

AWA series HEAT-SINK ALUMINIUM ENCLOSURE

AWA series is an aluminium enclosure that has a frame with heat-sink fins on both sides.

Furthermore, the enclosure is also conductive, which provides a shielding effect.

By machining the panels, the unit becomes extremely suitable to be used as high-end audio, or as an industrial equipment.

APPLICATION EXAMPLE

Industrial IoT Interface Device



Industrial Fanless PC



Audio Amplifier



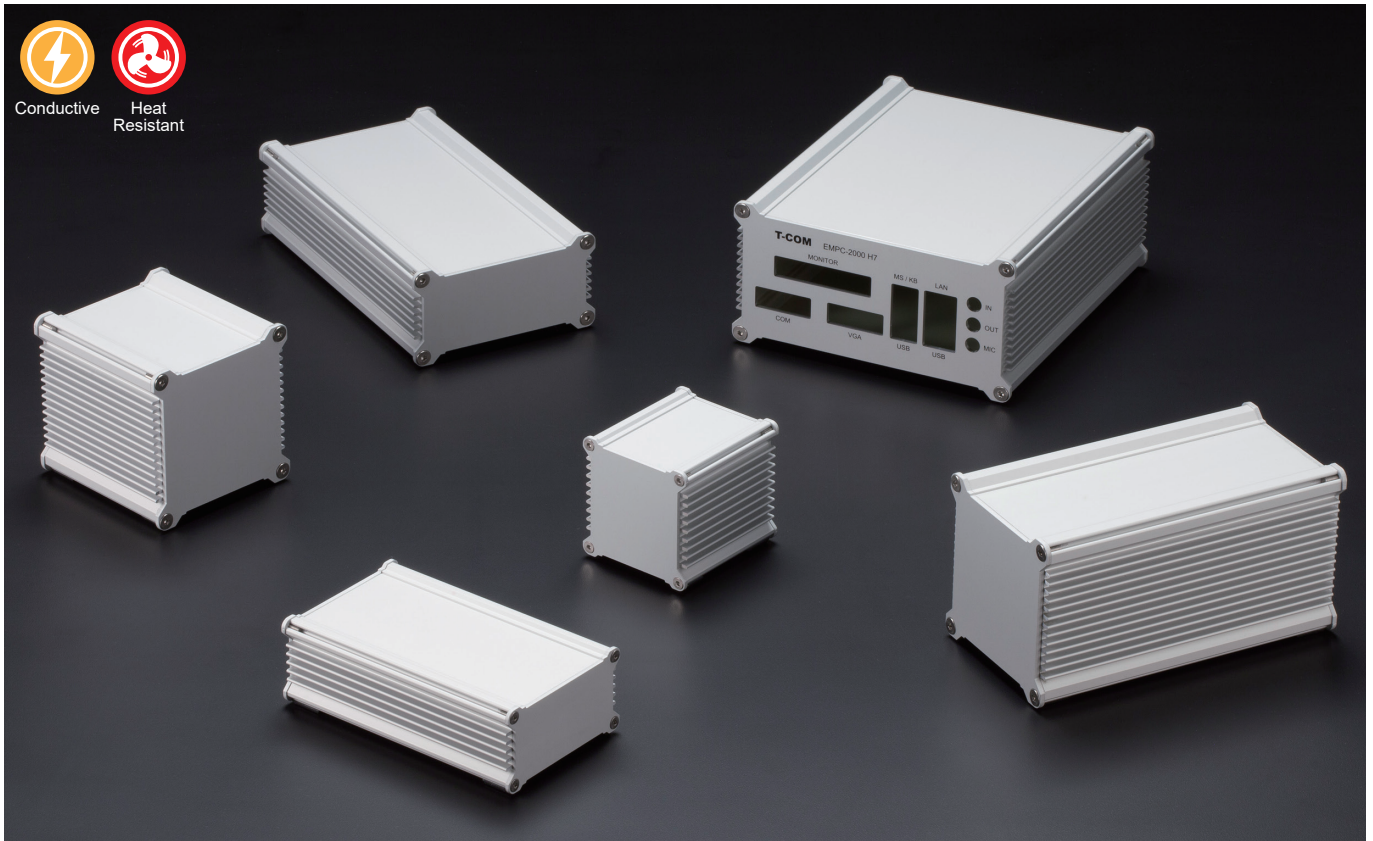
Wide-Band Solid State Optical Amplifier



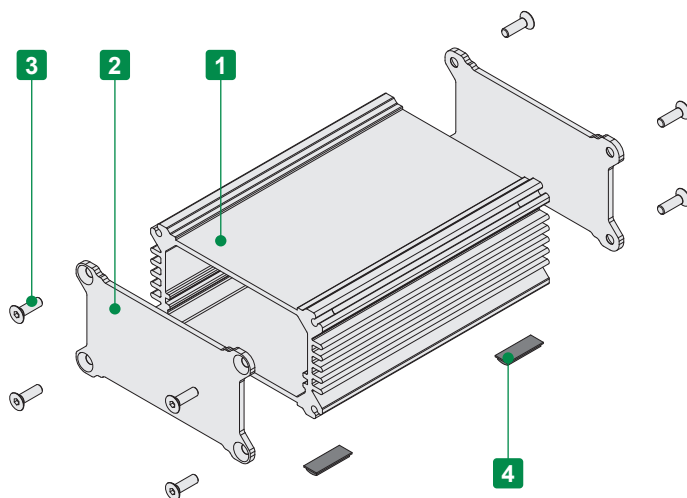
Customization

CNC milling available for customization on AWA series.
See website for more details.





- Extruded aluminium frame manufactured with heat-sink sides.
- Silver anodized end panels make for a luxurious finish.
- Conductivity is achieved by utilizing the contact between the unfinished end panel sides and the unfinished ends of the frame.
- PCB or chassis can be horizontally mounted by sliding into an inner-grooved body frame.
