

# Pi-Box Pro 4 and Rack Fronts for Raspberry Pi4

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## Pi-Box Pro 4 Enclosures



MP004561



MP004562

### Description

The Pi-Box Pro 4 is a 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.

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.

Available in silver or black as standard.

### The Pi-Box Pro 4 with heatsink kit 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 heatsink kit also includes: Heat Blocks, Heat Transfer Pads & Screws

### Heatsink

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 Pro 4 silver housing and one in a Pi-Box Pro 4 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 Pro 4 aluminium enclosure and heat kit.

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Farnell.com/multicomp-pro  
Element14.com/multicomp-pro

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# Pi-Box Pro 4 and Rack Fronts for Raspberry Pi4

## 1U 19" Rack Fronts and Pi-Box 4 Enclosures



### Description

- A 1U 19" extruded aluminium rack panel milled to fit a removable PI-Box Pro 4 unit(s).
- Available in 1, 2 or 3 unit versions.
- Panels are available in black anodise with a brushed finish.
- PI-Box Pro 4 units include a Heatsink Kit and Extender Board to align the power and micro HDMI connectors onto the same plane as the Ethernet and USB connectors.
- Rack Fronts has Heatsink Kit in its content. It is possible to order Rack Fronts alone without the Heatsink Kit.

### 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

### Rear End Plate

Material : Acrylic  
Finish : Black  
Thickness : 3mm

### Features

- 1, 2 or 3 units wide
- Removable units
- Black anodised with brushed finish

### Part Number Table

Description	Part Number
Pi-Box Pro 4 with Heatsink kit, RPI4, Silver	MP004561
Pi-Box Pro 4 with Heatsink kit, RPI4, Black	MP004562
1U 19" Rack Panel, Black, 1 x Cutout + 1 x PI-Box Pro 4	MP007511
1U 19" Rack Panel, Black, 2 x Cutout + 2 x PI-Box Pro 4	MP007512
1U 19" Rack Panel, Black, 3 x Cutout + 3 x PI-Box Pro 4	MP007513

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