DARKROCK CP-CASE-DR-EC2-BK

DARKROCK EC2 Black ATX Mid Tower PC Case User Manual

Model: CP-CASE-DR-EC2-BK

Overview   **Setup**   **Operation**   **Maintenance**   **Troubleshooting**   **Specifications**   **Support**

1. PRODUCT OVERVIEW

The DARKROCK EC2 Black ATX Mid Tower PC Case is designed for optimal performance and aesthetic appeal. It features a meshed front panel for superior airflow, a tempered glass side panel for showcasing internal components, and modern connectivity including a Type-C port. This case supports a wide range of components, making it suitable for various PC builds.

Figure 1.1: DARKROCK EC2 PC Case with its tempered glass side panel open, revealing the interior.

Key Features:

- **Meshed Front Panel:** Ensures efficient airflow and optimal cooling for PC components.
- **Tempered Glass Design:** Provides a clear view of your hardware and personalized style.
- **Type-C Ready:** Features the latest connectivity options for high-speed data transfer.
- **Magnetic Dust Filter:** Located on the top and bottom to prevent dust accumulation.
- **Broad Compatibility:** Supports ATX, M-ATX, ITX motherboards, 50 series graphics cards (up to 340mm GPU length), and various cooling configurations (up to 8 x 120mm fans, 1 x 360mm radiator).

2. Setup and Component Installation

This section guides you through the process of installing your PC components into the DARKROCK EC2 case.

