3D-PRINTED ENCLOSURE · PIEEG-8 & PIEEG-16

PiEEG Pi 5 Enclosure

3D-printed PLA case for Raspberry Pi 5 with PiEEG-8 or PiEEG-16



FITS **PiEEG-8 & PiEEG-16**	HOST **Raspberry Pi 5**
MATERIAL **PLA, non-conductive**	SIZE **≈ 106 × 75 × 37 mm**
FIXING **4 × M2.5 × 8 mm**	WEIGHT **≈ 35–45 g**

Overview

One 3D-printed PLA case for a Raspberry Pi 5 with either PiEEG-8 or PiEEG-16 on top. The lid's two slots sit right over the electrode headers of both shields, so electrode leads plug in with the case closed. Four screws hold the lid at the corners, so it opens again easily.

Key Features

One case for PiEEG-8 and PiEEG-16
Both shields share the Raspberry Pi HAT footprint. The left lid slot sits over electrodes 1–8; the right slot over electrodes 9–16 (PiEEG-16) or the jumpers (PiEEG-8).

Electrodes with the lid closed
Electrode leads plug in through the two lid slots without opening the case.

Shaped around the Raspberry Pi 5
Openings for USB-C power, both micro-HDMI ports, USB, Ethernet and microSD, plus side vents.

Standard mounting
Four posts at the Raspberry Pi's standard 58 × 49 mm mounting holes.

Open-source and repairable
Printed in non-conductive PLA. The STL files are open source, so you can print a spare part yourself.

Views



With PiEEG-8



With PiEEG-16



Pi 5 port openings

Technical Specifications

Compatible shields	PiEEG-8, PiEEG-16
Host board	Raspberry Pi 5 (openings follow the Pi 5 port layout)
Material	PLA (non-conductive), FDM 3D printed
Printed parts	2 — case body and lid
Case body	105.8 × 75.2 × 35.5 mm
Lid	105.8 × 75.2 × 3.6 mm (including the four screw ears)
Assembled size	≈ 106 × 75 × 37 mm
Lid fixing	4 × M2.5 × 8 mm countersunk screws into the corner lugs
Pi mounting	4 posts at 58 × 49 mm (standard Raspberry Pi holes)
Openings	USB-C, 2 × micro-HDMI, USB, Ethernet, microSD, side vents, 2 lid slots for electrode leads
Weight	≈ 35–45 g (estimate; depends on infill)
Operating temperature	Up to about 50 °C (PLA)

All dimensions are measured from the released STL files. For drawings, fastener details and assembly, see **PIEEG-ENC-MD-002** — Mechanical Drawing & Assembly Guide.

Package Contents

1× **Case body for Raspberry Pi 5** — PLA, four mounting posts, Pi 5 port openings and side vents

1× **PiEEG-8/16 lid with screw ears** — PLA, two slots over the electrode headers, countersunk screw holes

4× **M2.5 × 8 mm countersunk screws** — 90° flat head, Phillips

Required for Operation (not included)

- Raspberry Pi 5
- PiEEG-8 or PiEEG-16 shield
- Small Phillips screwdriver (PH0 / PH1)
- 5 V USB battery power bank (mandatory for mains isolation during human recording)

Ordering Information

ITEM	SKU	NOTES
PiEEG Pi 5 Enclosure	TBD	Board sold separately. Lab / university orders of 5+ units: 10–20 % discount, PO and pro-forma invoice available.

Material & Care

PLA is stiff, non-conductive and fine at room and body temperature. It softens at around 55–60 °C, so don't leave the case in a hot car, on a heater or in direct summer sun. Clean with a dry or slightly damp cloth; avoid acetone and strong solvents.

Safety note. PiEEG is an open-source research and education device, not a medical device. The case is a mechanical cover only and adds no electrical isolation. Always power the Raspberry Pi from an isolated 5 V battery power bank, with every connected device on battery.