

## Multi-unit Rackmount Chassis RM-SV Series

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<User Guide>  
Ver.2.0.0

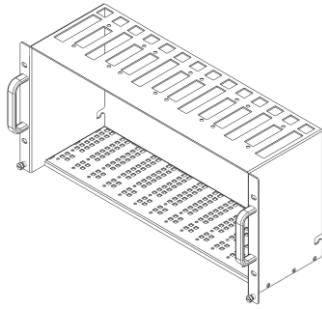
- Thank you for choosing our product.
- To ensure the best performance of this product, please read this guide fully and carefully before using it and keep this manual together with the product for future reference as needed.

### Before reading this manual

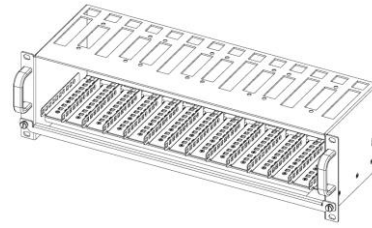
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## Included items

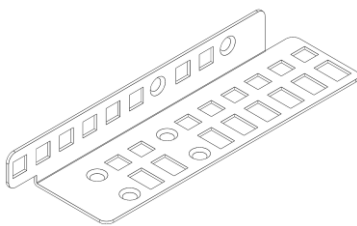
Verify that all items listed below are included in the package.  
If any items are missing or damaged, please contact IDK.



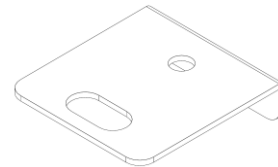
Rack (RM-SV5)



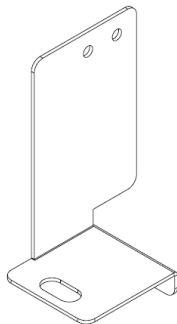
Rack (RM-SV3)



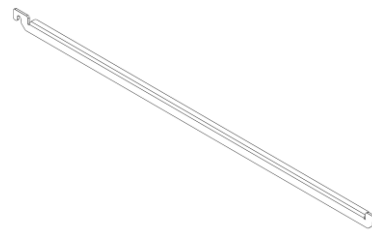
Partition bracket (Already mounted)



Tab bracket



Tab bracket BM



Stopper (Already mounted)

RM-SV5	
Rack (Frame and single plate)	1
Partition bracket (Already mounted)	14
Tab bracket	14
Stopper (Already mounted)	1
M4 screw (Binding head, M4×L6)	9 <sup>*1</sup>
M3 screw (Binding head, M3×L5)	16 <sup>*1</sup>

RM-SV3	
Rack (Frame and single plate)	1
Partition bracket (Already mounted)	14
Tab bracket or Tab bracket BM <sup>*2</sup>	14
Stopper (Already mounted)	1
M3 screw (Binding head, M3×L5)	16 <sup>*1</sup>

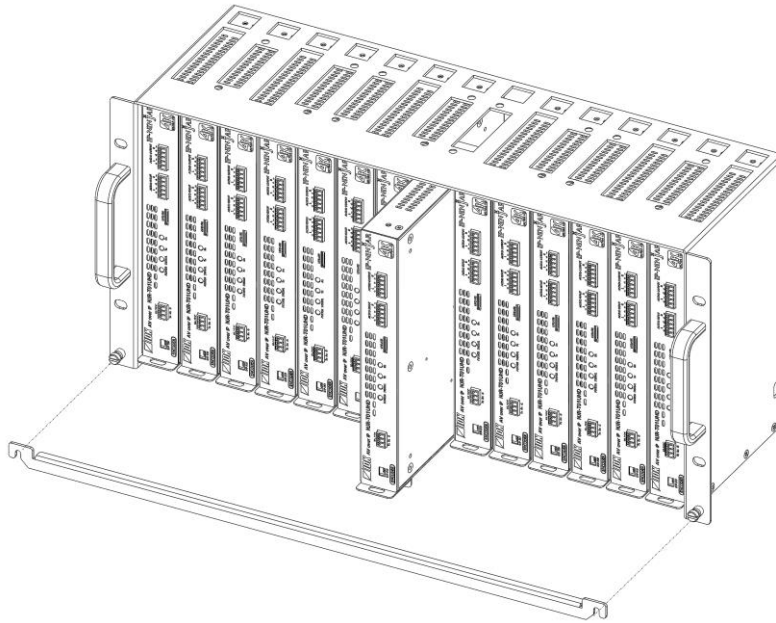
<sup>\*1</sup> Two (2) extra screws are included.

