

Raspberry Pi 4B HEAT-SINK ALUMINIUM CASE

**Made with Aluminium Diecast material
for Excellent Heat Dissipation and Rigidity**

Exceptional Functionality with Superb Cost Efficiency!

RPH series



3 different types are available: Desktop, Flanged and DIN Rail

Desktop type RPH-4B



Available in metallic silver and black
for Raspberry Pi 4 Model B

Flanged type RPH-4B-F



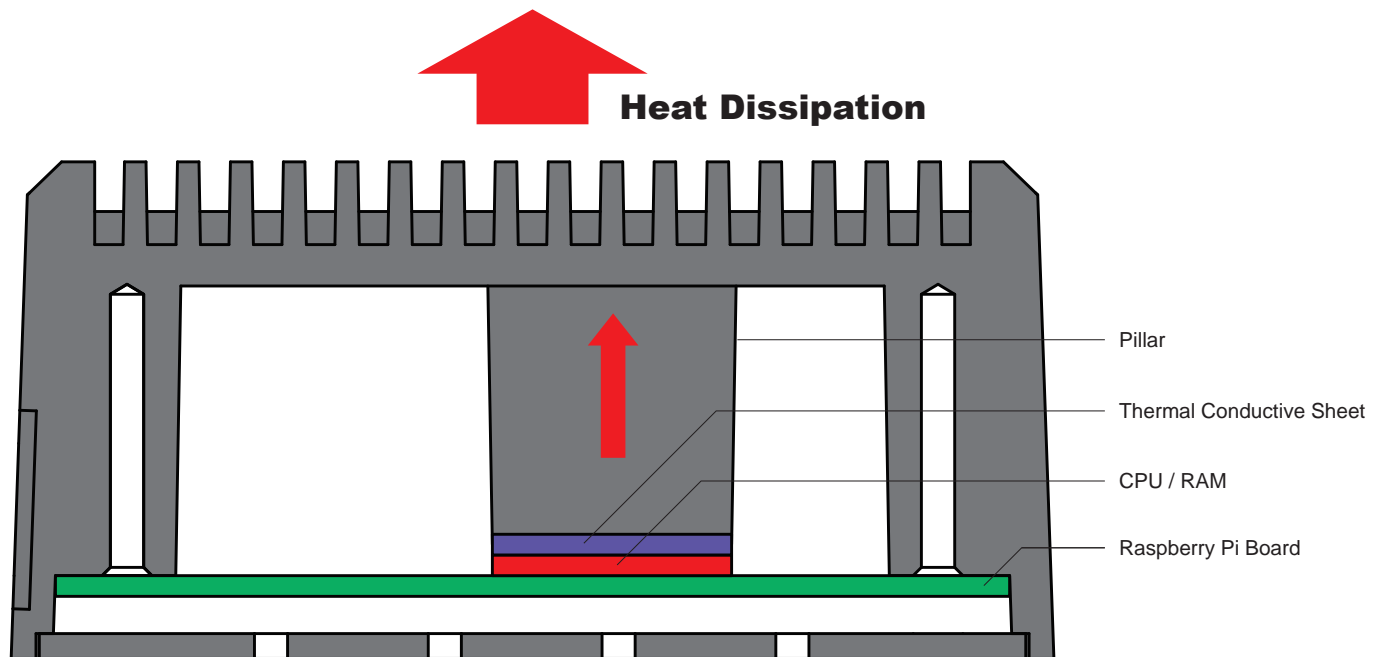
Compatible with VESA Mount Standards
(75 x 75mm / 100 x 100mm), and can be
installed on the back side of PC displays, etc.

DIN Rail type RPHD-4B

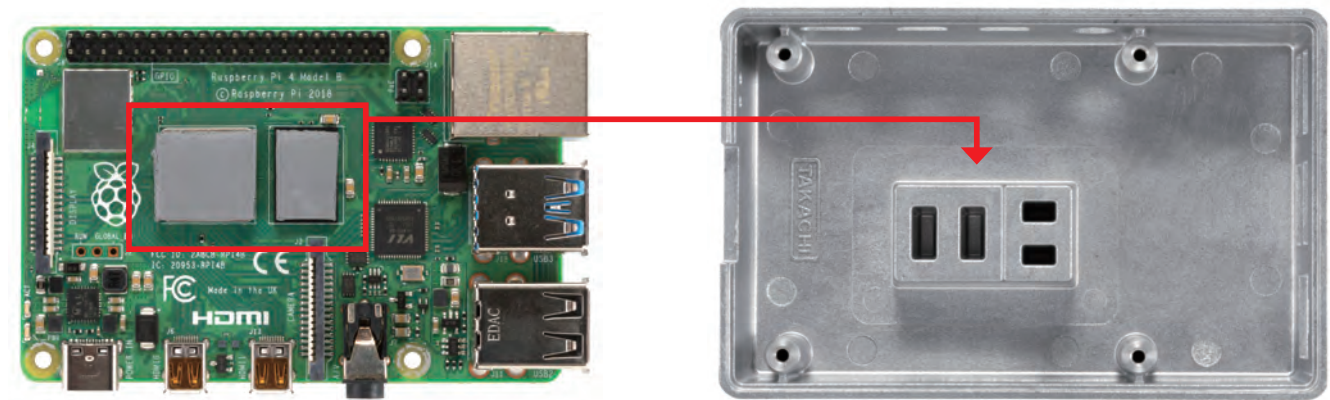


Available with DIN rail mounting bracket.
Perfect for mounting on control panels
or switchboards.

Efficient Heat Dissipation Construct to Maximize your Raspberry Pi Performance!

