



Raspberry Pi IO Case

for Raspberry Pi Compute Module 5

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Overview



The Raspberry Pi IO Case for Raspberry Pi Compute Module 5 is a high-quality two-piece metal enclosure for Compute Module 5 and the Compute Module 5 IO Board. It provides space for accessories connected to the IO Board, such as an M.2 SSD or a PoE+ HAT+.

The IO Case includes slots to enable the connection of CSI-2 cameras or DSI displays and includes a built-in controllable fan to support thermal regulation for higher-power applications. Cut-outs in the side of the case allow access to HDMI, Ethernet, USB-A, and USB-C (power in) connectors and to the SD card slot. A mounting hole is provided for an external wireless antenna.

Specification

Case

Form factor: 170 mm × 94 mm × 28 mm

Weight: Approx 350g

Product material: Sheet metal

DC brushless fan

Input voltage: 5V DC (3.5 – 5.5V) supplied via four-pin fan header on a carrier board

Start voltage: $\geq 3.5\text{V}$

Power consumption: 0.85W

Rated current: $0.18 \pm 0.02\text{A}$

Fan speed control: Pulse width modulation control with tachometer

Maximum fan speed: 8000 RPM $\pm 15\%$ (at 25°C, after 3 – 5 minutes rotating)

Maximum airflow: 2.46 CFM

Noise: 21.7 dB

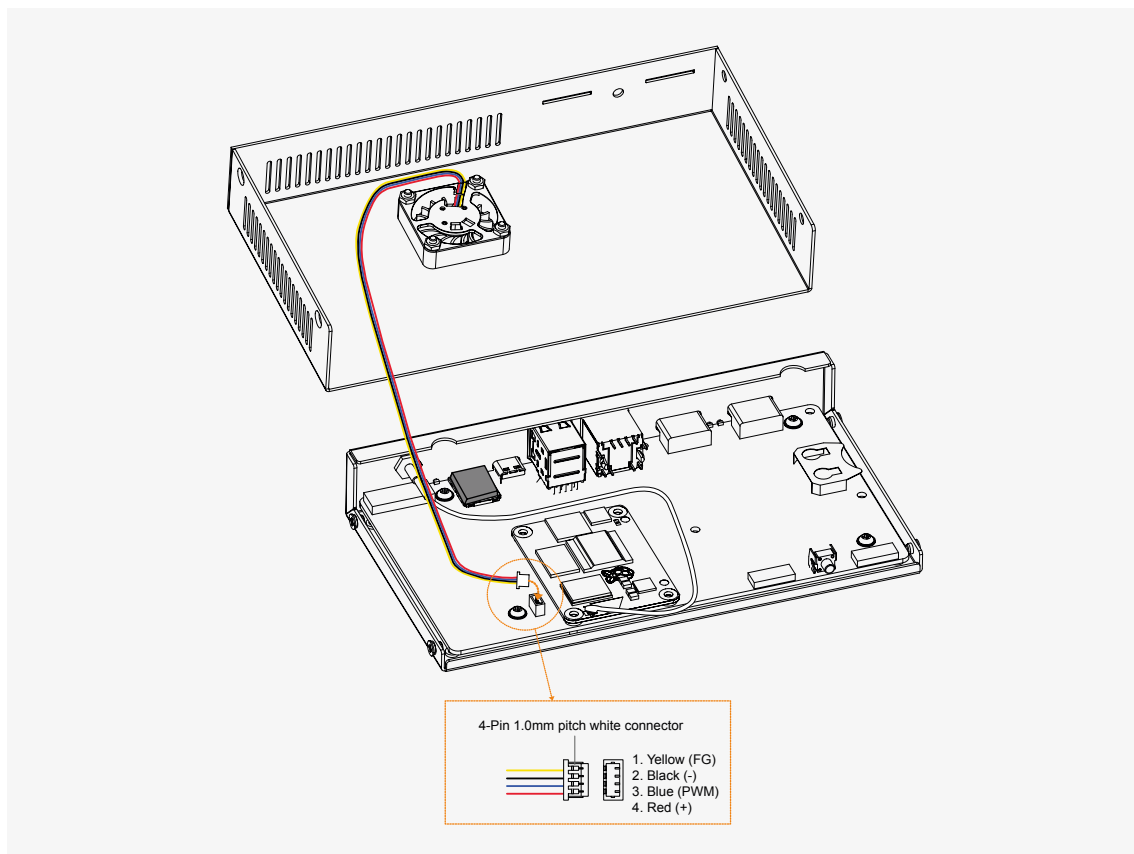
Cable length: 150 mm

Production lifetime: The Raspberry Pi IO Case will remain in production until at least January 2036