<sup>\*2</sup> Tab bracket or Tab bracket BM that you selected when ordering.

**[Fig. 1] Included items**

## About RM-SV Series

The RM-SV is a rackmount for accommodating a mix of thin type half-rack and standard half-rack units. Up to 14 units can be mounted or removed separately.



[Fig. 2] Rackmount with units

## Mounting combinations

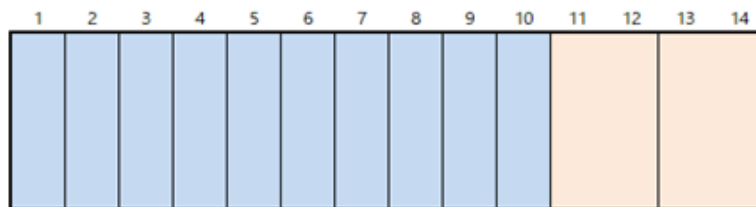
Up to 14 units can be mounted depending on the thickness of the units.

[Table 1] Unit size and required number of slots

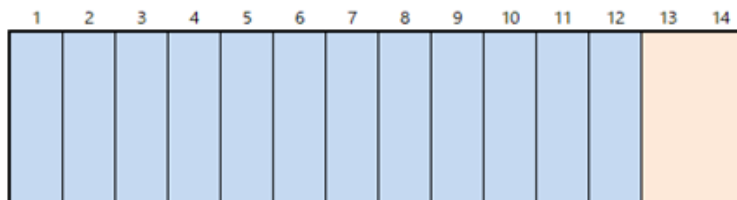
Rack	Unit size	Required slot	Group
RM-SV5	8.3 (W) × 1.2 (H)" (210 (W) × 30 (H) mm)	1	A
	8.3 (W) × 1.7 (H)" (210 (W) × 42 (H) mm)	2	B
	8.3 (W) × 1.7 (H)" (210 (W) × 44 (H) mm)		
RM-SV3	4.2 (W) × 1.1 (H)" (106 (W) × 27.5 (H) mm)	1	A
	4.2 (W) × 1.1 (H)" (106 (W) × 28 (H) mm)		
	4.2 (W) × 1.2 (H)" (106 (W) × 30 (H) mm)		
	4.2 (W) × 1.7 (H)" (106 (W) × 42 (H) mm)	2	B

### Combination examples

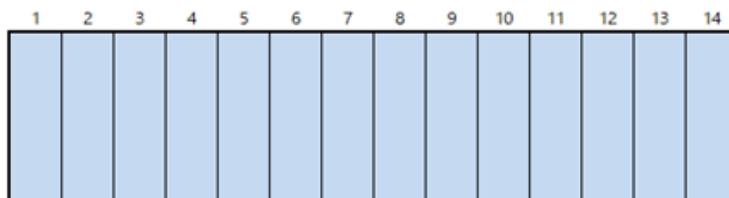
- 10 Group A units + 2 Group B units



- 12 Group A units + 1 Group B unit



- 14 Group A units



[Fig. 3] Combination examples

Unused space can be flat by removing partition brackets. (P.6) If you want to put any object in the space, secure the object using tying zip-ties to 6x6 mm square hole. Units whose side panel is not flat cannot be mounted to the rack.



Not flat → Cannot be mounted



Flat → Can be mounted

[Fig. 4] Side panel (Not flat or Flat)