2.1 Opening the Case

The tempered glass side panel features a convenient door-opening design for easy access. Gently pull the ribbon to unlatch the magnetic closure and swing the panel open. The panel can also be detached by lifting it off its hinges.
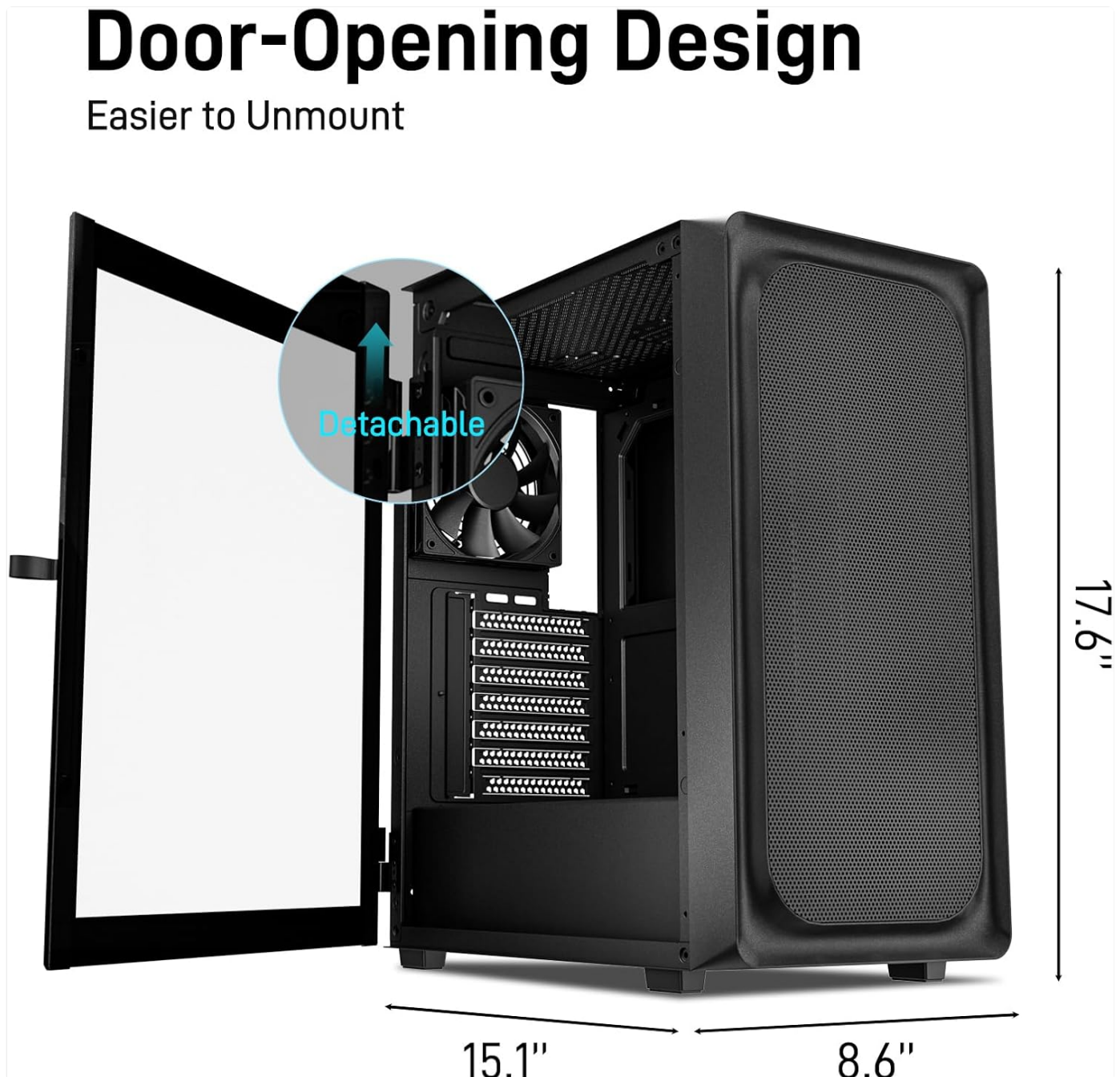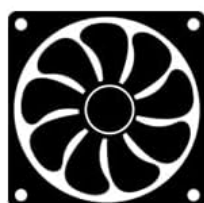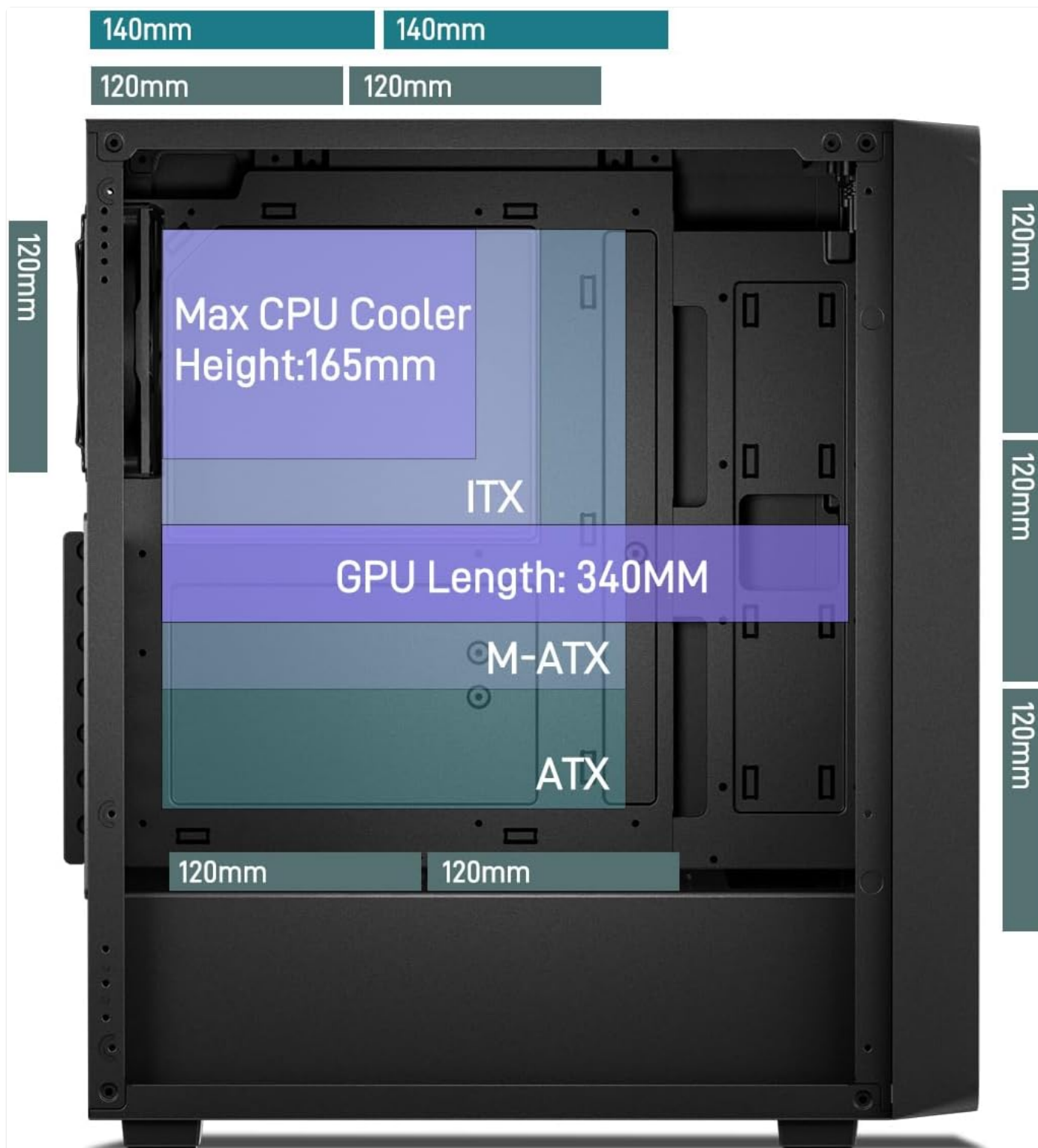

