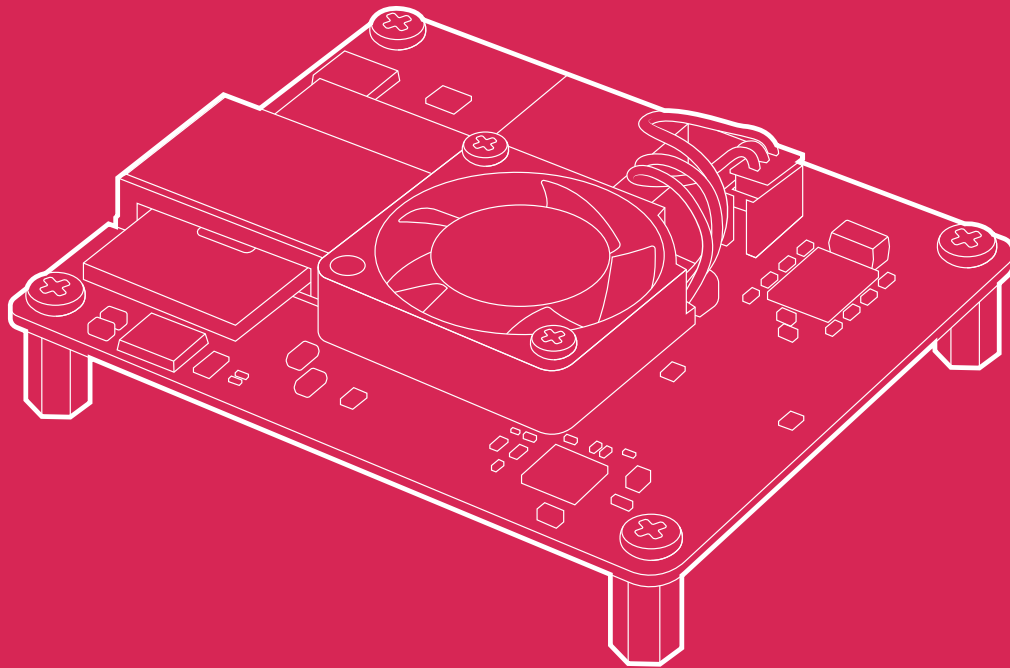


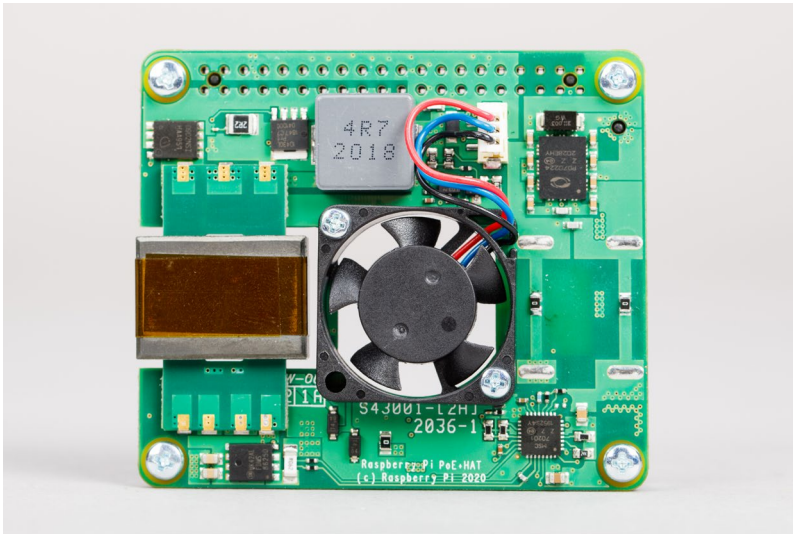


# Raspberry Pi PoE+ HAT

Published November 2021



## Overview

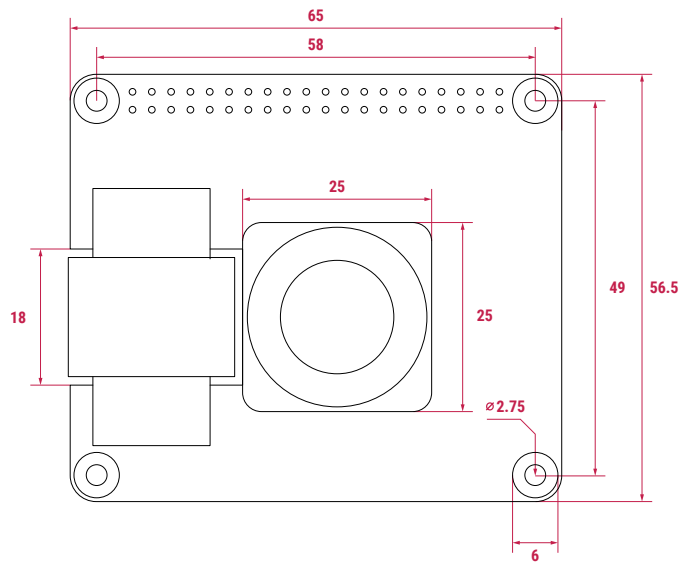


The Raspberry Pi PoE+ HAT is an add-on board for Raspberry Pi computers with PoE pins, including Raspberry Pi 3B+ and Raspberry Pi 4. It is used to power Raspberry Pi via an Ethernet cable, provided that power-sourcing equipment is installed on the Ethernet network. The HAT also includes a fan that will cool the Raspberry Pi processor.

## Specification

<b>Standard:</b>	IEEE 802.3at-2009 PoE
<b>Input voltage:</b>	37–57 V DC, Class 4 device
<b>Output power:</b>	5 V DC/5 A
<b>Cooling:</b>	25 mm × 25 mm brushless fan delivering 2.2 CFM for processor cooling
<b>Features:</b>	<ul style="list-style-type: none"><li>• Fully isolated switched-mode power supply</li><li>• Fan control</li></ul>
<b>Operating temperature:</b>	0 °C to +50 °C
<b>Production lifetime:</b>	The Raspberry Pi PoE+ HAT will remain in production until at least January 2027
<b>Compliance:</b>	For a full list of local and regional product approvals, please visit <a href="http://www.raspberrypi.org/compliance">www.raspberrypi.org/compliance</a>

## Physical specification



Note: all dimensions in mm

## Installation

### Connecting your PoE+ HAT to your Raspberry Pi

- Before installing the PoE+ HAT, you must attach the supplied spacers in the four corners of the board
- Then connect the Raspberry Pi PoE+ HAT to the two 0.1" headers (40 + 4) that are fitted on your Raspberry Pi
- Once the PoE+ HAT board is connected, you can power your Raspberry Pi through its RJ45 network connector

### Disconnecting your PoE+ HAT

- Take care when separating the HAT from your Raspberry Pi
- Pull evenly so that it detaches from all the pins at the same rate; do not pull one end of the connector off before the other