## Precaution

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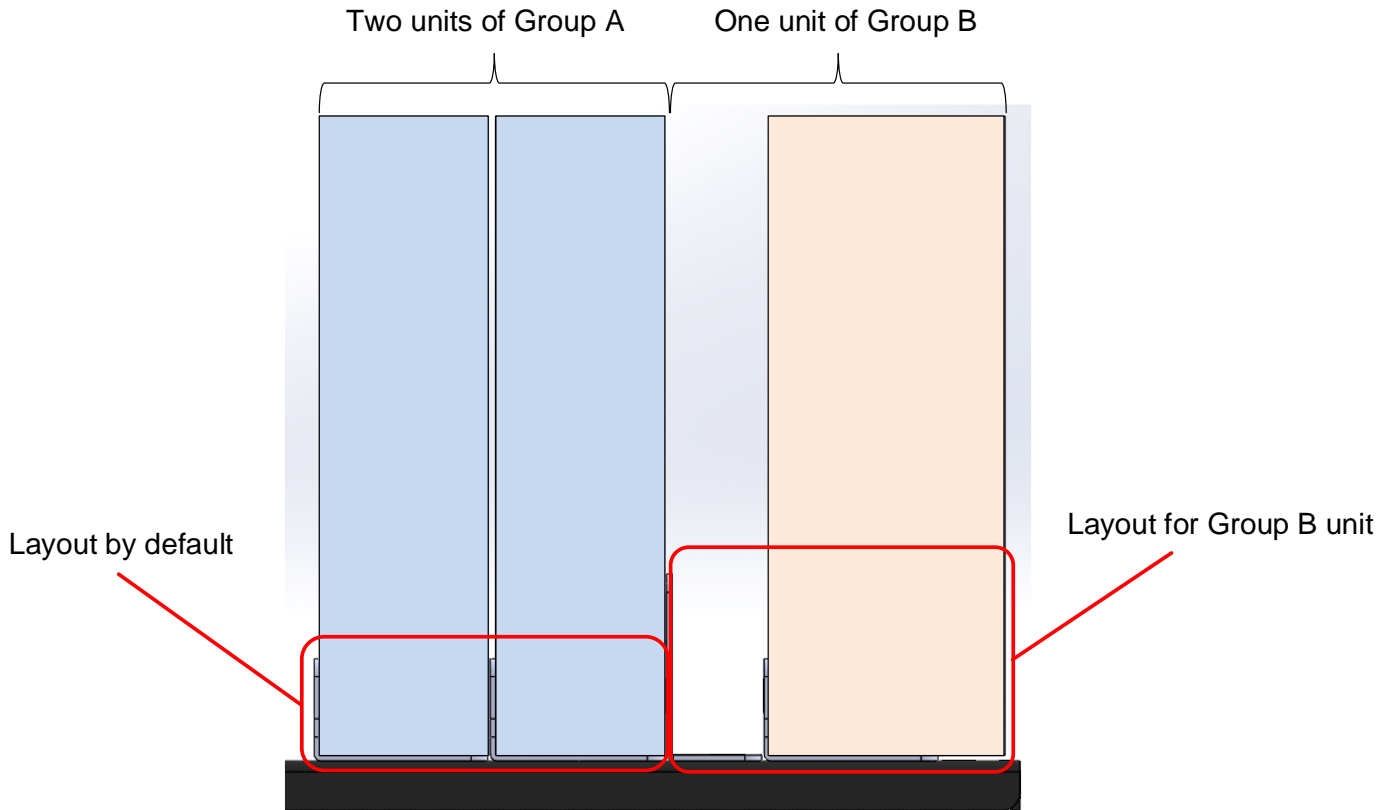
Please observe the following precautions.

- Power off all devices before installation.
- Remove the rubber feet from the bottom of the chassis, if any.
- Dissipate static electricity before installation. Failure to observe this precaution may result in ESD (electrostatic discharge) damage.
- The appropriate screw tightening torque: M3: 0.59 N·m (6.1 kgf·cm, approx.)  
M4: 1.47 N·m (15.0 kgf·cm, approx.)
- Each mounted unit is heated from other units in the same rackmount, and it increases the internal temperature. See “**Fan in rackmount (P.12)**” for details.
- Keep enough space for ventilation to avoid rise in rack temperature.

## Changing layout

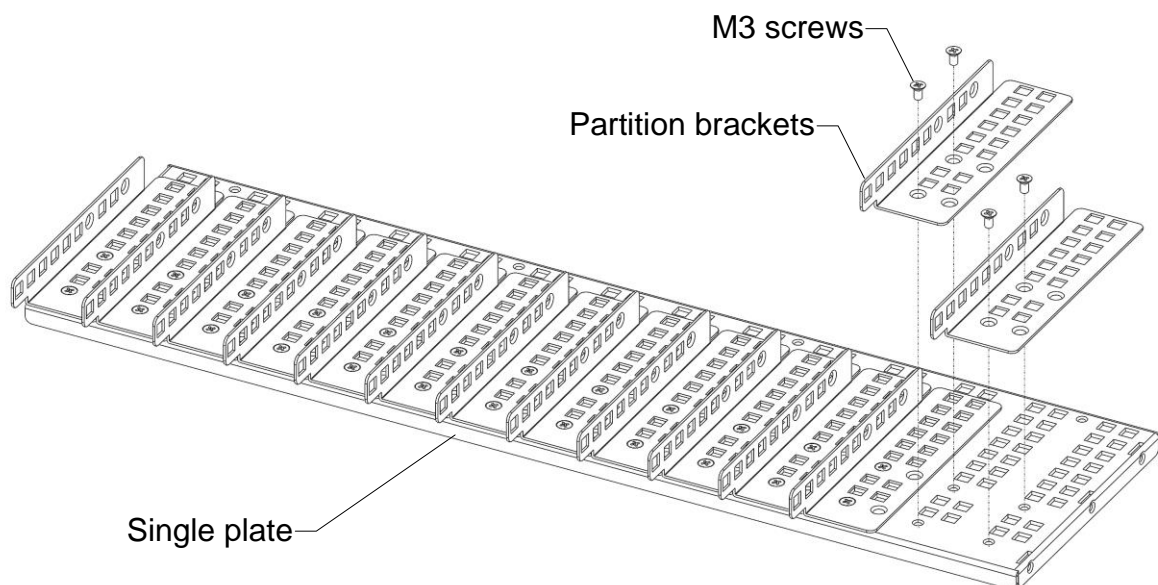
**Memo:** A unit of Group A needs one (1) slot for each.  
A unit of Group B needs two (2) slots for each.