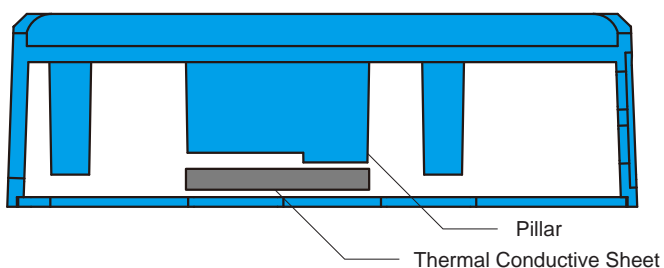


- Attach thermal conductive sheet onto CPU and RAM. Heat is transferred to the heat-sink cover through the pillar.



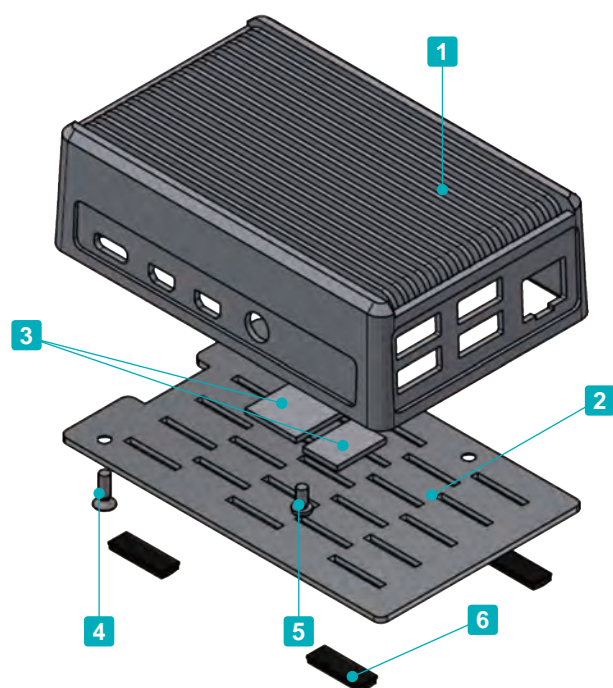
2 different Heat dissipation and Normal are available.

RPH-4B-H (Heat dissipation)



RPH-4B-N (Normal)



Heat
Resistant

Heat Dissipation

Normal



- Heat-sink top cover case exclusively for use with the Raspberry Pi 4 Model B. Equipped with highly efficient heat-sink top cover.
- Constructed using diecast aluminium for strength and rigidity.
- 2 different Desktop and Flanged wall mount are available. Flanged wall mount type is compatible with VESA Mount Standards, (75 x 75mm / 100 x 100mm), and can be installed on the back side of PC displays, etc.

■ Raspberry Pi board is not included.

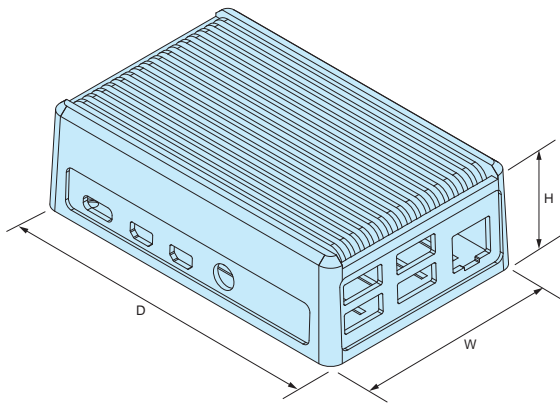
Components

No.	Part name	Pcs	Material	Color / Finish
1	Top cover	1	Diecast aluminium ADC12	Silver • Black / Powder coated
2	Base	1	Aluminium A1100P t \pm 1.5	Metallic silver / Painted (Conductive inside) • Black / Painted
3	Thermal conductive sheet (H type only)	2	Silicone polymer + Ceramic composite	Gray
4	Screw (M2.5-10 flat head)	2	Steel	Trivalent chromate • Black trivalent chromate
5	Screw for Board (M2.5-4 pan head)	2	Steel	Trivalent chromate
6	Rubber feet *	4	Polyurethane	Black

* Not applicable to flanged models.

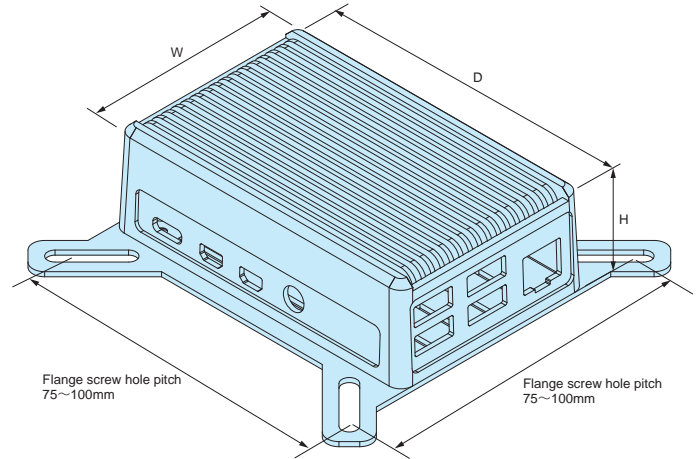
RPH dimensions

RPH-4B-H, RPH-4B-N (Desktop)



■ DXF/DWG/PDF/STP drawings available on our website.