- Suitable for industrial fanless PC, measuring instrument, digital audio amplifier and more.
- Custom length is available.

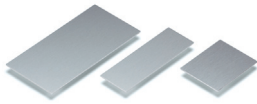


Included screws :
 AWA5-3, 6-6, 8-4 models : Hex flat head M3-8 x 8 pcs
 AWA8-8, 10-5, 12-7, 15-8 models : Hex flat head M4-10 x 8 pcs
 AWA20-8 models : Hex flat head M5-10 x 8 pcs
 ※Hexagonal wrench included

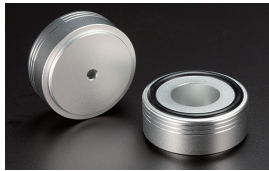
Component

No.	Part name	Pcs	Material	Color / Finish
1	Body frame	1	Extruded aluminium A6063S-T5	Silver / Anodized with clear coating
2	End panel	2	Aluminium A1050P	Silver / Anodized (Unfinished inside)
3	Hex socket screw	8	Stainless steel	Unfinished
4	Rubber feet	4	Polyurethane	Black

Accessories (Optional parts)



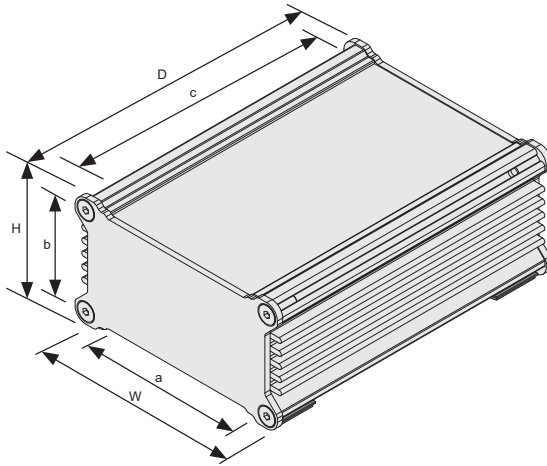
Mounting plate AWC series
See page 166



Aluminium isolation feet AFS • AFM series
See page 333

AWA dimensions

※c = Body frame length.