Up to 14 units of Group A can be mounted to the RM-SV by default. To make a space for a unit of Group B, replace two partition brackets.



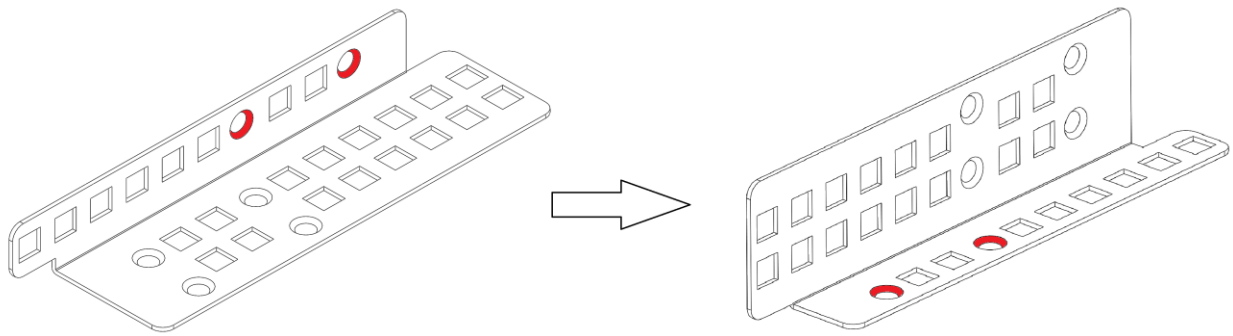
[Fig. 5] Rack layout

1. Remove the partition brackets from the single plate by unscrewing M3 screws.



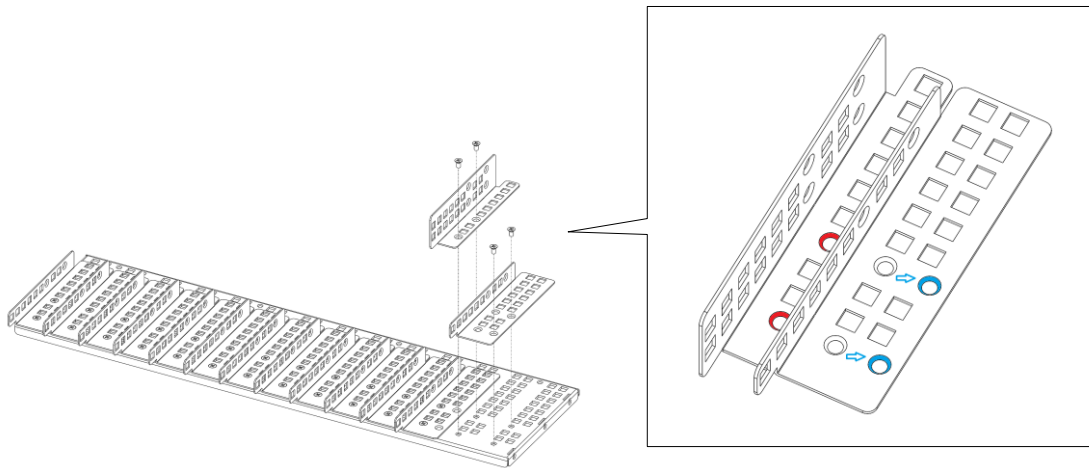
[Fig. 6] Removing partition brackets

2. Change the orientation of one bracket that is removed.