RPH-4B-FH, RPH-4B-FN (Flanged)



Product no. / Dimensions

Product no.		External dimensions			Type	Included accessory	※ Thermal resistance rate (°C/W)	Weight (g)
● Silver	● Black	W	H	D				
RPH-4B-H-S	RPH-4B-H-B	63	30	98	Desktop Heat dissipation	Rubber feet	7.31	159.9
						Thermal conductive sheets		
RPH-4B-N-S	RPH-4B-N-B	63	30	98	Desktop Normal	Rubber feet	7.31	142
RPH-4B-FH-S	RPH-4B-FH-B	63	31.5	98	Flanged Heat dissipation	Thermal conductive sheets	7.31	168.2
RPH-4B-FN-S	RPH-4B-FN-B	63	31.5	98	Flanged Normal	—	7.31	150.3

※ Thermal resistance test condition

- Ambient air cooling.
- Heat-sink fins are set perpendicular to the ground with temperature at 60°C.
- Powder coated aluminium diecast.
- Heat source is applied on the opposite side (inner side) of the fins.

Temperature measurement test

Raspberry Pi board is placed into the RPH-4B-H model and a commercially available Raspberry Pi plastic case.

Temperature is measured after 6 hours of continuous operation.

*Results will vary depending on usage period and environment. Listed values are in-house test reference values only.



RPH-4B-H

CPU Temperature : 45.7°C



Plastic case

CPU Temperature : 58.4°C



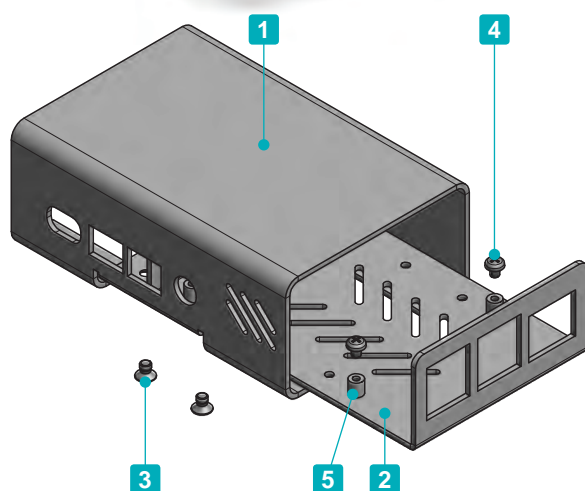
Two Raspberry Pi boards can be installed into the RPI-2 and RPI-4B-2 models.



RPI-1F and RPI-4B-1F models are compatible with VESA Mount Standards (75 x 75mm / 100 x 100mm), and can be installed on the back side of PC displays, etc.

- Compatible with Raspberry Pi 2B, 3B, 3B+ and 4B boards.
- All aluminium, polished and elegant metallic silver finish.
- 3 different Single desktop, Dual desktop, and Single flanged are available.
- Conductive internal surface.

■ Raspberry Pi Board is not included.



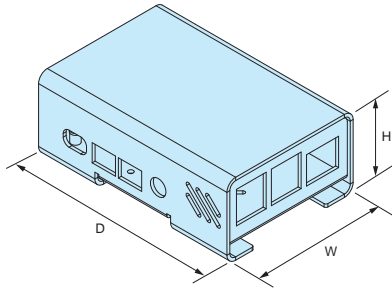
Components

No.	Part name	Pcs	Material	Color / Finish
1	Cover	1	Aluminium A1100P t=1.5	Metallic silver / Painted (Conductive inside)
2	Base	1	Aluminium A1100P t=1.5	Metallic silver / Painted (Conductive inside)
3	Screw (M3-4 flat head)	4	Steel	Trivalent chromate
4	Screw for Board (M2.5-4 pan head)	4	Steel	Trivalent chromate
5	Clinching standoff	4	Steel	Galvanized trivalent

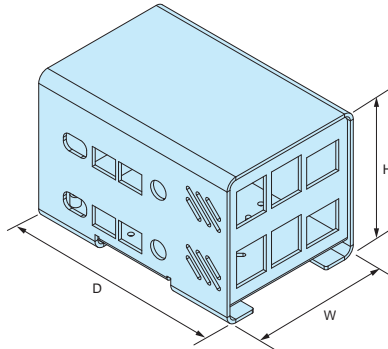
RPI dimensions

■ DXF/DWG/PDF/STP drawings available on our website.

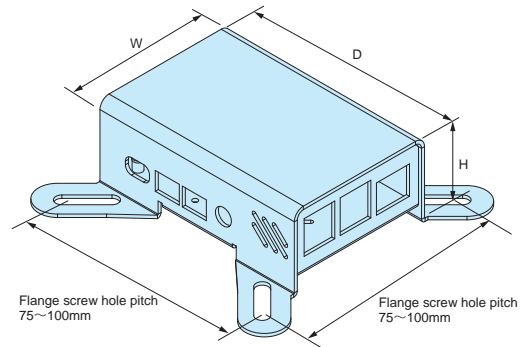
RPI-1, RPI-4B-1 (Single)



RPI-2, RPI-4B-2 (Dual)



RPI-1F, RPI-4B-1F (Flanged)



Product no. / Dimensions

Product no.	External dimensions			Type	Included accessory	Compatible board	Weight (g)
	W	H	D				
RPI-1	65	37	95	Single desktop	Rubber feet	Raspberry Pi 2B/3B/3B+	90.5
RPI-4B-1	65	37	97	Single desktop	Rubber feet	Raspberry Pi 4B	91.5
RPI-2	65	65	95	Dual desktop	Rubber feet	Raspberry Pi 2B/3B/3B+	136
					Hexagonal spacer (M2.5-25)		
RPI-4B-2	65	65	97	Dual desktop	Rubber feet	Raspberry Pi 4B	138.8
					Hexagonal spacer (M2.5-25)		
RPI-1F	65	37	95	Single flanged	—	Raspberry Pi 2B/3B/3B+	91.5
RPI-4B-1F	65	37	97	Single flanged	—	Raspberry Pi 4B	93.8

■ Rubber feet · · · Synthetic rubber / Black Hexagonal spacer · · · Brass / Nickel plated

Raspberry Pi Case Customization

Unique Logo (Inkjet print, Engraving)

See page Custom-1 ~ Custom-4, Custom-8, as well as our website for further details.

