CPU cooler height (163.5mm) and PSU length (160mm) supported by the case.

5. **Install Graphics Card (GPU):**

   Insert your graphics card into the appropriate PCIe slot on the motherboard. Secure it with the retention clip and screw. The Elite 301 accommodates GPUs up to 365mm in length.



Image: GPU Clearance - Illustrates the generous space available for graphics cards, supporting lengths up to 365mm.

6. **Cable Management:**

   Utilize the cable routing options behind the motherboard tray to keep your build clean and improve airflow. The integrated PSU cover helps conceal cables for a visually appealing setup.



Image: Breathable PSU Shroud - Demonstrates how the ventilated PSU cover aids in efficient cooling and cable concealment.

7. **Front Panel Connections:**

   Connect the USB 3.0 and USB Type-C ports, audio jacks, and power/reset buttons from the case's front I/O panel to your motherboard. The Elite 301 features an integrated USB Type-C port for modern connectivity.



Image: USB Type-C Port - Highlights the integrated USB Type-C port on the I/O panel for convenient connectivity.

8. **Install Fans:**

   The case comes with three pre-installed 120mm ARGB PWM fans. Ensure they are properly connected to your motherboard or fan controller for power and ARGB control. The large intake grill ensures unrestricted airflow.



Image: Unrestricted Air Flow - Depicts the efficient airflow provided by the three 120mm ARGB PWM fans.



Image: Large Intakes Grill - A close-up view of the large intake grill, designed for maximum airflow.

9. **Close the Case:** Reattach the side panels, ensuring they are securely fastened.

Operating Your PC Case

Once all components are installed and connected, your Cooler Master Elite 301 case is ready for operation. The case provides a stable and well-ventilated environment for your PC hardware.

- **Power On:** Press the power button on the front I/O panel to start your system.
- **Airflow Monitoring:** The high airflow design, featuring a large intake grill and multiple fan mounts, ensures optimal cooling for your components. Monitor component temperatures using system monitoring software to ensure stable operation.
- **ARGB Lighting:** The pre-installed ARGB fans can be controlled via compatible motherboard software or a dedicated ARGB controller (if included or purchased separately) to customize lighting effects.

Maintenance

Regular maintenance helps preserve the performance and appearance of your PC case.

- **Dust Filter Cleaning:** The Elite 301 features dust filters on intake areas. Periodically remove and clean these filters to prevent dust buildup and maintain optimal airflow. This can typically be done by rinsing with water and allowing them to dry completely, or by using compressed air.
- **Exterior Cleaning:** Wipe the exterior surfaces of the case with a soft, damp cloth. Avoid abrasive cleaners or solvents that could damage the finish.
- **Internal Dust Removal:** Every few months, open the case and use compressed air to gently remove dust from internal components and fan blades. Ensure the system is powered off and unplugged before performing internal cleaning.

Troubleshooting

This section addresses common issues you might encounter with your PC case.

- **Poor Airflow/High Temperatures:**
  - Check if dust filters are clogged and clean them.
  - Ensure all fans are spinning correctly and are oriented for proper intake/exhaust.
  - Verify that cables are neatly managed and not obstructing airflow.
- **Front Panel I/O Not Working:**
  - Confirm that all front panel headers (USB, audio, power, reset) are correctly connected to the motherboard. Refer to your motherboard manual for specific pin layouts.
- **Component Fit Issues:**
  - Double-check component dimensions against the case specifications (GPU length, CPU cooler height, PSU length).
  - Ensure standoffs are correctly installed for the motherboard size.
- **ARGB Fans Not Lighting Up:**
  - Verify that the ARGB cables are securely connected to the correct ARGB headers on your motherboard or controller.
  - Check your motherboard's software or physical controller for ARGB settings.

Specifications

Feature	Specification
Model Name	Elite 301
Item Model Number	E301-KGNN-S00
Brand	Cooler Master
Case Type	Mini-Tower
Motherboard Compatibility	Micro ATX, Mini-ITX
Dimensions (LxWxH)	15.35 x 8.01 x 16.92 inches
Item Weight	9.8 pounds
Material	Tempered Glass, Plastic, Metal
Color	Black
Cooling Method	Water, Air
Power Supply Mounting Type	Bottom Mount

Feature	Specification
Number of USB 3.0 Ports	1 (plus USB Type-C)
Light Color	ARGB

Warranty and Support

For detailed warranty information, technical support, or to inquire about replacement parts, please visit the official Cooler Master website or contact their customer service directly. Keep your proof of purchase for warranty claims.
You can visit the Cooler Master Store on Amazon for more products and information: Cooler Master Store

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