**[Fig. 7] Changing orientation**

3. Put the partition brackets back to the single plate using the removed M3 screws as follows.

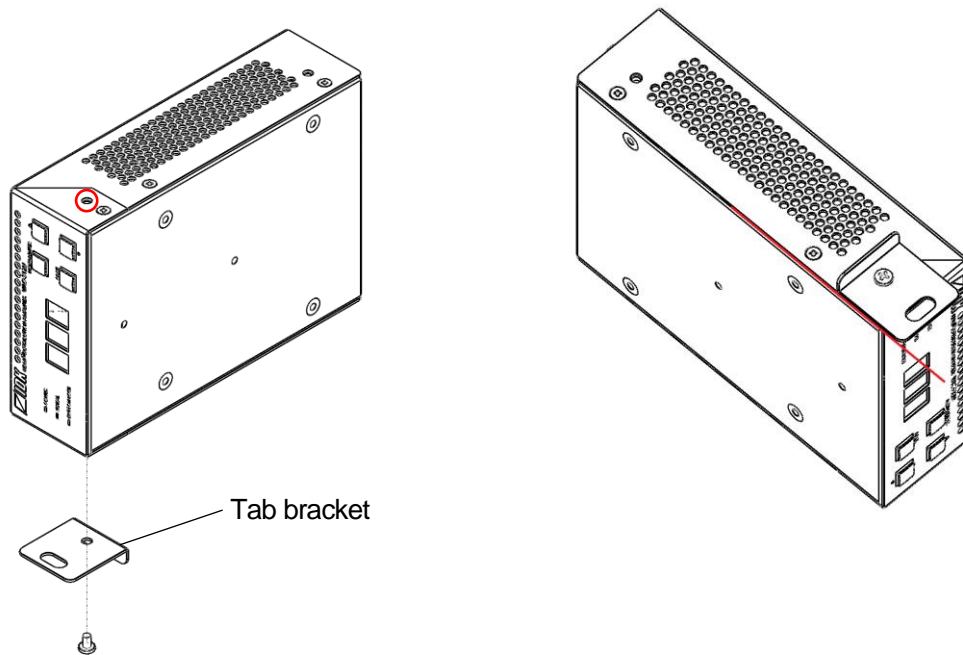


**[Fig. 8] Attaching partition brackets**

## Attaching tab bracket to unit

### ■ For unit having one screw hole as shown below

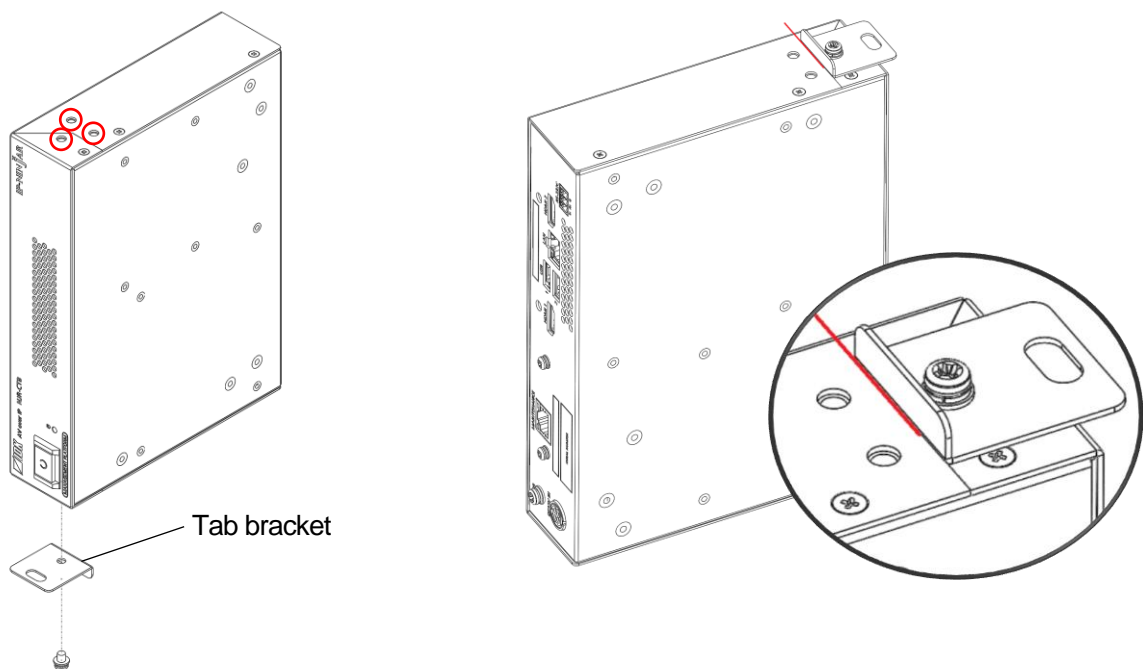
Attach a tab bracket to the unit using a supplied M3 screw.