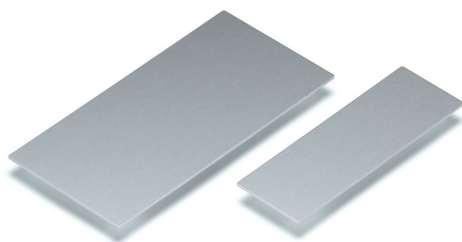
■ DXF/DWG/PDF/STP drawings available on our website.

※ Thermal resistance test condition

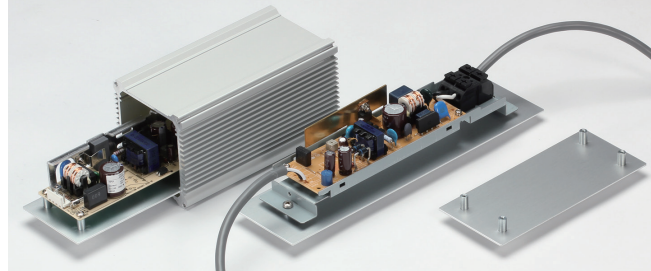
- Ambient air cooling
- Heat-sink fins are set perpendicular to the ground with temperature at 60°C.
- Anodized aluminium extrusion
- Heat source is applied on the opposite side (inner side) of the fins.

Product no. / Details

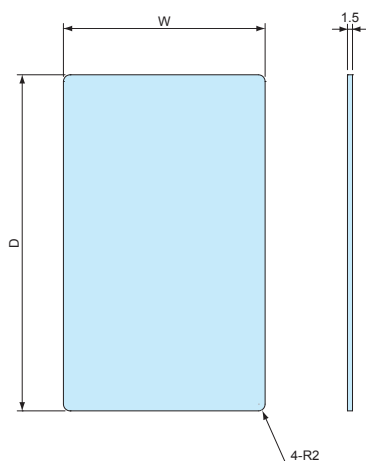
Product no.	External dimensions			Internal dimensions			※Thermal resistance rate (°C/W)	Weight (g)
	W	H	D	a	b	c		
AWA 5-3- 5SS	52	32	53.2	39	22.5	49.2	11.2	69.5
AWA 5-3- 7SS	52	32	73.2	39	22.5	69.2	9.18	90.5
AWA 5-3-10SS	52	32	98.2	39	22.5	94.2	7.64	116.5
AWA 5-3-12SS	52	32	123.2	39	22.5	119.2	6.63	142.5
AWA 6-6- 7SS	61	61	68	47	51	64	4.41	156
AWA 6-6-10SS	61	61	98	47	51	94	3.5	212
AWA 6-6-14SS	61	61	138	47	51	134	2.83	286
AWA 6-6-19SS	61	61	188	47	51	184	2.33	379
AWA 6-6-24SS	61	61	238	47	51	234	2.02	471.5
AWA 8-4- 8SS	76	41	78	62	31	74	5.97	154
AWA 8-4-10SS	76	41	103	62	31	99	5.01	195
AWA 8-4-13SS	76	41	128	62	31	124	4.37	236.5
AWA 8-4-16SS	76	41	163	62	31	159	3.76	294
AWA 8-8- 9SS	82	82	86	66.5	66.5	81	3.1	319.5
AWA 8-8-11SS	82	82	111	66.5	66.5	106	2.63	392.5
AWA 8-8-16SS	82	82	156	66.5	66.5	151	2.12	523.5
AWA 8-8-21SS	82	82	206	66.5	66.5	201	1.79	669.5
AWA 8-8-26SS	82	82	261	66.5	66.5	256	1.54	829.5
AWA10-5-10SS	102	52	95.6	86.5	36.5	90.6	4.52	288.5
AWA10-5-14SS	102	52	135.6	86.5	36.5	130.6	3.62	387.5
AWA10-5-18SS	102	52	175.6	86.5	36.5	170.6	3.08	486
AWA10-5-23SS	102	52	225.6	86.5	36.5	220.6	2.64	609
AWA12-7- 9SS	115.7	67	90.6	100.2	51.5	85.6	3.6	354
AWA12-7-12SS	115.7	67	125.6	100.2	51.5	120.6	2.93	460
AWA12-7-17SS	115.7	67	165.1	100.2	51.5	160.1	2.47	579.5
AWA12-7-20SS	115.7	67	200.6	100.2	51.5	195.6	2.18	687
AWA15-8-12SS	152	77	120.6	136.5	61.5	115.6	2.64	565.5
AWA15-8-16SS	152	77	160.6	136.5	61.5	155.6	2.2	712
AWA15-8-21SS	152	77	210.6	136.5	61.5	205.6	1.86	895.5
AWA15-8-26SS	152	77	260.6	136.5	61.5	255.6	1.63	1,079
AWA20-8-15SS	202.4	77.4	153.8	186.5	61.5	147.8	2.3	854.5
AWA20-8-19SS	202.4	77.4	193.8	186.5	61.5	187.8	1.99	1,025
AWA20-8-24SS	202.4	77.4	243.8	186.5	61.5	237.8	1.72	1,238
AWA20-8-29SS	202.4	77.4	293.8	186.5	61.5	287.8	1.54	1,451.5