Figure 2.1: Detachable tempered glass side panel for easy component access.

2.2 Motherboard Installation

The case supports ATX, Micro-ATX (M-ATX), and Mini-ITX (ITX) motherboards. Ensure the standoffs are correctly aligned for your motherboard size. Secure the motherboard using the provided screws.

140mm 140mm

120mm 120mm

120mm

Max CPU Cooler Height:165mm

120mm

ITX

GPU Length: 340MM

120mm

M-ATX

ATX

120mm

120mm 120mm

Front: 120mm x3
Top: 120mm x2 / 140mm x2
Rear: 120mm x1
PSU shroud: 120mm x2

Top: 240 mm   Rear:120mm
Front: 360mm / 240 mm

Figure 2.2: Internal layout illustrating motherboard compatibility (ATX, M-ATX, ITX) and maximum CPU cooler height (165mm) and GPU length (340mm).

2.3 Storage Drive Installation

The case provides dedicated bays for 2.5-inch SSDs and 3.5-inch HDDs. Install your drives into the appropriate mounting locations and secure them.
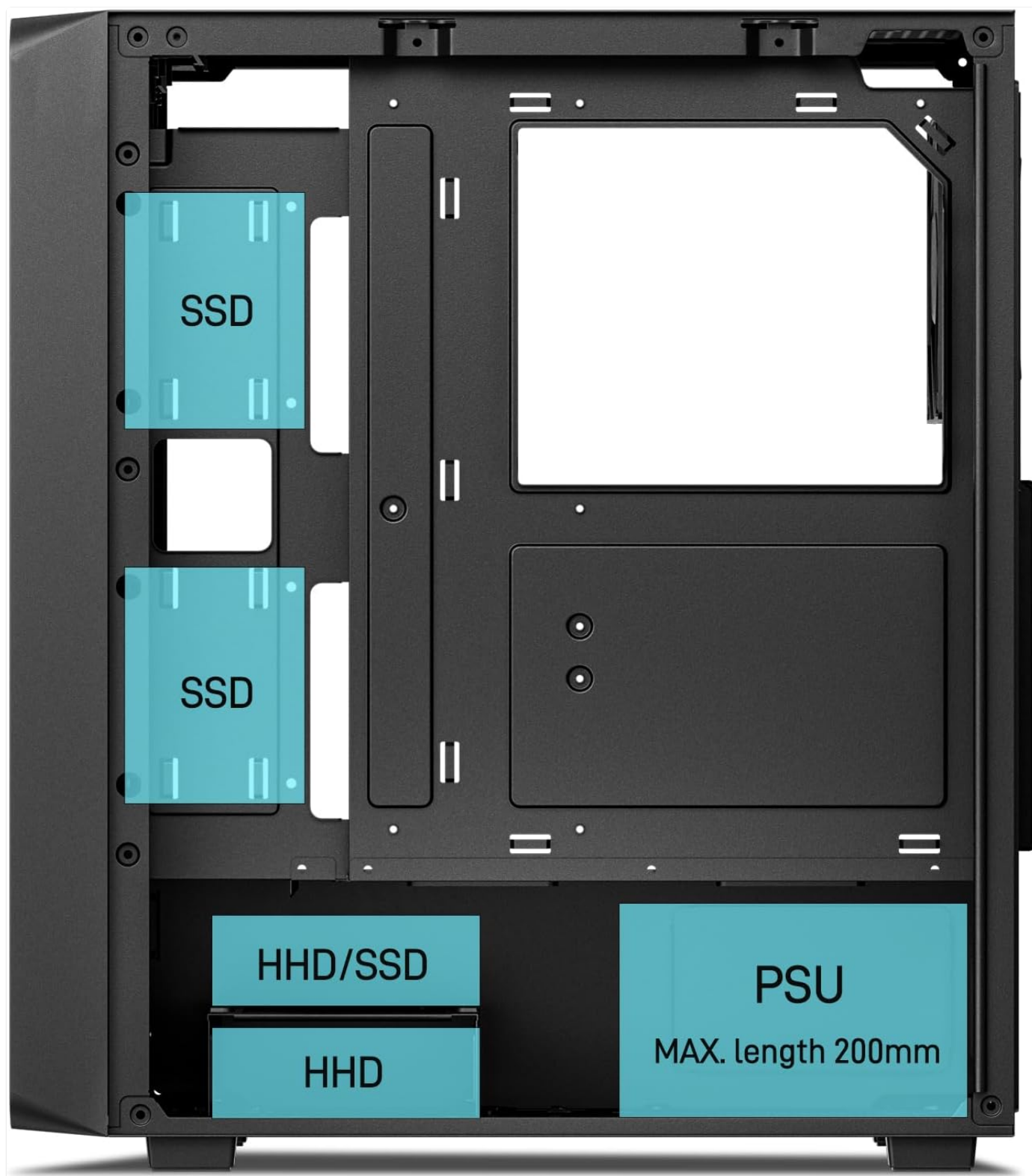
Figure 2.3: Designated mounting areas for SSDs, HDDs, and the Power Supply Unit (PSU).

2.4 Power Supply Unit (PSU) Installation

The PSU mounts at the bottom of the case. Ensure the PSU is oriented correctly for proper airflow and secure it with screws. The case supports PSUs up to 200mm in length.

2.5 Cooling System Installation

The EC2 case supports various cooling configurations to maintain optimal temperatures. It can accommodate up to 8 x 120mm fans and a 360mm radiator in the front.

- **Front:** Up to 3 x 120mm fans or 1 x 360mm radiator.
- **Top:** Up to 2 x 120mm or 2 x 140mm fans.
- **Rear:** 1 x 120mm fan (one pre-installed).
- **PSU Shroud:** Up to 2 x 120mm fans.

Figure 2.4: Airflow design of the EC2 case, showing intake from the front and bottom, and exhaust from the top and rear.

3. OPERATION

Once all components are installed and connected, you can begin operating your PC.