[Fig. 9] Attaching tab bracket

### ■ For unit having three screw holes as shown below

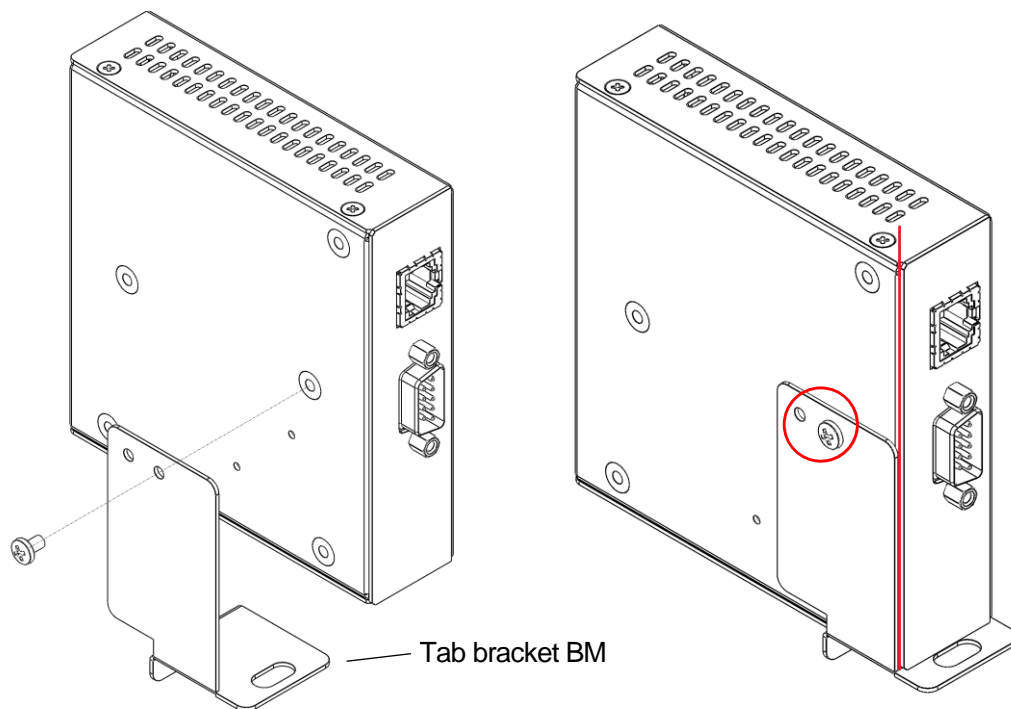
Attach a tab bracket to the unit using a provided M4 screw.



[Fig. 10] Attaching tab bracket



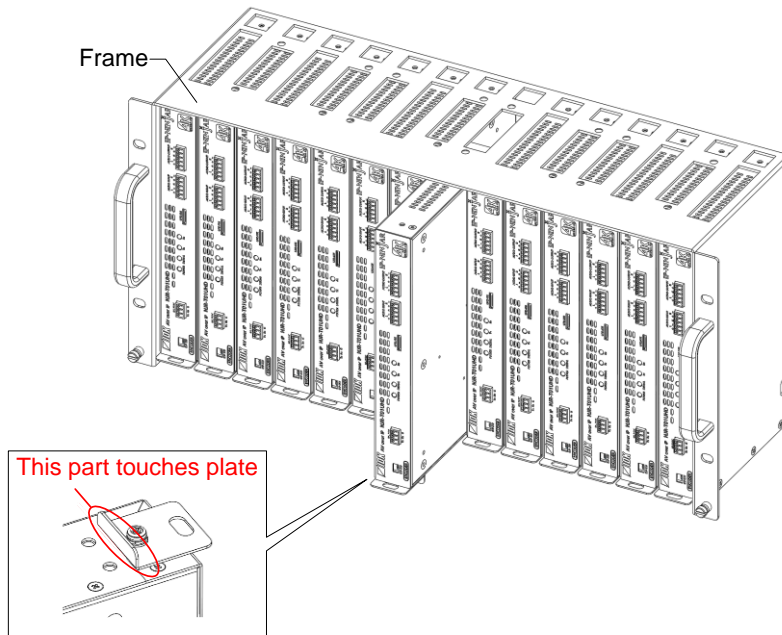
■ For unit having no screw hole on the side panels as shown below  
Attach a tab bracket BM to the unit using a supplied M3 screw.