Compliance: For a full list of local and regional product approvals, please visit pip.raspberrypi.com

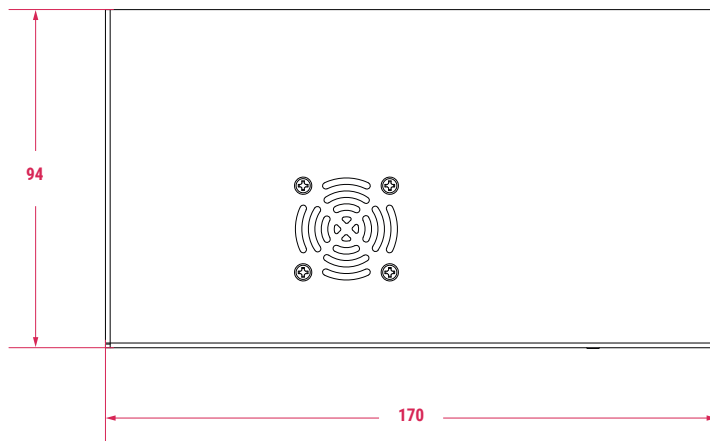
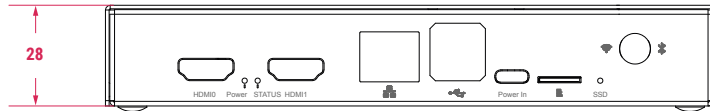
Assembly instructions

1. Separate the top of the IO Case from the base by unscrewing the screws. If you need to install an antenna extension cable, remove the rubber plug from the antenna port.
2. Install Compute Module 5 onto the Compute Module 5 IO Board.
3. Place the IO Board into the base of the IO Case, align the four mounting holes, and secure the board to the base with four M2.5 × 4 screws.
4. If you are using an antenna extension cable, insert its SMA connector into the antenna port in the base of the case, and insert the other end of the cable into the antenna port on CM5.
5. Remove the protective paper from the silicone pad to reveal the adhesive surface. Stick the pad inside the base of the case such that the upper edge of the pad is flush with the bottom of the SD card slot. This prevents an SD card from falling into the case when it is inserted.
6. Plug the fan power cable from the top of the case into the FAN connector on the IO Board, as shown in the diagram below.



7. If you are using a camera or a display, pass the flat cable through the slot in the top of the case and connect it to one of the CAM/DISP ports on the IO Board.
8. Place the top of the case over the base and secure with four M3 × 4 screws.
9. If you are using an external antenna, screw it securely into the SMA connector that is accessible through the side of the case.
10. Assembly is now complete. To insert an SD card, push it into the SD card slot with the contacts facing downwards. To remove it, push it inwards towards the slot to release it.

Physical specification



Note:

All dimensions in mm

All dimensions are approximate and for reference purposes only. The dimensions shown should not be used for producing production data

The dimensions are subject to part and manufacturing tolerances

Dimensions may be subject to change

WARNINGS

- This product should only be used with Raspberry Pi Compute Module 5, Compute Module 5 IO Board, and first-party accessories such as the Antenna Kit and Camera Modules.
- This product should be operated in a well-ventilated environment and should not be covered.
- Make sure the metal case does not touch any electronic components on Compute Module 5 or any accessories, to avoid the risk of unwanted electrical contact and shorting.
- Ensure the screws are undamaged and can screw in securely before use. Discontinue use of the case and replace the screws if they are damaged or deformed, or if they do not screw in securely.
- Take care when using the case, as the metal parts of the product may become hot during operation.

SAFETY INSTRUCTIONS

To avoid malfunction or damage to this product, please observe the following:

- Do not expose to water or moisture, or place on a conductive surface whilst in operation.
- Do not expose to heat from any source; the Raspberry Pi IO Case is designed for reliable operation at normal ambient temperatures.
- Take care while handling to avoid mechanical or electrical damage to the fan and connectors.
- Avoid touching or handling the fan while it is powered.





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