AWC series**ALUMINIUM MOUNTING PLATE for AW • AWN • AWP • AWA**

APPLICATION EXAMPLE



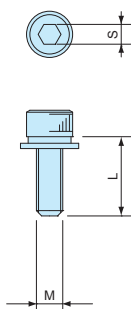
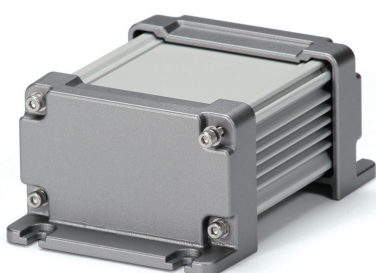
- Material: Aluminium A1050P t=1.5 / Silver anodized
- Mounting plate for AW, AWN, AWP, and AWA enclosures.
- Utilize for mounting PCB, power supply, terminal blocks, etc.

AWC dimensions

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

Product no. / Details

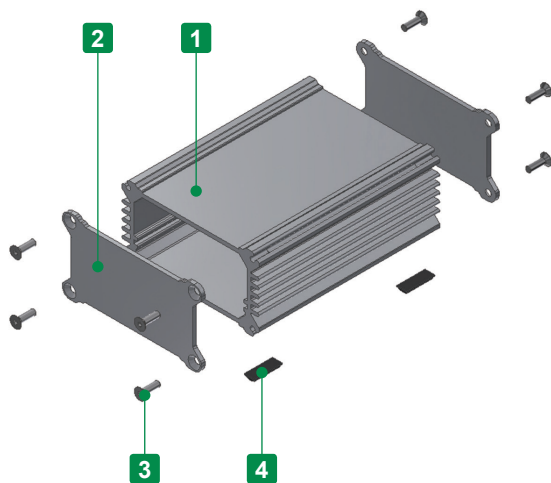
Product no.	W	D	Suitable models
AWC 5- 7	38.9	49.2	AW • AWN 5-4- 7
AWC 5- 9	38.9	69.2	AW • AWN 5-4- 9
AWC 5-11	38.9	94.2	AW • AWN 5-4-11
AWC 5-14	38.9	119.2	AW • AWN 5-4-14
AWC 7- 8	47	64	AW • AWN 7-7- 8 • AWA 6-6- 7
AWC 7-11	47	94	AW • AWN 7-7-11 • AWA 6-6-10
AWC 7-15	47	134	AW • AWN 7-7-15 • AWA 6-6-14
AWC 7-20	47	184	AW • AWN 7-7-20 • AWA 6-6-19
AWC 7-25	47	234	AW • AWN 7-7-25 • AWA 6-6-24
AWC 8- 9	61.8	74	AW • AWN • AWP 8-5- 9 • AWA 8-4- 8
AWC 8-12	61.8	99	AW • AWN • AWP 8-5-12 • AWA 8-4-10
AWC 8-14	61.8	124	AW • AWN • AWP 8-5-14 • AWA 8-4-13
AWC 8-18	61.8	159	AW • AWN • AWP 8-5-18 • AWA 8-4-16
AWC 9-10	66.5	81	AW • AWN • AWP 9-9-10 • AWA 8-8- 9
AWC 9-13	66.5	106	AW • AWN • AWP 9-9-13 • AWA 8-8-11
AWC 9-17	66.5	151	AW • AWN • AWP 9-9-17 • AWA 8-8-16
AWC 9-22	66.5	201	AW • AWN • AWP 9-9-22 • AWA 8-8-21
AWC 9-28	66.5	256	AW • AWN • AWP 9-9-28 • AWA 8-8-26
AWC11-11	86.5	90.6	AW • AWN • AWP11-6-11 • AWA10-5-10
AWC11-15	86.5	130.6	AW • AWN • AWP11-6-15 • AWA10-5-14
AWC11-19	86.5	170.6	AW • AWN • AWP11-6-19 • AWA10-5-18
AWC11-24	86.5	220.6	AW • AWN • AWP11-6-24 • AWA10-5-23
AWC12-11	100.2	85.6	AW • AWN • AWP12-8-11 • AWA12-7- 9
AWC12-14	100.2	120.6	AW • AWN • AWP12-8-14 • AWA12-7-12
AWC12-17	100.2	160.1	AW • AWN • AWP12-8-17 • AWA12-7-17
AWC12-22	100.2	195.6	AW • AWN • AWP12-8-22 • AWA12-7-20
AWC16-14	136.3	115.6	AW • AWN • AWP16-9-14 • AWA15-8-12