[Fig. 11] Attaching tab bracket BM

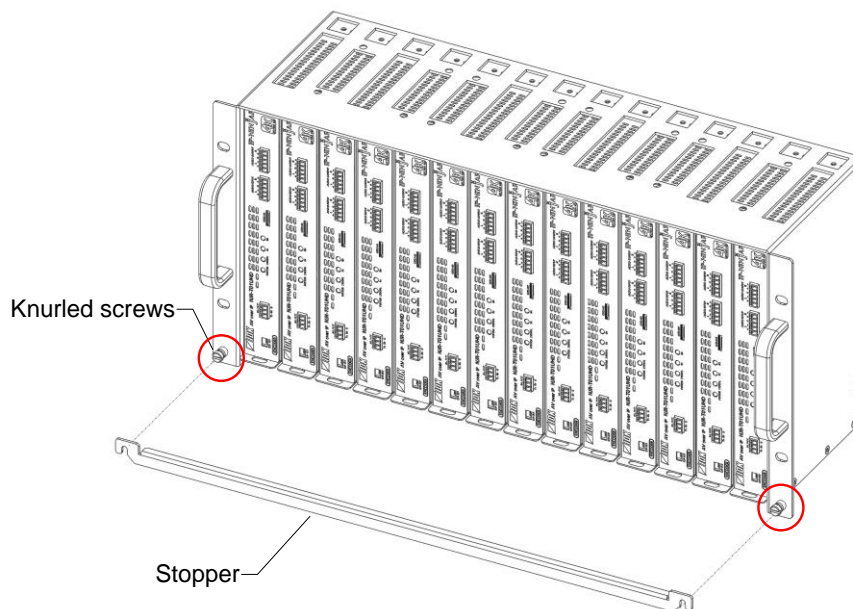
## Mounting unit to RM-SV and Installing RM-SV to rack shelf