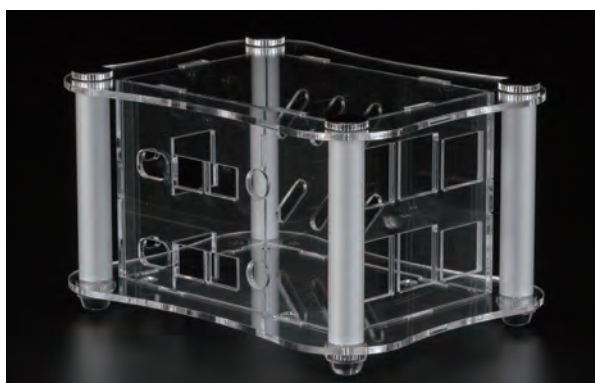
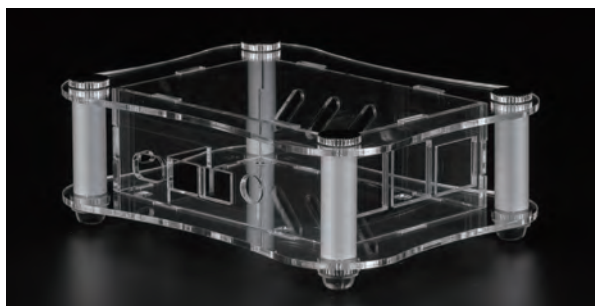
Various print processing methods are available, with no Minimum Order Quantity requirement!



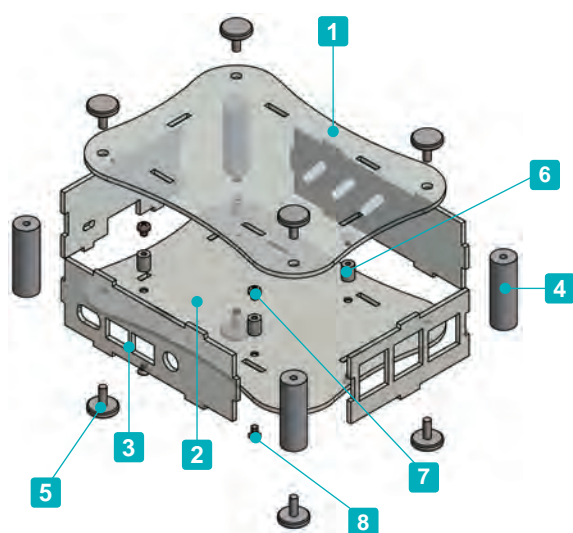
Color Anodization • Painting

See page Custom-12, as well as our website for further details.





RPA-4B-1F is compatible with VESA Mount Standards (100 x 100mm), and can be installed on the back side of PC displays, etc.



- Exclusively for use with Raspberry Pi 4B models.
- 3 different Single desktop, Dual desktop, and Single flanged are available.

■ Raspberry Pi board is not included.

※Ethanol or other alcoholic solvents may cause the acrylic panel to crack.
Use a neutral cleaner or specialized acrylic cleaning solvent for cleaning.

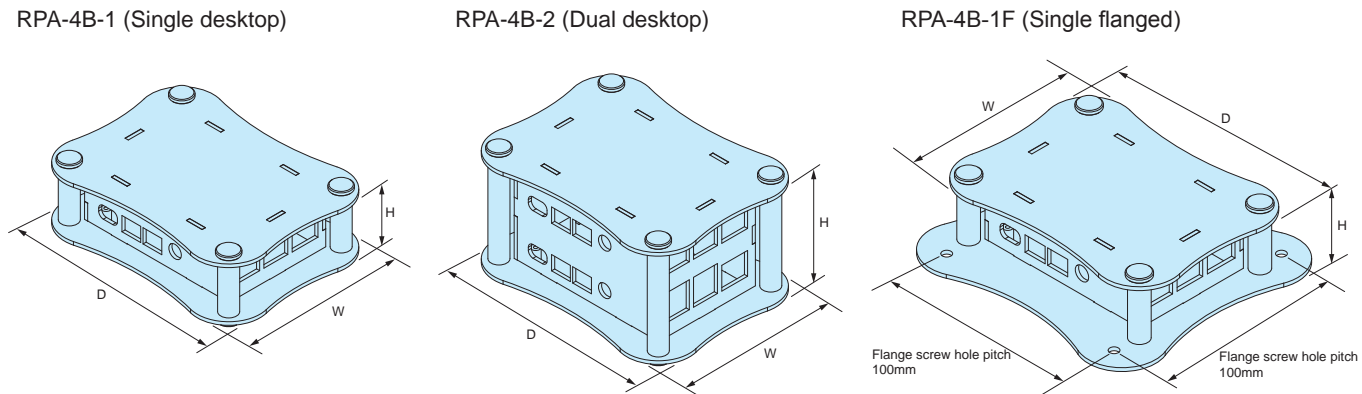
※Included screws : RPA-4B-1 Knurled thumb screw x 8
RPA-4B-2 Knurled thumb screw x 8
RPA-4B-1F Knurled thumb screw x 4
M3-8 flat head, Trivalent chromate x 4

Components

No.	Part name	Pcs	Material	Color / Finish
1	Top cover	1	Acrylic t=2.0	Transparent
2	Bottom cover	1	Acrylic t=2.0	Transparent
3	Panel	4	Acrylic t=2.0	Transparent
4	Pillar	4	Extruded aluminium A6063S-T5	Silver / Anodized with clear coating
5	Knurled thumb screw (M3-8)※	4 / 8	Brass	Nickel plated
6	Standoff (for board)	4	Brass	Nickel plated
7	Screw for Board (M2.5-4 pan head)	4	Steel	Trivalent chromate
8	Screw for Standoffs (M2.5-5 flat head)	4	Steel	Trivalent chromate

RPA dimensions

■ DXF/DWG/PDF/STP drawings available on our website.



