

## Multi-unit Rackmount Chassis RM-SV Series

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<User Guide>  
Ver.2.1.0

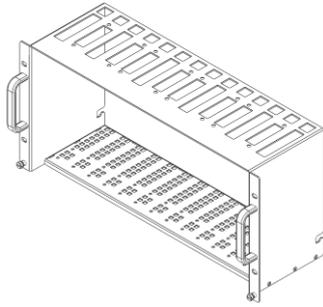
- Thank you for choosing our product.
- To ensure the best performance of this product, please read this guide fully and carefully before using it and keep this manual together with the product for future reference as needed.

### Before reading this manual

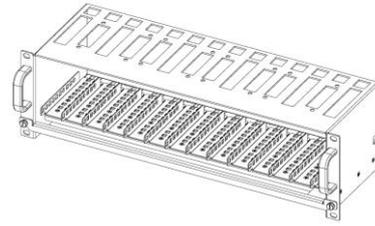
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## Included items

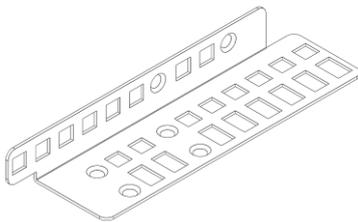
Verify that all items listed below are included in the package.  
If any items are missing or damaged, please contact IDK.



Rack (RM-SV5)



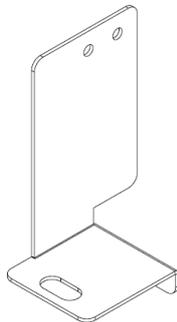
Rack (RM-SV3)



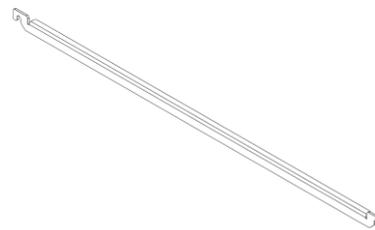
Partition bracket (Already mounted)



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> |

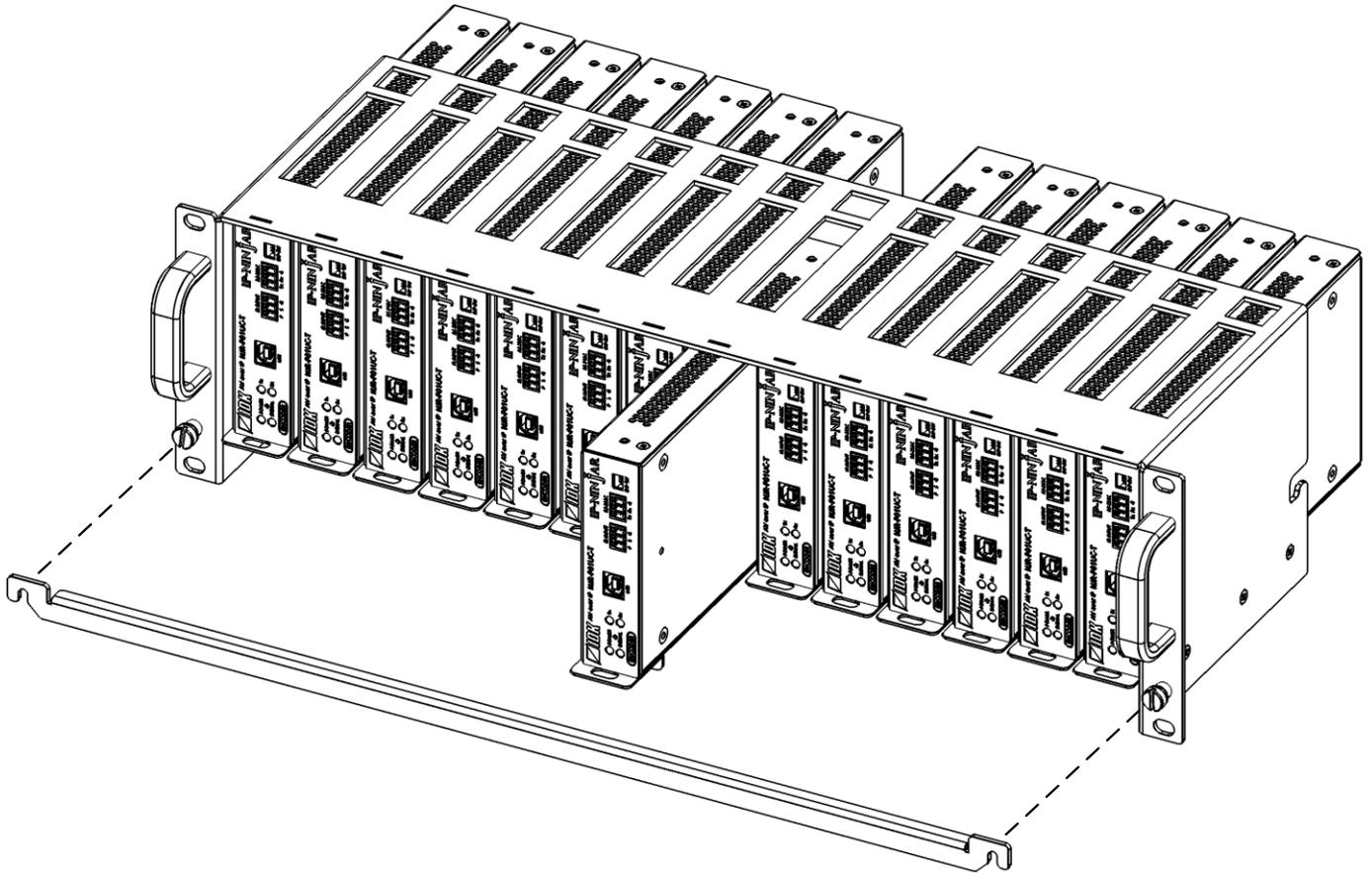
<sup>\*1</sup> Two (2) extra screws are included.