1. Slide the unit until the tab bracket touches the single plate.



[Fig. 12] Mounting unit

2. Loosen knurled screws (M4) and place the stopper bracket. Tight the stopper bracket using a slotted screwdriver.



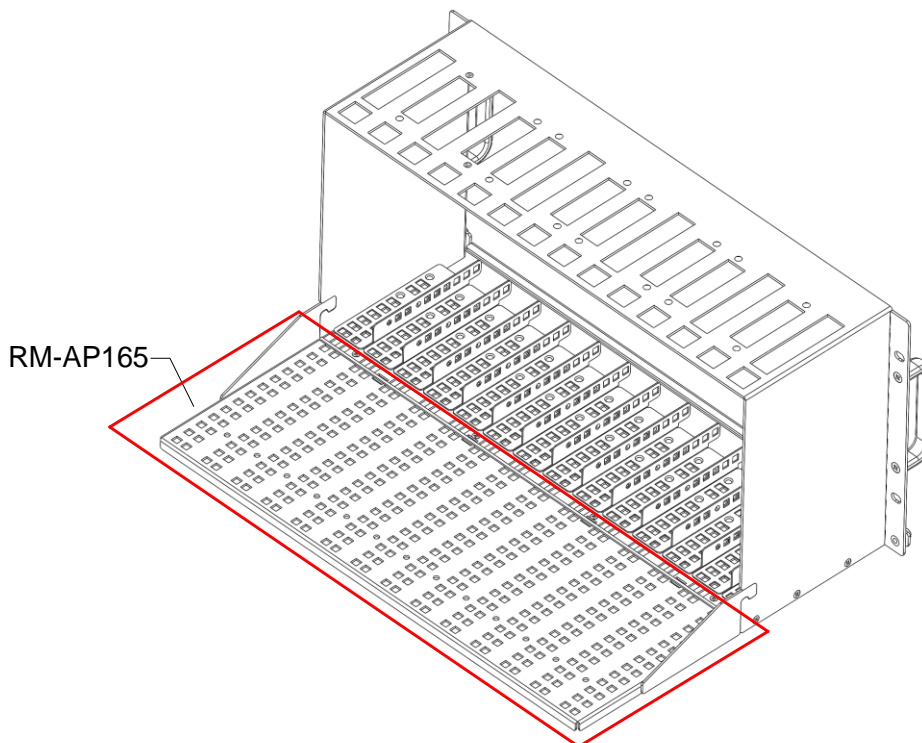
[Fig. 13] Attaching stopper bracket

## Optional hardware for RM-SV series

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### ■ RM-AP165

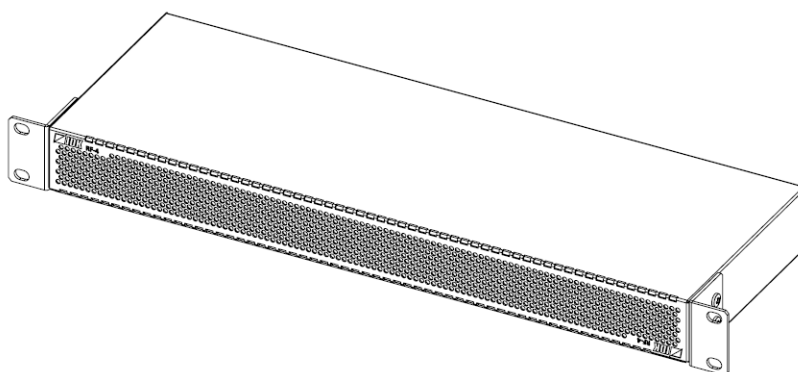
The RM-AP165 provides extra space in the rear side for placing objects. Use zip-ties or the like to secure objects through 6x6 mm square holes.



[Fig. 14] RM-AP165 drawing

### ■ RF-4

The RF-4 is a cooling fan unit that can be mounted to the rack to avoid rise in internal rack temperature. The fan unit offers the ideal airflow: Intake from the front panel; exhaust from bottom or top panel.



[Fig. 15] RF-4 drawing

## Fan in rackmount

Each mounted unit is heated from other units in the same rackmount, and it increases the internal temperature. Ensure to install fan unit (RF-4; P.11) to the rackmount in order to avoid temperature increase; follow the table below.

[Table 2] The need for fans in rackmount

For units whose upper operating temperature limit is **104°F (40°C)**

Presence of fan	Operates at <b>68°F (20°C)</b>	Operates at <b>86°F (30°C)</b>	Operates at <b>104°F (40°C)</b>
Unit with fan	No fans needed		Fans should be mounted
Unit without fan	No fans needed	Fans should be mounted	

[Table 3] The need for fans in rackmount

For units whose upper operating temperature limit is **86°F (30°C)**

Presence of fan	Operates at <b>50°F (10°C)</b>	Operates at <b>68°F (20°C)</b>	Operates at <b>86°F (30°C)</b>
Unit with fan	No fans needed		Fans should be mounted
Unit without fan	No fans needed	Fans should be mounted	

For some case, the fan unit is not necessary depending on the number of units and environment temperature. Please contact us for details.

## Dimension and weight

[Table 4] Dimension and weight

Model	Dimension	Weight
RM-SV5	19 (W) × 8.7 (H) × 5.9 (D)" (482.6 (W) × 222 (H) × 150 (D) mm) (Excluding connectors and the like)	7.1 lbs. (3.2 kg)
RM-SV3	19 (W) × 5.2 (H) × 5.9 (D)" (482.6 (W) × 133 (H) × 150 (D) mm) (Excluding connectors and the like)	5.7 lbs. (2.6 kg)

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**Headquarters**

IDK Corporation  
7-9-1 Chuo, Yamato-shi, Kanagawa-pref.  
242-0021 JAPAN  
TEL: +81-46-200-0764 FAX: +81-46-200-0765  
URL: <http://www.idkav.com>

Email: [idk\\_eng@idk.co.jp](mailto:idk_eng@idk.co.jp)

**USA**

IDK America Inc.  
72 Grays Bridge Road Suite 1-C, Brookfield, CT 06804  
TEL: +1-203-204-2445  
URL: <http://www.idkav.com>

Email: [sales@idkav.com](mailto:sales@idkav.com)

**Europe**

IDK Europe GmbH  
Lise-Meitner-Str. 6, D-40878 Ratingen  
TEL: +49-2102-578-301-0  
URL: <http://www.idkav.com>

Email: [info@idkav.eu](mailto:info@idkav.eu)



**Product information  
Support**

Arvanics Corporation  
7-9-1 Chuo, Yamato-shi, Kanagawa-pref.  
242-0021 JAPAN  
TEL: +81-46-259-6920 FAX: +81-46-259-6930  
URL: <http://www.arvanics.com>

Email: [info@arvanics.com](mailto:info@arvanics.com)

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