Product no. / Dimensions

Product no.	External dimensions			Type	Included accessory	Weight (g)
	W	H	D			
RPA-4B-1	95	34	125	Single desktop	Rubber feet	118
RPA-4B-2	95	62	125	Dual desktop	Rubber feet	171.5
					Round spacer (M2.5-25)	
RPA-4B-1F	95	34	125	Single flanged	—	118.5

■ Rubber feet . . . Polyurethane / Transparent Round spacer . . . Brass / Nickel plated

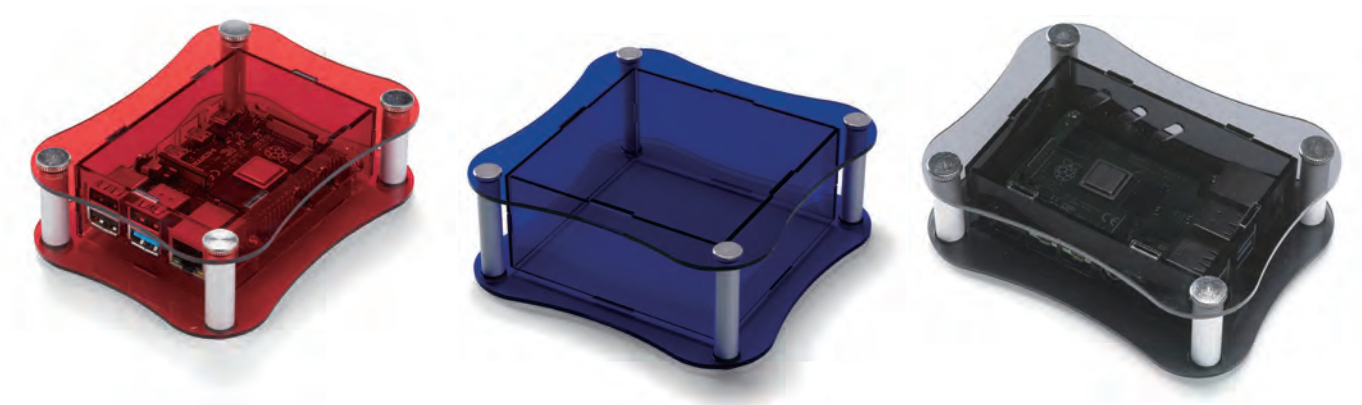
Raspberry Pi Case Customization

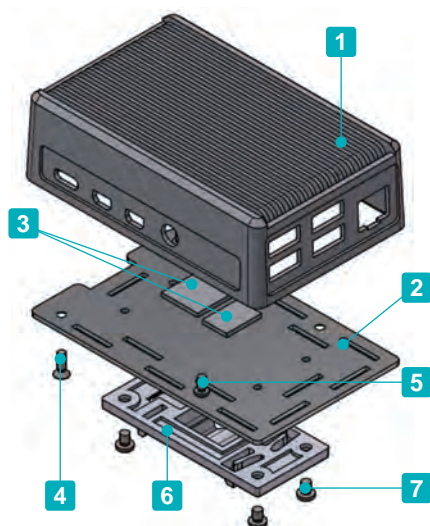
Unique Logo (Inkjet print, Engraving)
See page Custom-1 ~ Custom-4, Custom-8, as well as our website for further details.
 Various print processing methods are available, with no Minimum Order Quantity requirement!



Color Variation

Available in different color types, as well as smoked / tinted shades.





Heat Dissipation

Normal



- DIN rail mount heat-sink case exclusively for use with the Raspberry Pi 4B. Equipped with highly efficient heat-sink top cover.
- Constructed using diecast aluminium for strength and rigidity.
- 2 different Heat dissipation and Normal are available.

- Raspberry Pi board is not included.