3.1 Front Panel I/O Ports

The top panel of the case provides convenient access to various input/output ports and controls:

- **Power Button:** To turn your computer on or off.
- **Reset Button:** To restart your computer.
- **USB 2.0 Port:** For connecting USB 2.0 devices.
- **USB 3.0 Port:** For connecting high-speed USB 3.0 devices.
- **Type-C Port (USB 3.2 Gen 2, 10Gbps):** For high-speed data transmission with compatible devices.
- **HD Audio Jacks:** For connecting headphones and microphones.

Figure 3.1: Front panel I/O ports including Type-C, USB 3.0, USB 2.0, HD Audio, Reset, and Power buttons.

4. MAINTENANCE

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

4.1 Dust Filter Cleaning

The DARKROCK EC2 case is equipped with magnetic dust filters on the top and bottom panels. These filters prevent dust from entering the chassis and should be cleaned periodically.

1. Gently remove the magnetic dust filters from the top and bottom of the case.
2. Use a soft brush, vacuum cleaner, or compressed air to remove accumulated dust.
3. Once clean, reattach the magnetic filters to their respective positions.
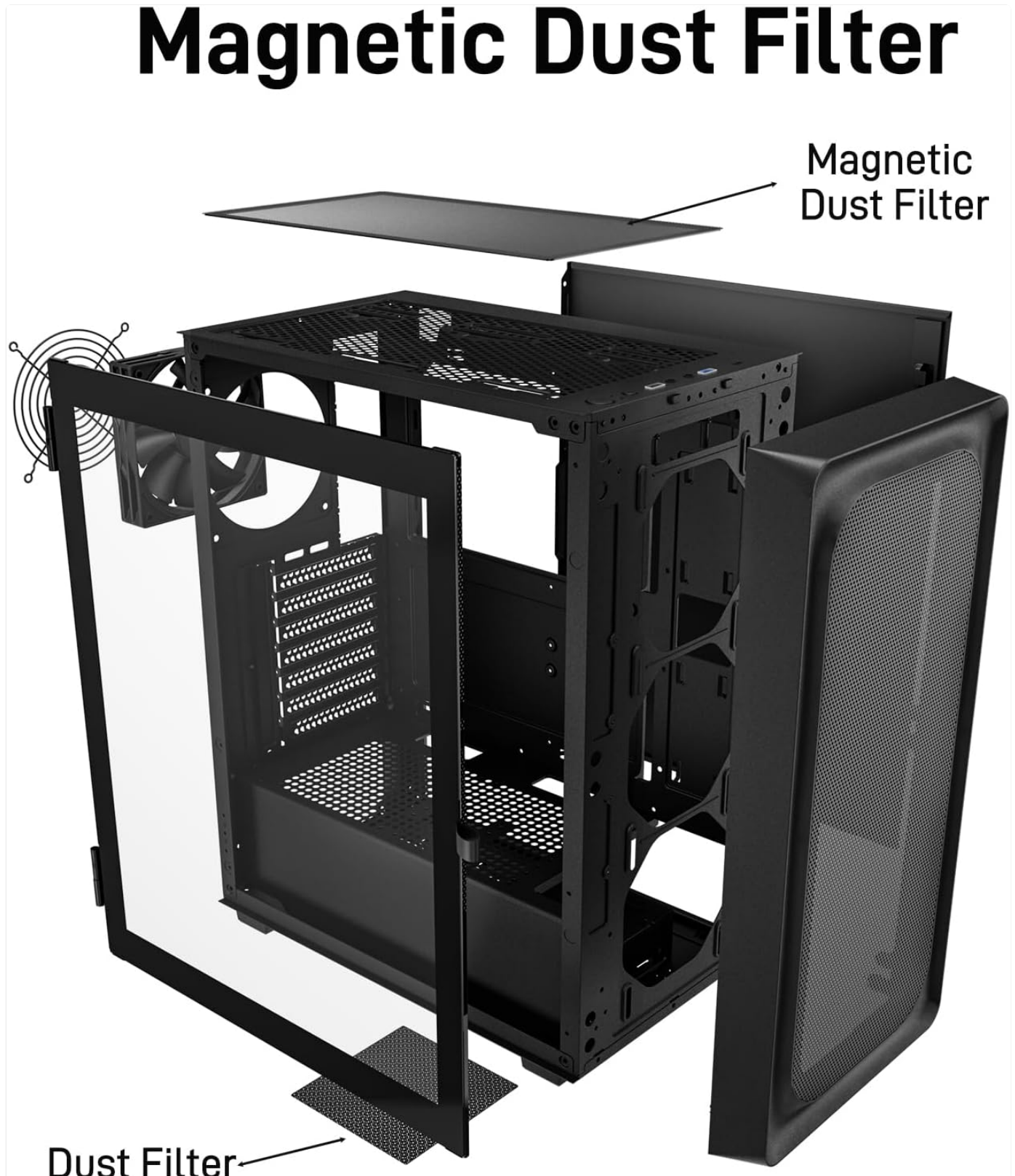
4.2 General Cleaning

