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# Pi-Box Pro 4

### **Short Description**

The Pi-Box Pro 4 comes with:

- Extender Board
- Carrier Plate
- E-Case B Extrusion
- Aluminium End Plate
- Acrylic End Plate (For WiFi & Bluetooth)
- Screws & Fixings

Pi-Box Pro 4 with heatsink kit also includes:

• Heat Blocks, Pads & Screws (if ordered)

### **Product Images**





### **Description**

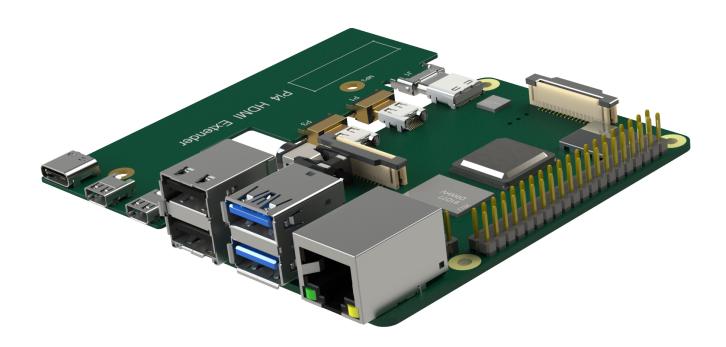
The Pi-Box Pro 4 is and rugged industrial enclosure kit for the Raspberry Pi4. By utilising our micro HDMI Pi4 extender board we can turn the power and micro HDMI connectors through 90° so the they are on the same plane as the Ethernet and USB connectors.

A heatsink kit has been developed and can be order as an option if required.

The rear panel is made from 3mm acrylic and allows for communication via Bluetooth and Wi-Fi signals from the Pi4.

The standard version allows for access to the SD Card from the assembled enclosure and the -NS version contains the SD Card within the sealed enclosure.

Available in silver or black as standard.



#### **Extrusion**

Material: Aluminium 6063 T6 (HE9)

Finish: Silver anodised 5µm or black anodised 10µm

#### **Front End Plate**

Material: Aluminium 5005 sheet

Finish: Black anodised 10µm

Thickness: 1.5mm

Available in silver or black as standard.

#### **Rear End Plate**

Material: Acrylic

Finish: Black

Thickness: 3.0mm

#### **Screws**

No. 4 x 3/8" Posi-pan head Plastite self-tapping screws

#### **Heatsink Kit**

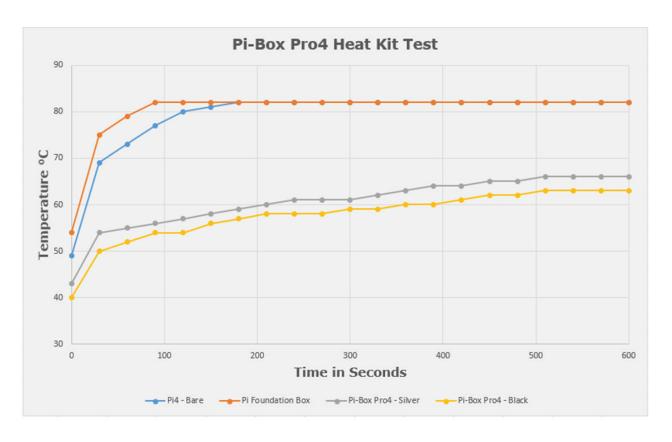
With the release of the Raspberry Pi4 the temperature of the processor under 100% usage has become an issue. When the processor gets too hot it throttles back which could compromise the application that the Pi is being used to perform.

As a solution we have developed a Heat Sinking Kit that consists of 2 aluminium blocks and adhesive pads that transfer the heat from the processor and the Ram chip to the aluminium carrier plate and then out to the enclosure, making the whole assembly a heat sink.

#### **Temperature Test bench Test**

We tested the Raspberry Pi4 running at 100% over a 10-minute period to register the temperature rise of the processor. The tests were performed with a bare board, one housed in a Raspberry Pi Foundation plastic enclosure, one in a Pi-Box Pro4 silver housing and one in a Pi-Box Pro4 black housing.

We saw a 19°C drop in operating temperature from 82°C in the bare board and plastic enclosure compared with the 63°C when housed in the Pi-Box Pro4 aluminium enclosure and heat kit.



#### Customisation

For alternative colours or full customisation, including fitting a HAT, go to the customisation area of the website

Please note: Lincoln Binns does not supply the Raspberry Pi, any additional cables or power supplies

## **Product Options**

Colour:	Black
	Silver
SD Card Access:	Yes
	No
Heat Kit:	Yes
	No