Cooler Master Q300LV2-KGNN-S00

Cooler Master Q300L V2 Micro-ATX Tower Instruction Manual

Model: Q300LV2-KGNN-S00 | Brand: Cooler Master

INTRODUCTION

The Cooler Master Q300L V2 is a Micro-ATX tower designed for PC enthusiasts and builders seeking a compact yet versatile chassis. This case supports Micro-ATX and Mini-ITX motherboards, offering ample space for component installation and future upgrades. Key features include a magnetic patterned dust filter, a USB 3.2 Gen 2x2 Type-C port for high-speed data transfer, and a tempered glass side panel for showcasing your build. The design prioritizes thermal performance with perforated panels for optimal airflow and flexible cooling options.

This manual provides essential information for assembling, operating, and maintaining your Cooler Master Q300L V2 case.

SETUP AND INSTALLATION

Follow these steps for proper assembly and installation of components within your Q300L V2 chassis.

1. Motherboard Installation

The Q300L V2 supports both Micro-ATX and Mini-ITX motherboards. Ensure the standoffs are correctly aligned for your motherboard size before securing it with screws.

Figure 1: Motherboard Compatibility (Micro-ATX 9.6 x 9.6 in, Mini-ITX 6.7 x 6.7 in)

2. Component Clearance

The case provides generous clearance for various components:

- **CPU Coolers:** Maximum height of 159mm.
- **Graphics Cards (GPUs):** Up to 360mm in length.
- **Power Supplies (PSUs):** Up to 160mm in length.

Figure 2: Component Clearance Specifications

3. Cooling System Installation

The Q300L V2 offers versatile cooling options. You can install a 240mm liquid cooler and up to 5 case fans for optimal thermal management.

- **Liquid Cooling:** Supports a 240mm liquid cooler.
- **Case Fans:** Accommodates up to 5 fans (e.g., 120mm or 140mm).

Figure 3: Versatile Cooling Layout

4. Cable Management

Utilize the 28mm of space behind the motherboard tray to route and organize cables. This helps maintain a clean interior and improves airflow.

Figure 4: Cable Routing Space

5. Front I/O Panel

The front I/O panel includes a USB 3.2 Gen 2x2 Type-C port, offering data transfer speeds up to 20GB/s, along with other standard USB ports and audio jacks. Connect these to your motherboard according to its manual.

Figure 5: Front I/O Panel with USB 3.2 Gen 2x2 Type-C

6. Tempered Glass Side Panel

The 4mm-thick tempered glass side panel allows for a clear view of your internal components. Handle with care during installation and removal.

Figure 6: Tempered Glass Side Panel View

7. Case Positioning

The Q300L V2 can be positioned either vertically or horizontally to suit your setup preferences.

Figure 7: Vertical Case Positioning

OPERATING INSTRUCTIONS

Once all components are installed and connected, ensure all cables are properly routed and secured. Power on your system using the power button on the front I/O panel.

Thermal Design and Airflow

The Q300L V2 features an open thermal design with perforated front, top, and bottom panels. This design promotes excellent heat dissipation and optimal thermal airflow throughout the system. Ensure that fan orientations are set to create an effective airflow path (e.g., front intake, rear/top exhaust) for best performance.

Figure 8: Open Thermal Design and Airflow

MAINTENANCE

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

Dust Filter Cleaning

The Q300L V2 is equipped with redesigned magnetic patterned dust filters on the front, top, and bottom panels. These filters are easily removable for cleaning. Periodically remove and clean them with compressed air or by rinsing with water (ensure they are completely dry before reinstallation) to prevent dust buildup and maintain airflow.

Figure 9: Redesigned Magnetic Dust Filters

General Cleaning

Wipe the exterior of the case with a soft, damp cloth. Avoid abrasive cleaners or solvents that could damage the finish or tempered glass. For the interior, use compressed air to remove dust from components.

TROUBLESHOOTING

If you encounter issues with your PC build, consider the following common troubleshooting steps:

- **System Not Powering On:**

- Ensure the power supply is switched on and properly connected to the wall outlet and motherboard.
- Verify all front panel connectors (power switch, reset switch) are correctly attached to the motherboard headers.
- Check that the CPU power and main ATX power cables are securely connected.

- **No Display Output:**

  - Confirm the monitor cable is connected to the graphics card (not the motherboard integrated graphics, unless no dedicated GPU is present).
  - Reseat the graphics card in its PCIe slot.
  - Check that the graphics card has sufficient power from the PSU.

- **Overheating Issues:**

  - Ensure all case fans and CPU/GPU coolers are spinning correctly.
  - Verify fan orientations for optimal airflow (intake/exhaust).
  - Clean dust filters and internal components to remove any obstructions.
  - Check thermal paste application on the CPU cooler.

- **USB Ports Not Functioning:**

  - Ensure the USB headers from the front I/O panel are correctly connected to the motherboard.
  - Check motherboard drivers for USB controllers.

For more detailed troubleshooting, refer to the manuals for your specific motherboard, CPU, and graphics card.

SPECIFICATIONS

Feature	Detail
Model Name	Q300L V2 Black
Item Model Number	Q300LV2-KGNN-S00
Brand	Cooler Master
Motherboard Compatibility	Micro ATX, Mini-ITX
Case Type	Mini-Tower
Material	Metal, Plastic, Tempered Glass
Color	Black
Product Dimensions (LxWxH)	15.2 x 9.1 x 15 inches (386 x 230 x 381 mm)
Item Weight	11.68 pounds (5.3 kg)
CPU Cooler Clearance	Max 159mm
GPU Clearance	Max 360mm
PSU Length Clearance	Max 160mm

Cable Routing Space	28mm behind motherboard tray
Front I/O Ports	1x USB 3.2 Gen 2x2 Type-C, 2x USB 3.0, Audio In/Out
Cooling Method	Air
Power Supply Mounting Type	Bottom Mount
Fan Support	Up to 5 case fans (e.g., 2x 120/140mm front, 1x 120mm rear, 2x 120/140mm top, 1x 120mm bottom)
Radiator Support	Up to 240mm liquid cooler

WARRANTY INFORMATION

Cooler Master products are covered by a limited warranty. For specific warranty terms and conditions, including duration and coverage details, please refer to the official Cooler Master website or the warranty card included with your product. Keep your proof of purchase for warranty claims.

CUSTOMER SUPPORT

For technical assistance, product inquiries, or support, please visit the official Cooler Master support website. You can typically find FAQs, driver downloads, and contact information for customer service there.

Official Cooler Master Website: www.coolermaster.com

PRODUCT VIDEO GUIDE

Watch this official video for a visual overview and additional insights into the Cooler Master Q300L V2 Micro-ATX Tower.

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Video 1: Cooler Master Q300L V2 Product Overview and Features