Wipe the exterior of the case with a soft, damp cloth. Avoid using harsh chemicals or abrasive materials that could damage the finish or tempered glass.

5. TROUBLESHOOTING

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

5.1 No Power / Front Panel Not Working

- **Check Connections:** Ensure all front panel cables (Power SW, Reset SW, USB, Audio) are correctly connected to the motherboard headers. Refer to your motherboard manual for proper pin assignments.
- **Power Supply:** Verify that the PSU is properly installed, switched on, and connected to the motherboard and components.

5.2 Poor Airflow / Overheating

- **Clean Dust Filters:** Refer to Section 4.1 for instructions on cleaning dust filters.
- **Fan Orientation:** Ensure cooling fans are installed with the correct airflow direction (intake from front/bottom, exhaust from top/rear).
- **Cable Management:** Poor cable management can obstruct airflow. Organize cables neatly behind the motherboard tray to improve air circulation.

5.3 Tempered Glass Panel Issues

- **Panel Not Closing:** Check for any obstructions inside the case or along the hinge mechanism. Ensure the magnetic latch is clear.
- **Scratches/Damage:** Handle the tempered glass panel with care. Avoid placing heavy objects on it or exposing it to sharp objects.

6. TECHNICAL SPECIFICATIONS

Feature	Specification
Brand	DARKROCK
Model Name	CP-CASE-DR-EC2-BK
Case Type	Mid Tower
Color	Black
Material	Tempered Glass, Plastic, Metal
Product Dimensions (LxWxH)	17.6 x 8.6 x 15.2 inches
Item Weight	12.45 pounds
Motherboard Compatibility	ATX, Micro-ATX, Mini-ITX
Max GPU Length	340 mm

Feature	Specification
Max CPU Cooler Height	165 mm
Max PSU Length	200 mm
Fan Support (Front)	3 x 120mm
Fan Support (Top)	2 x 120mm / 2 x 140mm
Fan Support (Rear)	1 x 120mm (1 pre-installed)
Fan Support (PSU Shroud)	2 x 120mm
Radiator Support (Front)	1 x 360mm / 1 x 240mm
Radiator Support (Rear)	1 x 120mm
Drive Bays	Multiple SSD/HDD bays
Front I/O Ports	1 x Type-C (USB 3.2 Gen 2), 1 x USB 3.0, 1 x USB 2.0, HD Audio, Power, Reset
Cooling Method	Water, Air

7. WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official DARKROCK resources.

- **Official User Manual (PDF):** For comprehensive instructions and diagrams, you can download the official PDF manual: **Download PDF Manual**
- **Manufacturer Website:** Visit the **DARKROCK Store on Amazon** for product updates and additional support.
- **Customer Service:** For further assistance, please contact DARKROCK customer support through their official channels.