AWC16-18	136.3	155.6	AW • AWN • AWP16-9-18 • AWA15-8-16
AWC16-23	136.3	205.6	AW • AWN • AWP16-9-23 • AWA15-8-21
AWC16-28	136.3	255.6	AW • AWN • AWP16-9-28 • AWA15-8-26
AWC21-17	186.1	147.8	AW • AWN • AWP21-9-17 • AWA20-8-15
AWC21-21	186.1	187.8	AW • AWN • AWP21-9-21 • AWA20-8-19
AWC21-26	186.1	237.8	AW • AWN • AWP21-9-26 • AWA20-8-24
AWC21-31	186.1	287.8	AW • AWN • AWP21-9-31 • AWA20-8-29

HCS series**HEXAGON SOCKET HEAD SCREW for AW • AWN**

- Hexagon socket head screws for fastening the end panels of AW and AWN enclosures.
- Utilize for tamper-resistance functionality or for an elegant sleek look.

Product no. / Details

Product no.	M	L	S	Material	Pack of
HCS3-12S	3	12	2.5	Stainless steel	8
HCS4-12S	4	12	3	Stainless steel	8
HCS5-12S	5	12	4	Stainless steel	8



- Conductivity is achieved by utilizing the contact between the unfinished end panels side, and the unfinished ends of the frame.
- Selectable in 8 different Width / Height types, with adjustable length (depth) in 1mm intervals from 50 to 700mm.
- PCB or chassis can be horizontally mounted by sliding into an inner-grooved body frame.
- Suitable for industrial fanless PC, measuring instrument, digital audio amplifier and so on.

Included screws :

AWAS 52-32-□, 61-61-□, 76-41-□ models : Hex countersunk M3-8 x 8 pcs

AWAS 82-82-□, 102-52-□, 116-67-□, 152-77-□ models : Hex countersunk M4-10 x 8 pcs

AWAS 202-77-□ models : Hex countersunk M5-10 x 8 pcs

※Hexagonal wrench included

Components

No.	Part name	Pcs	Material	Color / Finish
1	Body frame	1	Extruded aluminium A6063S-T5	Silver / Anodized
2	End panel	2	Aluminium A1050P	Silver / Anodized (outside) : Unfinished (inside)
3	Hex socket screw	8	Stainless steel	Unfinished
4	Rubber feet	4	Polyurethane	Black

Confirm Product No.

Confirm product no. with **1** values on page AWAS-2.