Technical Data

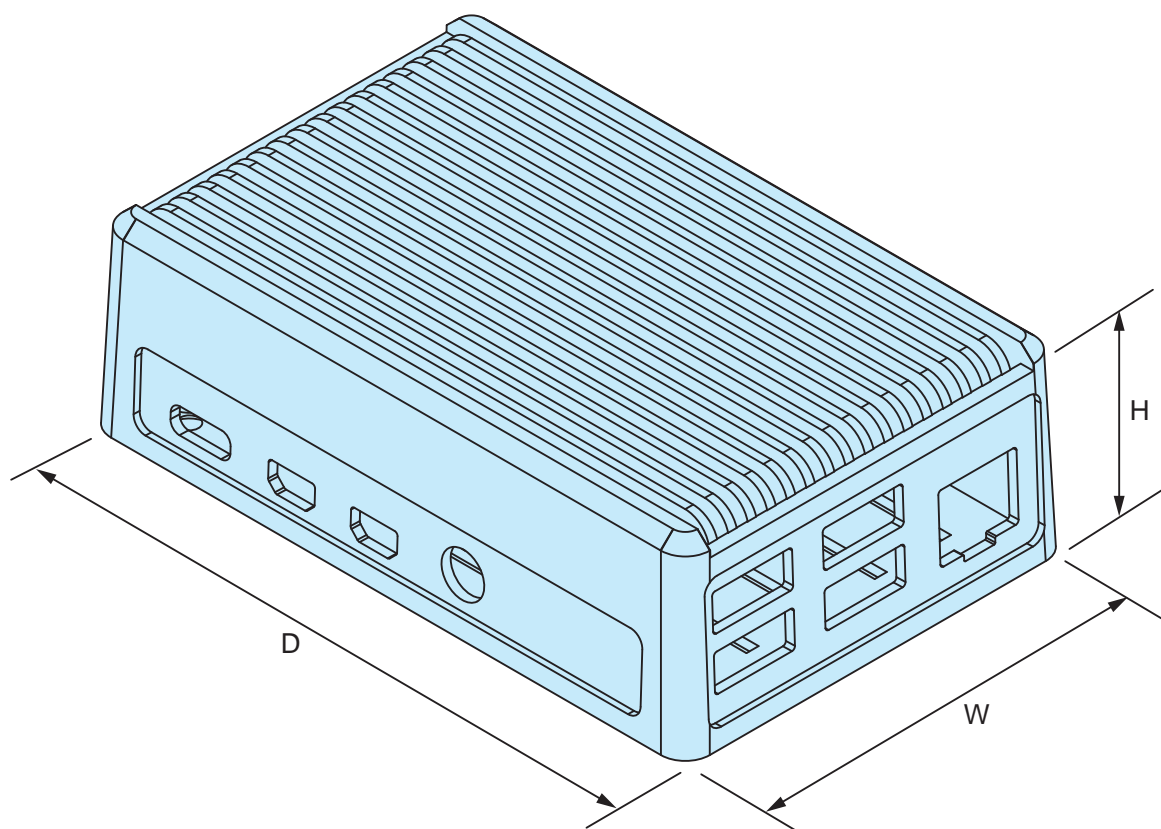
Max load : 300g
Operating Temperature : -20°C ~ +80°C

Components

No.	Part name	Pcs	Material	Color / Finish
1	Top cover	1	Diecast aluminium ADC12	Silver / Powder coated
2	Base	1	Aluminium A1100P t=1.5	Metallic silver / Painted (Conductive inside)
3	Thermal conductive sheet (H type only)	2	Silicone polymer + Ceramic composite	Gray
4	Screw (M2.5-10 flat head)	2	Steel	Trivalent chromate
5	Screw for Board (M2.5-4 pan head)	2	Steel	Trivalent chromate
6	Din-rail mounting base	1	PC • ABS UL94V-0	Light gray
7	Screw for Din-rail mounting base (M3-3 pan head)	4	Steel	Trivalent chromate

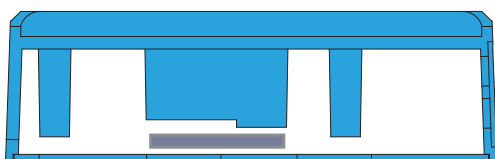
RPHD dimensions

■ DXF/DWG/PDF/STP drawings available on our website.

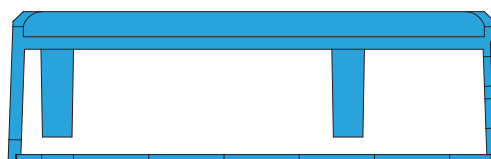


■ 2 different Heat Dissipation and Normal are available.

RPHD-4B-H (Heat dissipation)



RPHD-4B-N (Normal)



Product no. / Dimensions

*Din-rail mounting base height is not included in H dimension.

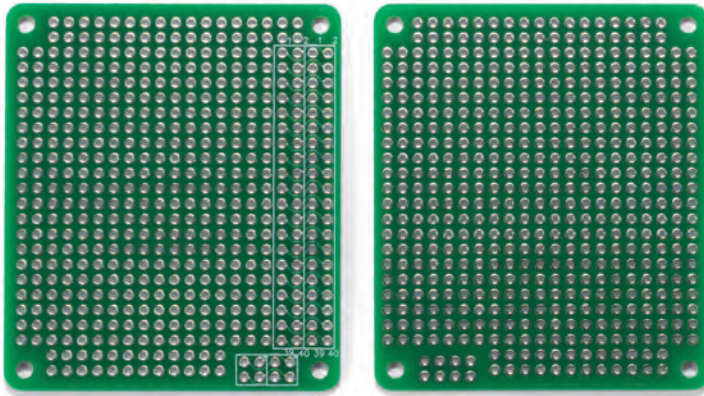
Product no.	External dimensions			Pillar Thermal conductive sheets	※Thermal resistance rate (°C/W)	Weight (g)
	W	H	D			
RPHD-4B-H-S	63	30	98	○	7.31	168.2
RPHD-4B-N-S	63	30	98	×	7.31	150.7

※Thermal resistance test condition

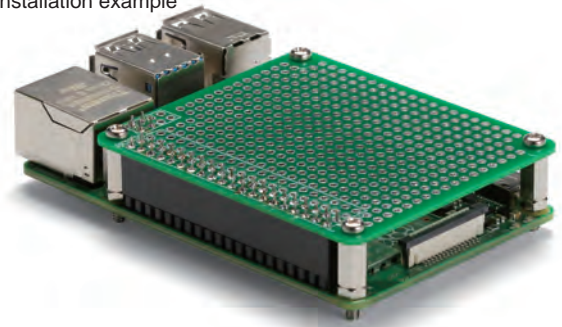
- Ambient air cooling.
- Heat-sink fins are set perpendicular to the ground with temperature at 60°C.
- Powder coated aluminium diecast.
- Heat source is applied on the opposite side (inner side) of the fins.