<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

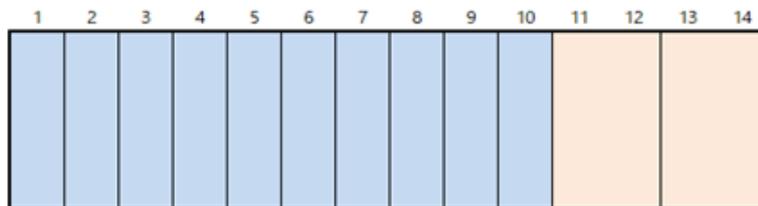
Up to 14 units can be mounted depending on the thickness of the units.

[Table 1] Unit size and required number of slots

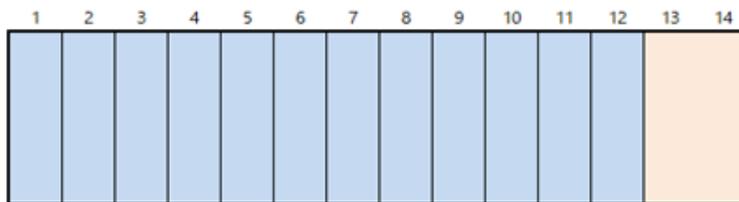
| Rack   | Unit size                                  | Required slot | Group |
|--------|--|---------------|-------|
| RM-SV5 | 8.3 (W) × 1.2 (H)" (210 (W) × 30 (H) mm)   | 1             | A     |
|        | 8.3 (W) × 1.7 (H)" (210 (W) × 42 (H) mm)   | 2             | B     |
|        | 8.3 (W) × 1.7 (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