Product no. AWAS

W H

-

D

SS

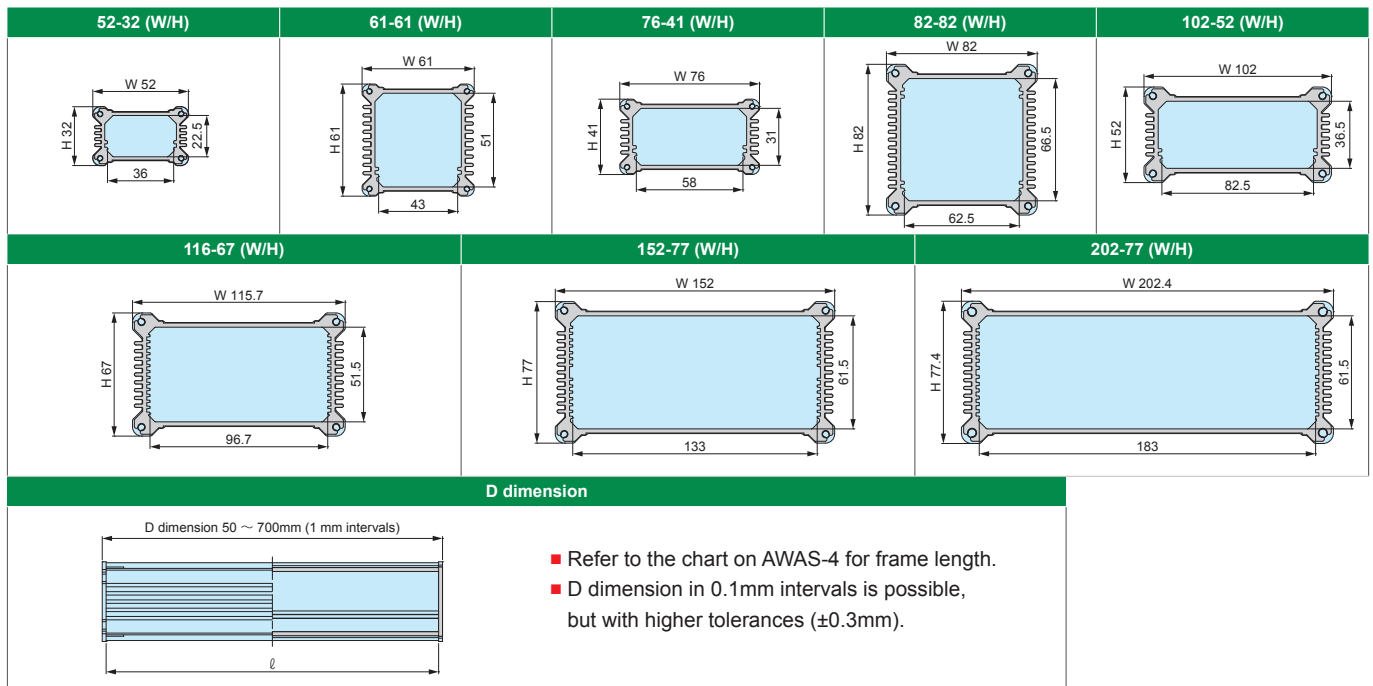
Color Code

Example : W/H = 102-52, D = 321mm

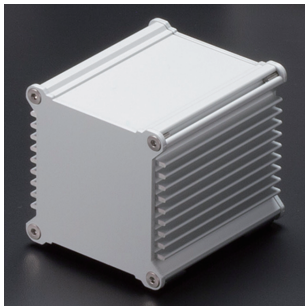
AWAS 102 - 52 - 321 SS

1 Specify Dimensions

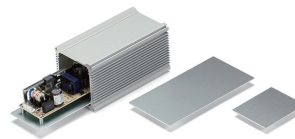
Specify W/H dimensions from the below chart, and D dimension in 1mm intervals.



Only SS (Silver / Silver) color type is available for the AWAS series.