RPCB-4B

EXPANSION PCB for Raspberry Pi 4B



Installation example



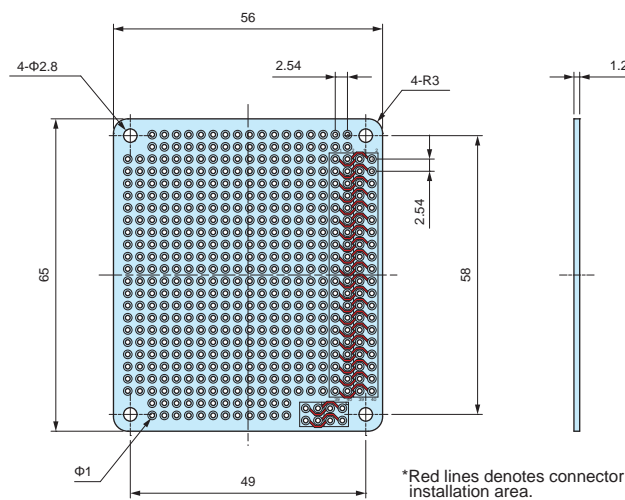
■ Material / Finish : Glass epoxy (FR-4) / Through-hole - Lead-free solder resist

- Expansion PCB for standard Raspberry Pi 4B boards. Use to install expansion parts or components.
- Environmentally friendly lead-free solder. RoHS3 compliant.

- Raspberry Pi Board is not included.
- Connector, spacer, and mounting screw set are sold separately.

RPCB-4B dimensions

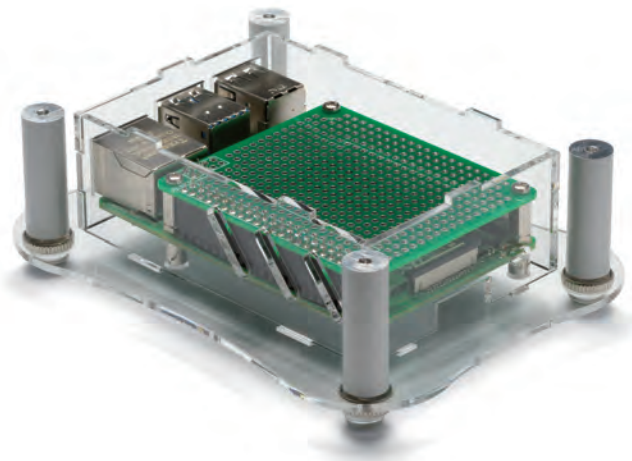
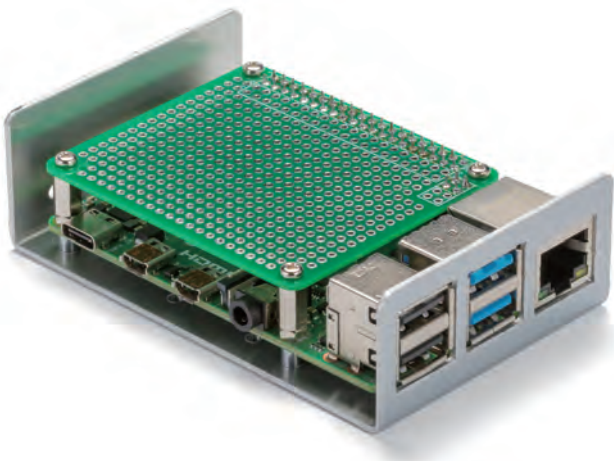
- DXF/DWG/PDF drawings available on our website.



Product no.

Product no.	Pack of
RPCB-4B	1

- Expansion PCB can also be utilized on RPI-4B and RPA series cases.
See page 132 ~ 134 for RPI series case and page 135 ~ 136 for RPA series case.



RPS series

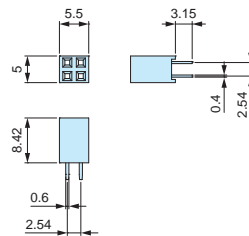
PIN SOCKET CONNECTOR for RPCB-4B



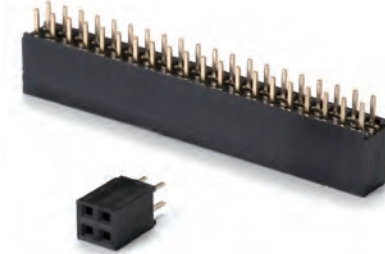
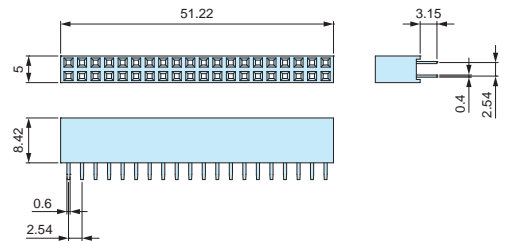
RPS dimensions

■ DXF/DWG/PDF drawings available on our website.

RPS2-2



RPS2-20



■ Material / Color : (Socket) FRPBT UL94V-0 /Black • (Pin) Phosphor bronze

■ 2.54mm hole-to-hole pitch pin socket connector.
Utilize with RPCB-4B expansion PCB for Raspberry Pi 4B.

Product no.

Product no.	Pin layout	Pack of
RPS2-2	4 (2 pin x 2)	1
RPS2-20	40 (20 pin x 2)	1

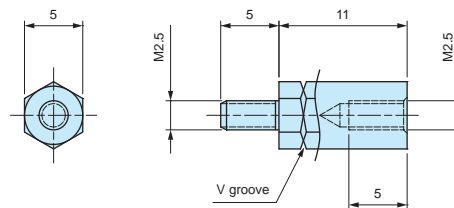
RPSP2.5-11

HEXAGONAL SPACER



RPSP2.5-11 dimensions

■ DXF/DWG/PDF drawings available on our website.