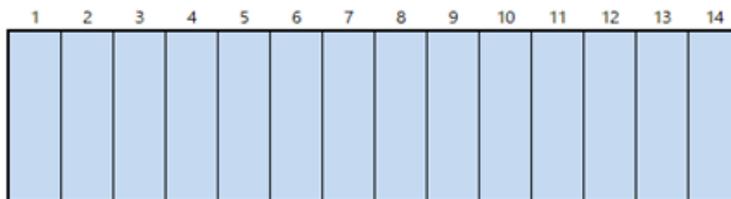
- 10 Group A units + 2 Group B units



- 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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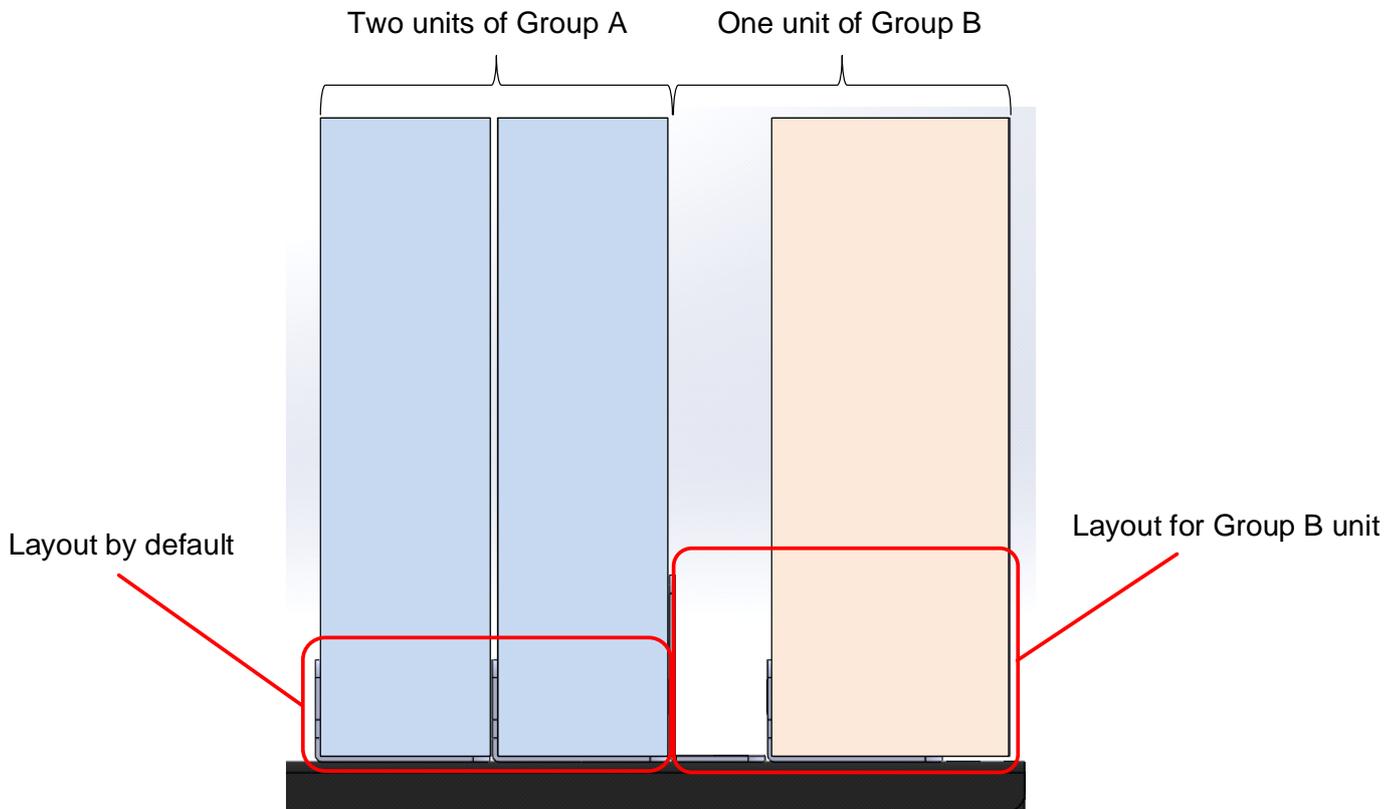
Please observe the following precautions.

- 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.13)**” for details.
- Keep enough space for ventilation to avoid rise in rack temperature.

## Changing layout

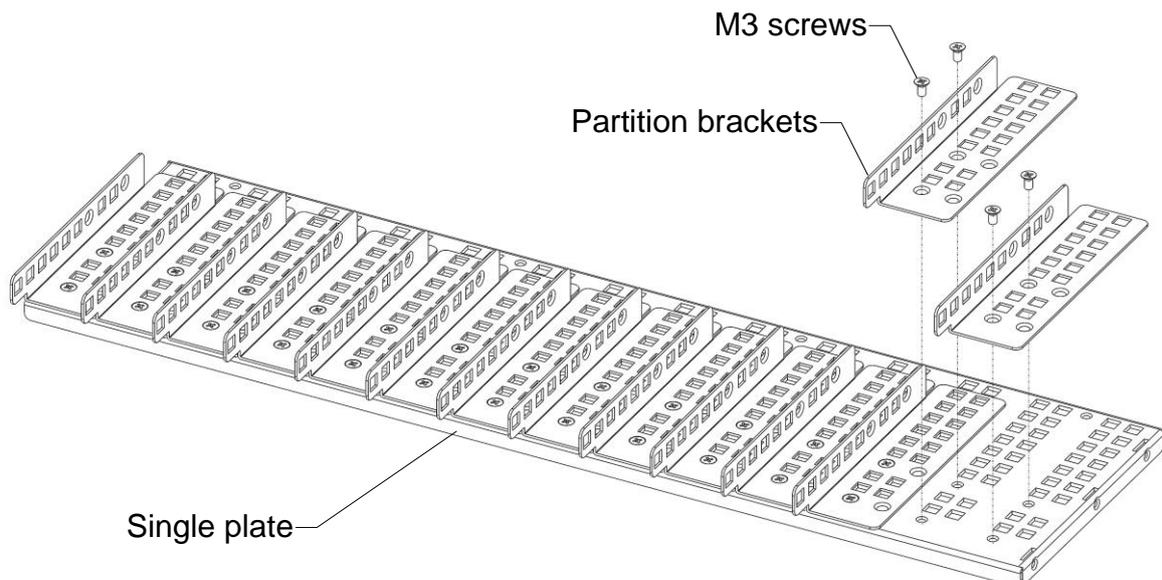
**Memo:** A unit of Group A needs one (1) slot for each.  
A unit of Group B needs two (2) slots for each.

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.