Accessories (Optional parts)



Mounting plate AWSC series
See page AWSC-1



Aluminium isolation feet AFS • AFM series
See page AFS • AFM-1 ~ AFS • AFM-2

Lead time

Custom Size Only
Custom Size + Hole Milling

4 business days (1 ~ 10 pcs)
10 business days (1 ~ 10 pcs)

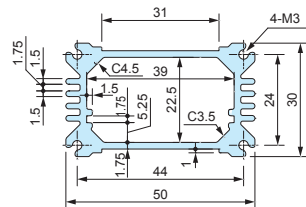
Order Inquiry

For more information, contact us here at sales@takachi-el.co.jp

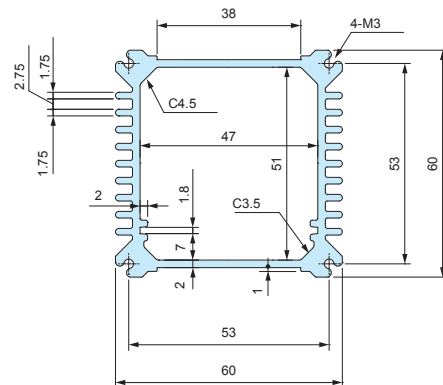
AWAS frame

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

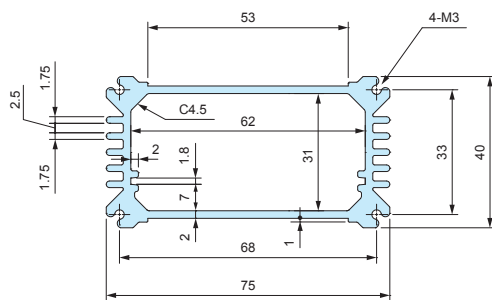
AWAS52-32-□



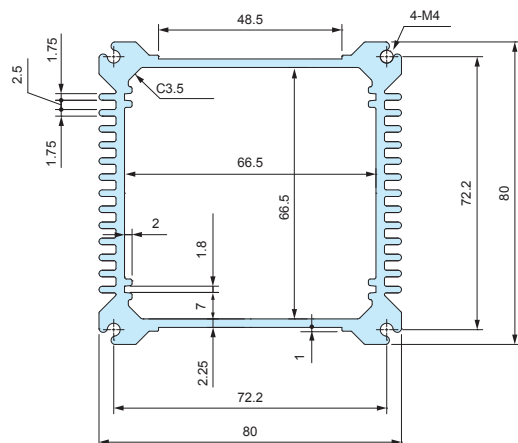
AWAS61-61-□



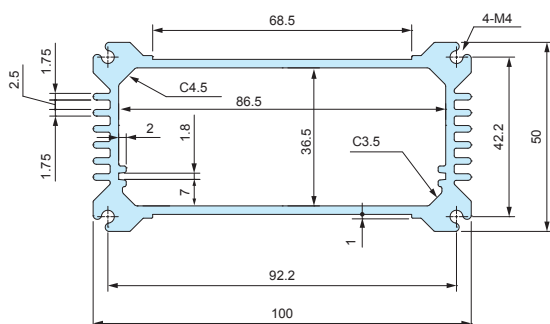
AWAS76-41-□



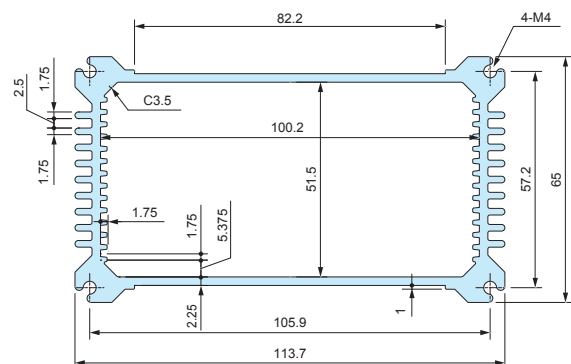
AWAS82-82-□



AWAS102-52-□

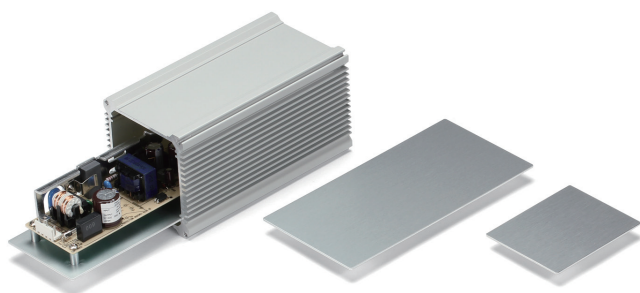


AWAS116-67-□



Technical drawing of a rectangular frame structure. The drawing shows a light blue frame with a central rectangular opening. The overall dimensions are 150 (width) and 136.5 (height). The frame has a thickness of 1.75. The inner opening has a width of 142.2 and a height of 61.5. The frame is composed of four corner pieces, each labeled 'C4', and four bolted connections, each labeled '4-M4'. The corner pieces have a width of 2.5 and a height of 1.75. The bolted connections have a diameter of 1.75. The frame is shown in a perspective view.

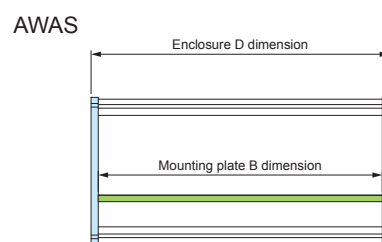
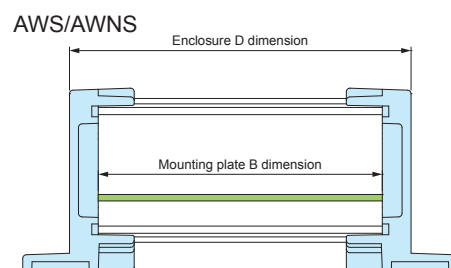
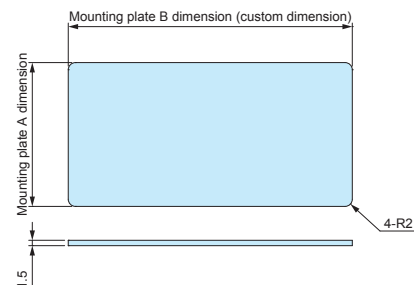
[illegible]**AWAS-4**