■ Material / Finish : Brass / Nickel plated

■ Brass hexagonal spacer with M2.5 threads on both male and female sides.
Utilize with RPCB-4B expansion PCB for Raspberry Pi 4B.

Product no.

Product no.	Pack of
RPSP2.5-11	4

MT2.5-4

MOUNTING SCREW for RPSP2.5-11



MT2.5-4 dimensions



■ Material / Finish : Steel / Trivalent chromate

■ Utilize when affixing RPCB-4B expansion PCB.

Product no.

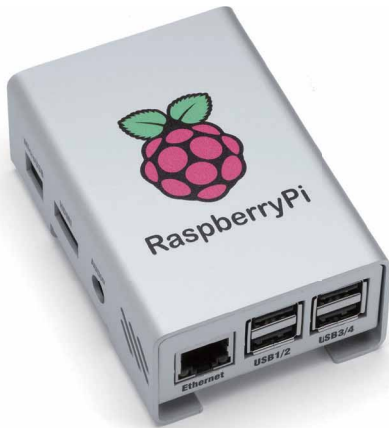
Product no.	Pack of
MT2.5-4	4

Raspberry Pi Case customization

Create your very own unique Raspberry Pi Case!

Unique Logo (Inkjet print, Engraving)

Inkjet printing services are available from just 1 piece, with low initial cost.
Engraving is also available.



Size adjustment

Size can be customized to fit your PCB.



Stainless Steel material

Stainless steel material can also be used for customization.



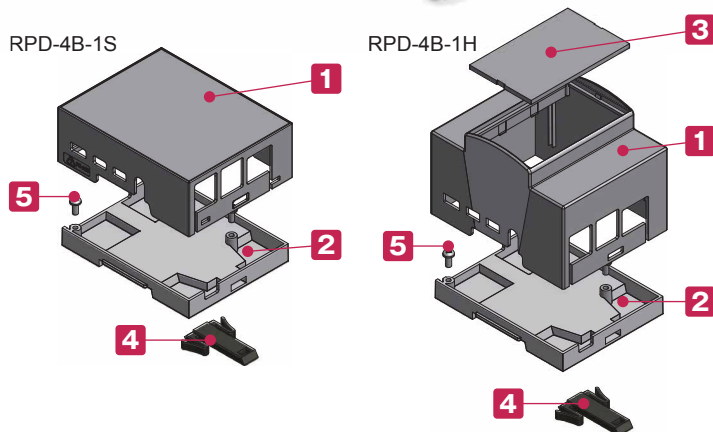
Color Anodizing・Painting





RPD-4B-1S

RPD-4B-1H



■ Exclusively for use with Raspberry Pi 4B.

■ Exclusively for use with 35mm DIN rail.

Able to assemble easily with a flathead screwdriver;
no screws required.

*Caution : Material may easily break when assembling.

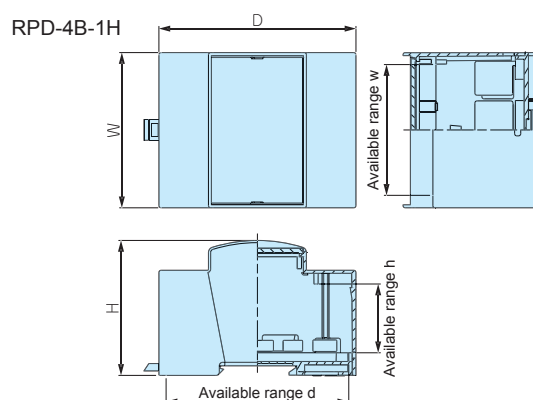
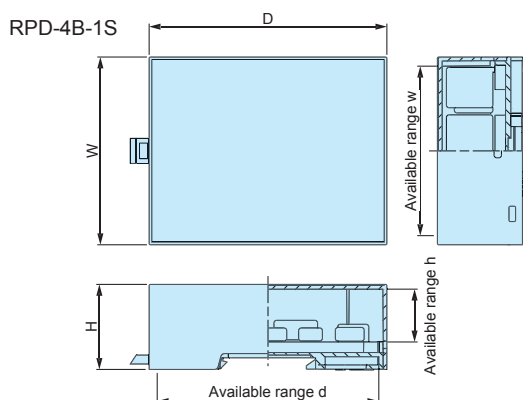
■ Raspberry Pi Board is excluded.

Components

No.	Part name	Pcs	Material	Color / Finish
1	Body	1	PC + ABS	Gray
2	Base	1	PC + ABS	Gray
3	Front panel (RPD-4B-1H only)	1	Polycarbonate t = 2.0	Transparent
4	Hook	1	PPO	Black
5	Screw for Board (M3-6)	2	Stainless steel	Unfinished

RPD dimensions

■ Drawings below are reference examples only.
DXF/DWG/PDF drawings available on our website.



Product no. / Dimensions

Product no.	Dimensions						Weight (g)
	W	H	D	w	h	d	
RPD-4B-1S	71.1	32.2	90	64.1	20.1	83.9	46.8
RPD-4B-1H	71.3	62	90.5	60.3	31.7	83.9	68.1

TAKACHI ELECTRONICS ENCLOSURE CO., LTD.

3-21-16 Higashi-ryoke,
Kawaguchi, Saitama 332-0003, JAPAN
Tel. +81-48-222-5409

www.takachi-enclosure.com

sales@takachi-el.co.jp

● All items listed in this catalogue are compliant with EU RoHS 10 standard.