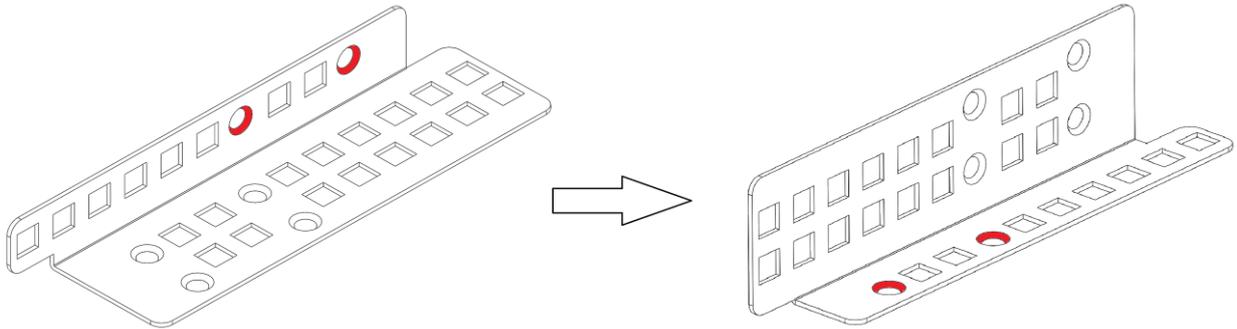
[Fig. 5] Rack layout

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



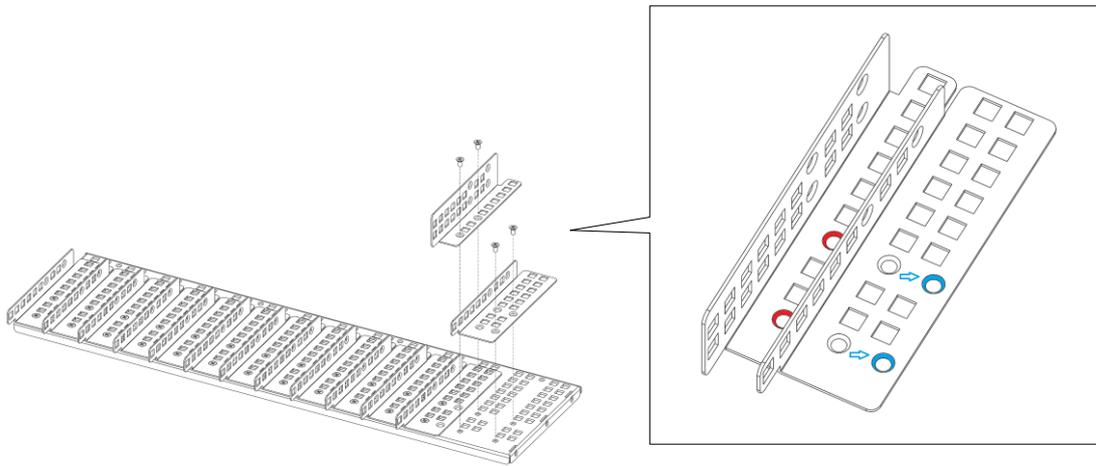
[Fig. 6] Removing partition brackets

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



**[Fig. 7] Changing orientation**

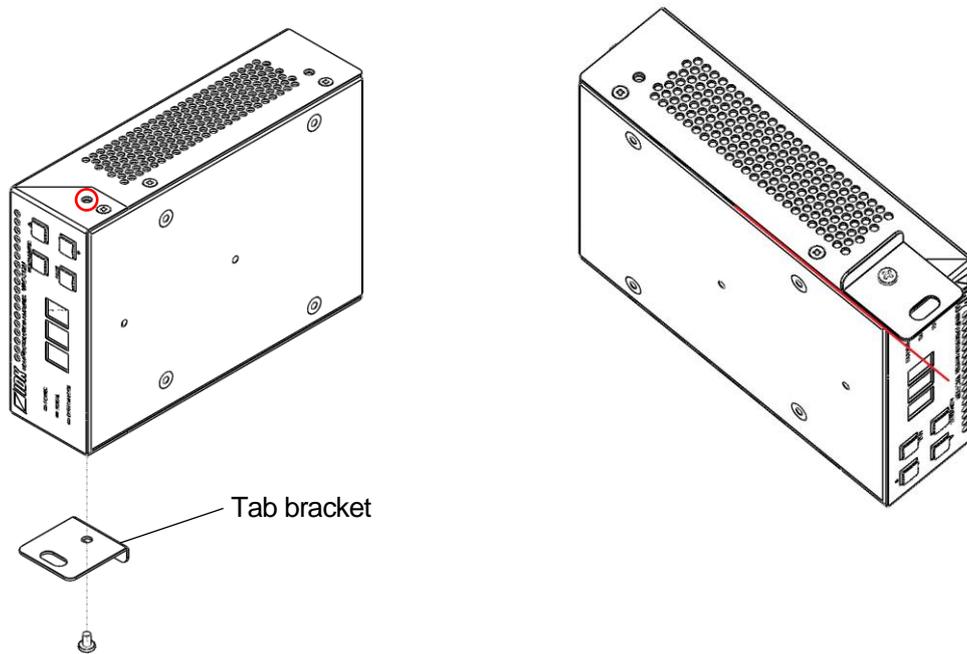
3. Put the partition brackets back to the single plate using the removed M3 screws as follows.