AWSC SERIES**CUSTOM SIZED MOUNTING PLATE** for AWS • AWNS • AWAS

- Material / Finish : Aluminium A1050P / Silver anodized

Mounting plate dimensions

Enclosure W-H product no.	Mounting plate A dimension	Mounting plate B dimension	Enclosure W type
AWS55-39/AWNS55-35	38.9	Enclosure D dimension-15.8	55
AWAS52-32	38.9	Enclosure D dimension-4	52
AWS66-71/AWNS66-66	47	Enclosure D dimension-16	66
AWAS61-61	47	Enclosure D dimension-4	61
AWS81-51/AWNS81-46	61.8	Enclosure D dimension-16	81
AWAS76-41	61.8	Enclosure D dimension-4	76
AWS86-92/AWNS86-86	66.5	Enclosure D dimension-19	86
AWAS82-82	66.5	Enclosure D dimension-5	82
AWS106-62/AWNS106-56	86.5	Enclosure D dimension-19.4	106
AWAS102-52	86.5	Enclosure D dimension-5	102
AWS120-77/AWNS120-71	100.2	Enclosure D dimension-19.4	120
AWAS116-67	100.2	Enclosure D dimension-5	116
AWS156-87/AWNS156-81	136.3	Enclosure D dimension-19.4	156
AWAS152-77	136.3	Enclosure D dimension-5	152
AWS206-87/AWNS206-81	186.1	Enclosure D dimension-22.2	206
AWAS202-77	186.1	Enclosure D dimension-6	202



Confirm Product No. Confirm product code with enclosure W product code and enclosure D dimension.

Mounting Plate Product No. **AWSC**

-
Enclosure W type Enclosure D dimension

Example : Enclosure W-H dimensions (i.e. AWS81-51) = 81-51, Enclosure D dimension = 234mm

AWSC -

Lead time

Custom Size Only
Custom Size + Hole Milling

4 business days (1 ~ 10 pcs)
8 business days (1 ~ 10 pcs)

Order Inquiry

For more information, contact us here at sales@takachi-el.co.jp