## WARNINGS

- This product shall only be connected to a Raspberry Pi via the four PoE pins.
- Any external power-sourcing equipment/power injector used to enable an Ethernet network shall comply with relevant regulations and standards applicable in the country of intended use.
- This product should be operated in a well ventilated environment, and if used inside a case, the case should not be covered.
- The connection of incompatible devices to the GPIO connection of a Raspberry Pi computer may affect compliance and result in damage to the unit and invalidate the warranty.
- All peripherals used with this product should comply with relevant standards for the country of use and be marked accordingly to ensure that safety and performance requirements are met. These articles include but are not limited to keyboards, monitors and mice when used in conjunction with Raspberry Pi computers.
- Where peripherals are connected that do not include the cable or connector, the cable or connector must offer adequate insulation and operation in order that the relevant performance and safety requirements are met.
- When the Raspberry Pi PoE+ HAT is connected to your Raspberry Pi, your Raspberry Pi should only be powered through the ethernet cable. Do not use any additional method to power the Raspberry Pi.

## 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. Raspberry Pi computers and the Raspberry Pi PoE+ HAT are designed for reliable operation at normal ambient room temperatures.
- Take care whilst handling to avoid mechanical or electrical damage to the printed circuit board and connectors.
- Do not handle the PoE+ HAT while it is powered, to avoid risk of injury from exposure to potential high voltages. Avoid handling the Raspberry Pi while it is connected to a power outlet; only handle by the edges to minimise the risk of electrostatic discharge damage.