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

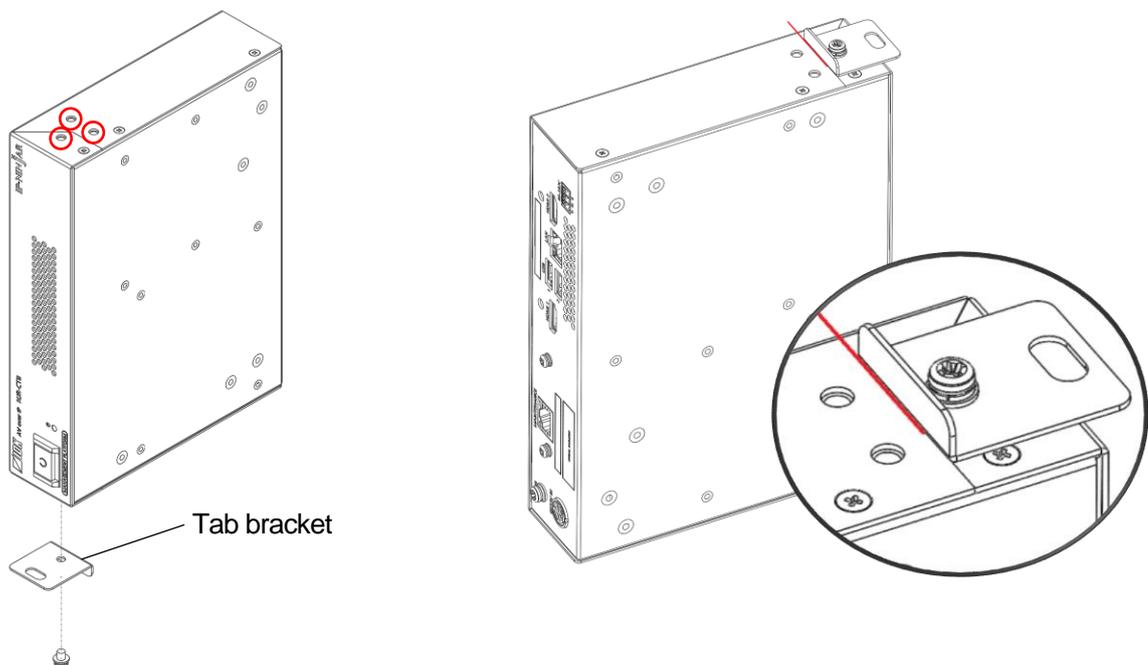
## Attaching tab bracket to unit

- For unit having one screw hole as shown below  
Attach a tab bracket to the unit using a supplied M3 screw.



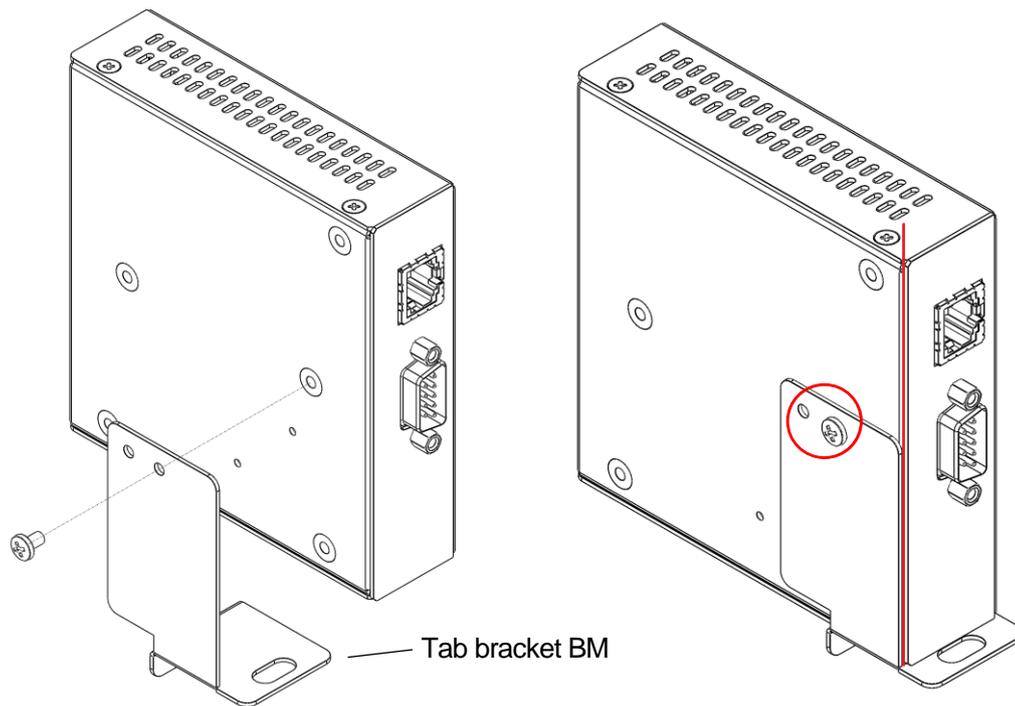
[Fig. 9] Attaching tab bracket

- 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

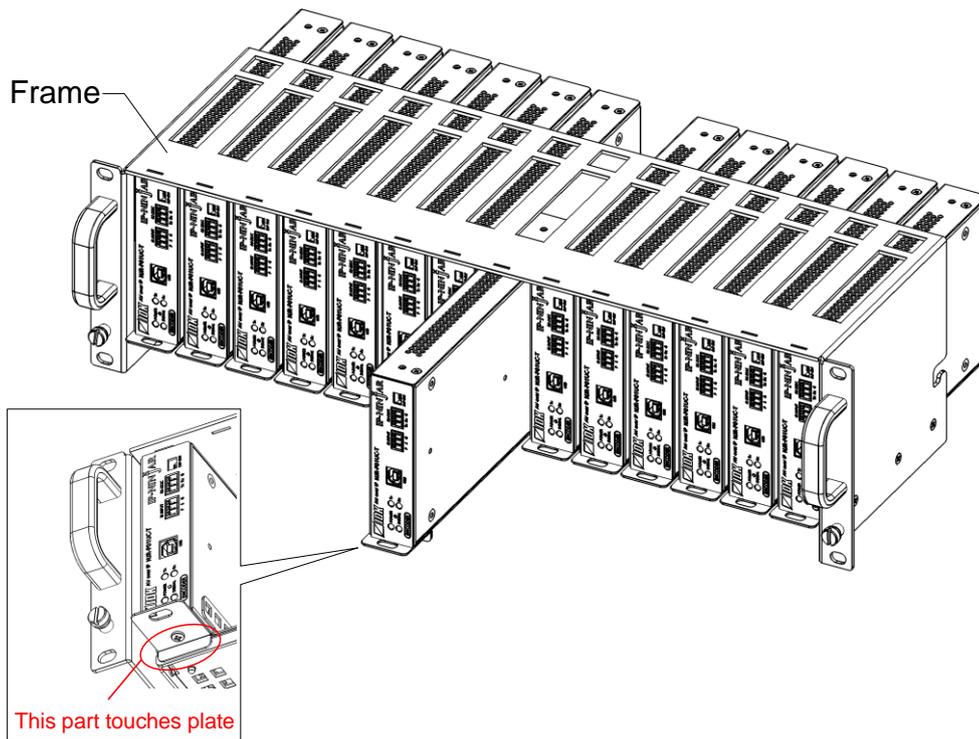
■ For unit having no screw hole on the side panels as shown below  
Attach a tab bracket BM to the unit using a supplied M3 screw.



[Fig. 11] Attaching tab bracket BM

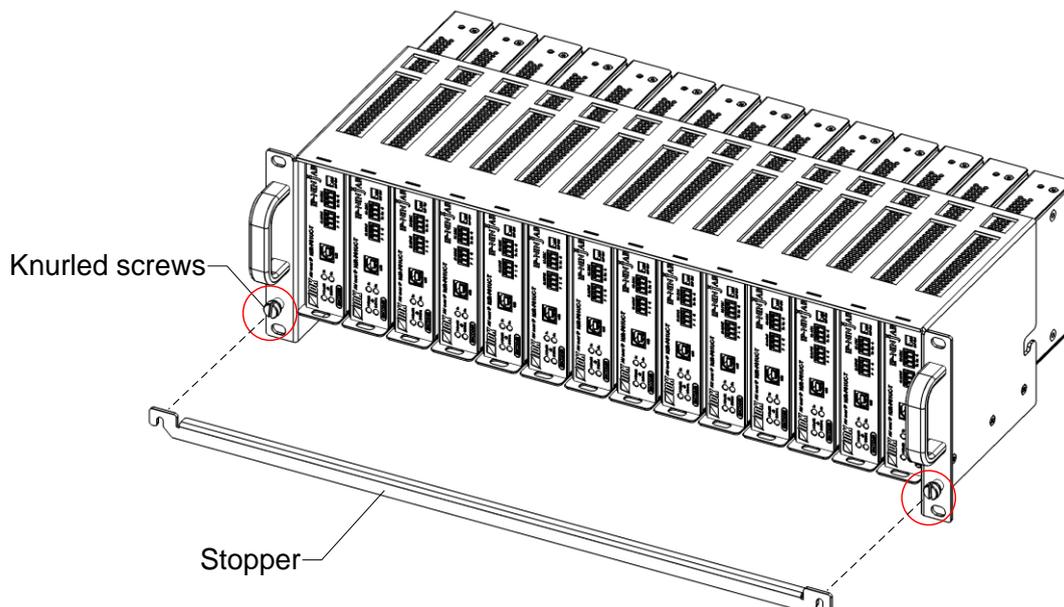
## Mounting unit to RM-SV and Installing RM-SV to rack shelf

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

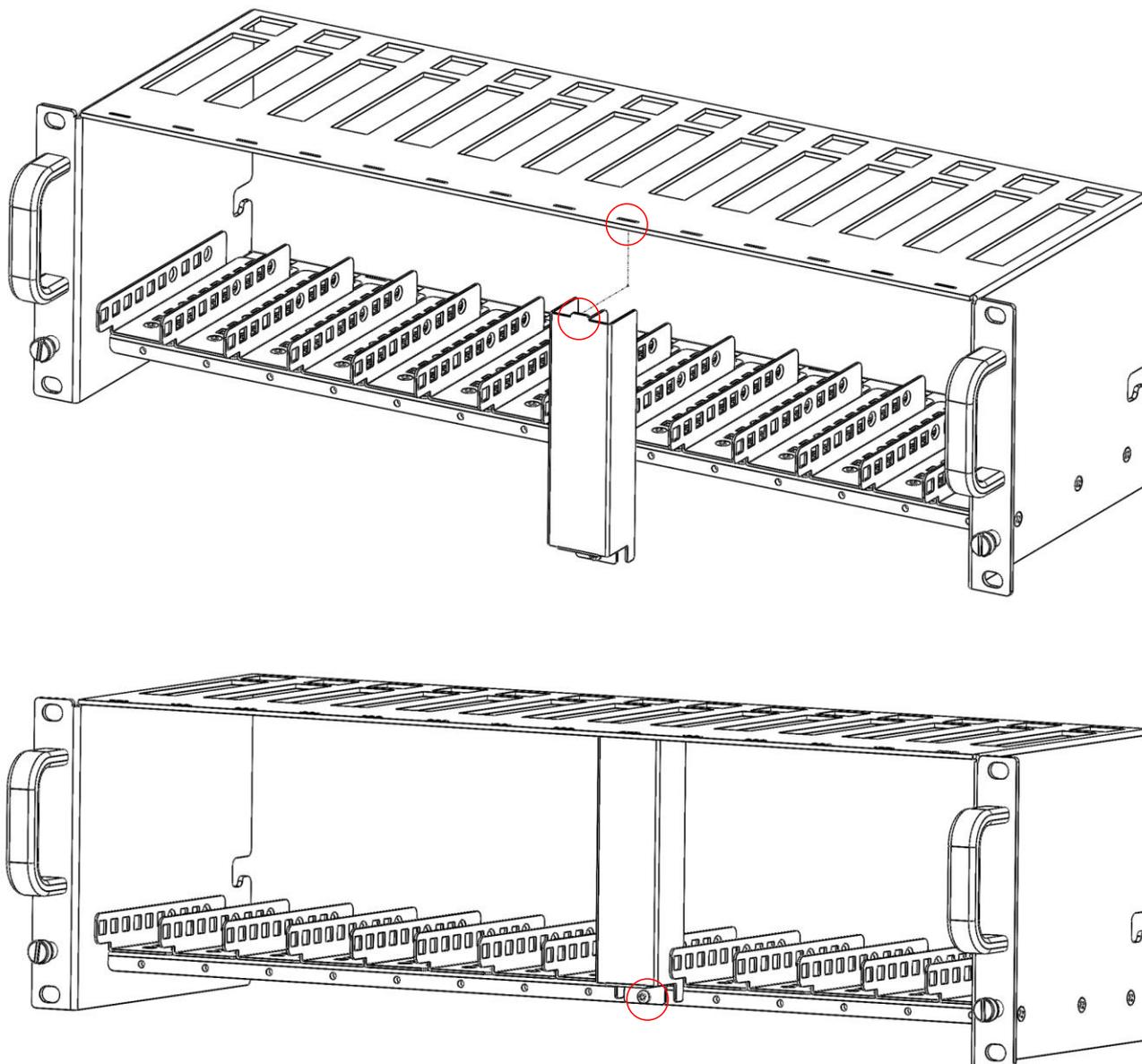
## Optional hardware for RM-SV series

### ■ RM-SBP3 (For RM-SV3)

The RM-SBP3 covers unused slots.

#### **Note**

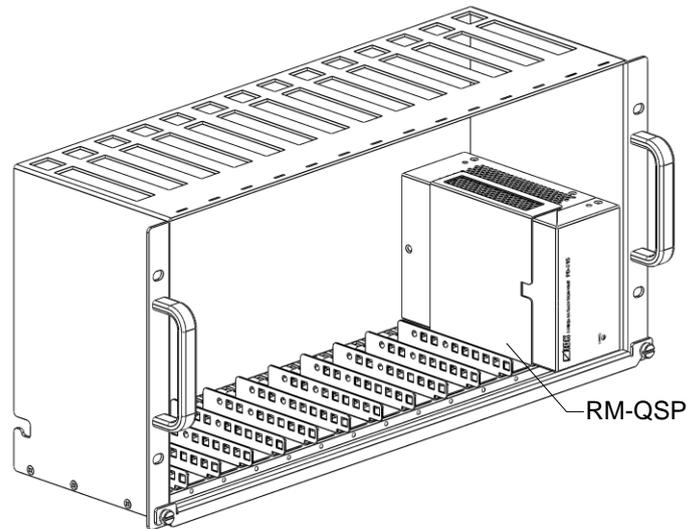
RM-SBP3 is only for RM-SV3. This cannot be used for RM-SV5.



[Fig. 14] Attaching blank panel

**■ RM-QSP (For RM-SV5)**

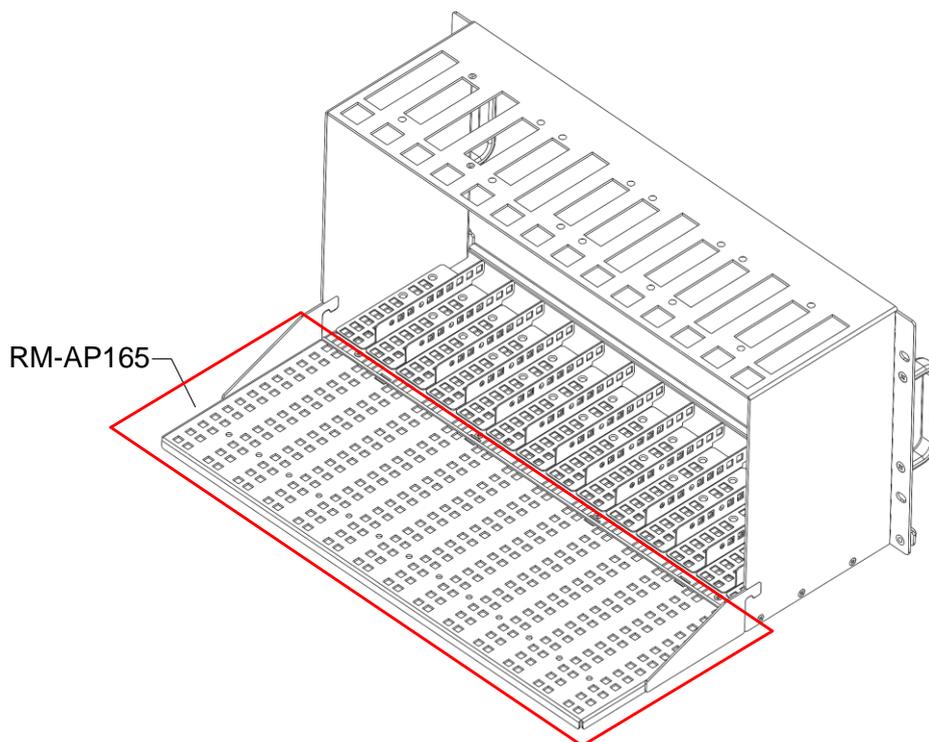
The RM-QSP is a partition for mounting EIA-quarter products to RM-SV5.



[Fig. 15] RM-QSP

**■ RM-AP165**

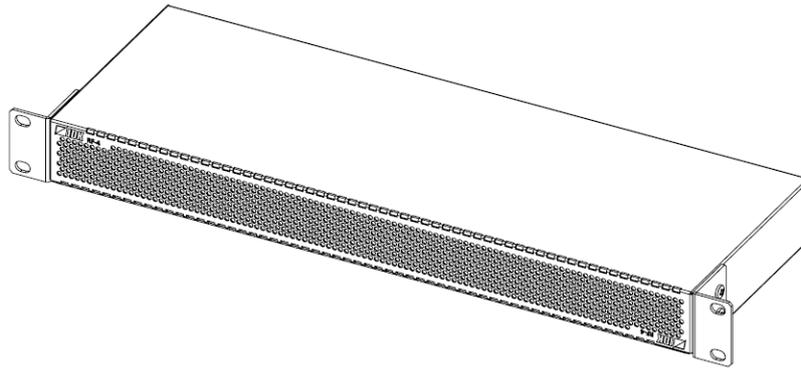
The RM-AP165 provides extra space in the rear side for placing objects. Use zip-ties or the like to secure objects through 6×6 mm square holes.



[Fig. 16] 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. 17] 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) 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 68°F (20°C) | Operates at 86°F (30°C) | Operates at 104°F (40°C) |
| 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 50°F (10°C) | Operates at 68°F (20°C) | Operates at 86°F (30°C) |
| 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)<br>(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)<br>(Excluding connectors and the like) | 5.7 lbs. (2.6 kg) |

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User Guide of RM-SV Series  
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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: [www.idkav.com](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: [www.idkav.com](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: [www.idkav.com](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: [www.arvanics.com](http://www.arvanics.com)

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

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