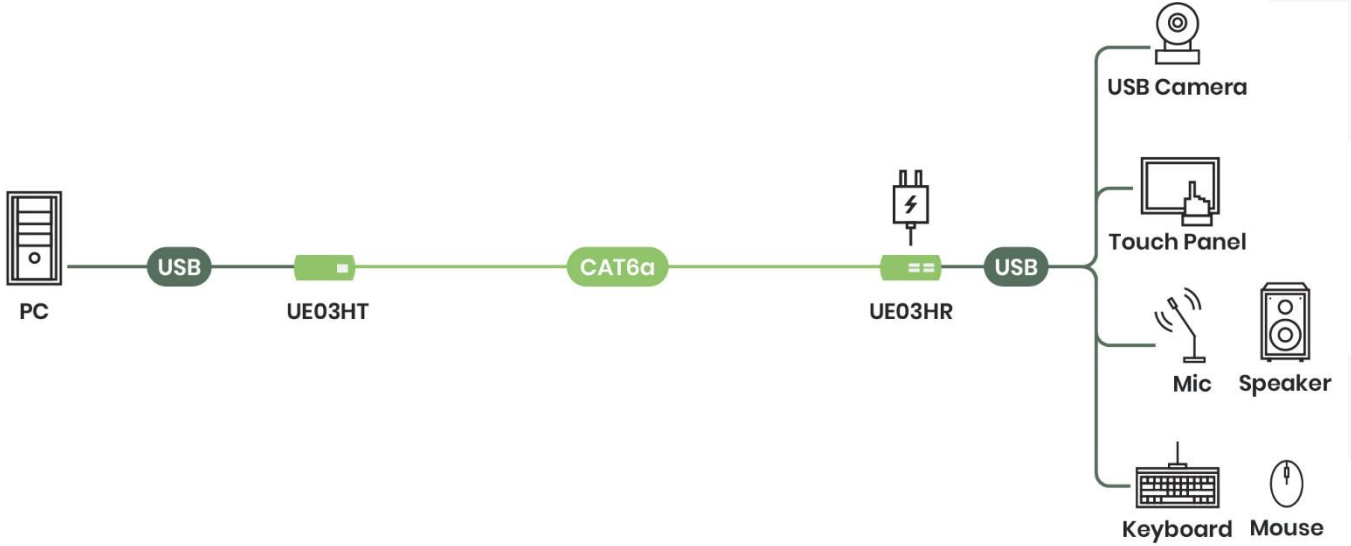# USB3.2 Cat6a Extender

Introduction

UE03H is a USB3.2 Gen1 extender designed to carry USB3 signal using Cat6a/7 Ethernet cable. It is totally backward compatible with USB2 & USB1 devices. It is perfect for multiple applications including devices such as USB cameras, touch panels, and any other USB3, USB2 or USB1 devices.
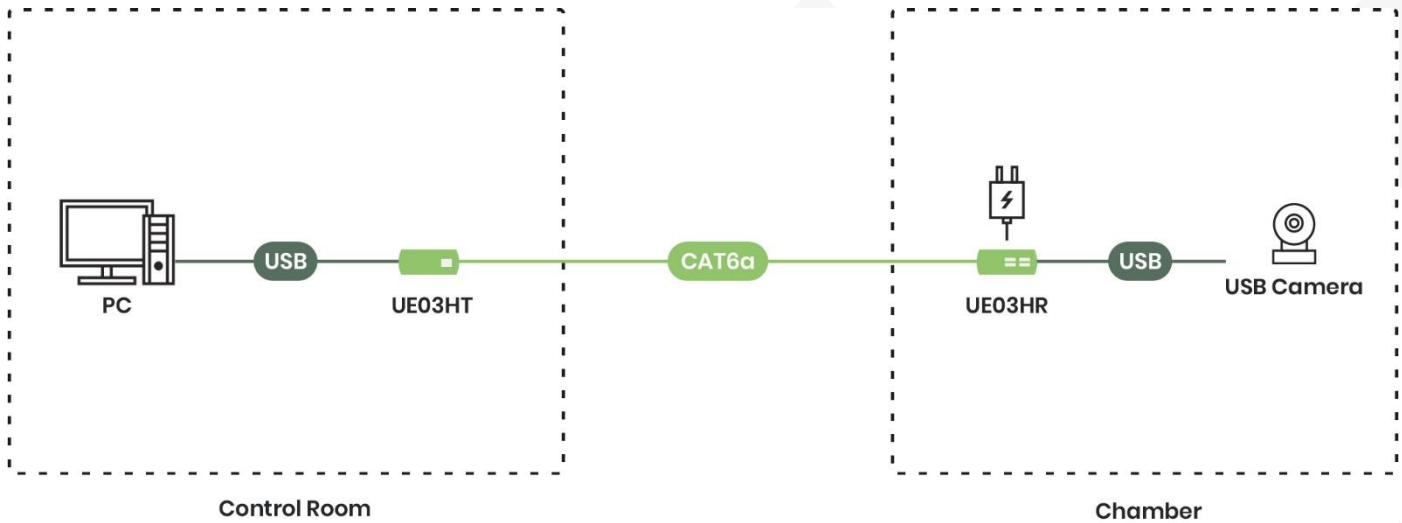
Features

- USB3.2 Gen1 up to 5Gbps (backward compatible with USB2 & USB1)
- Transmission distance up to 100m with Cat6a cable
- RS232 optional extension
- Compatible with USB2 and USB1 devices
- USB Type-C port on both sides
- Plug & Play
- Small & Compact, easy to install
- Low power consumption
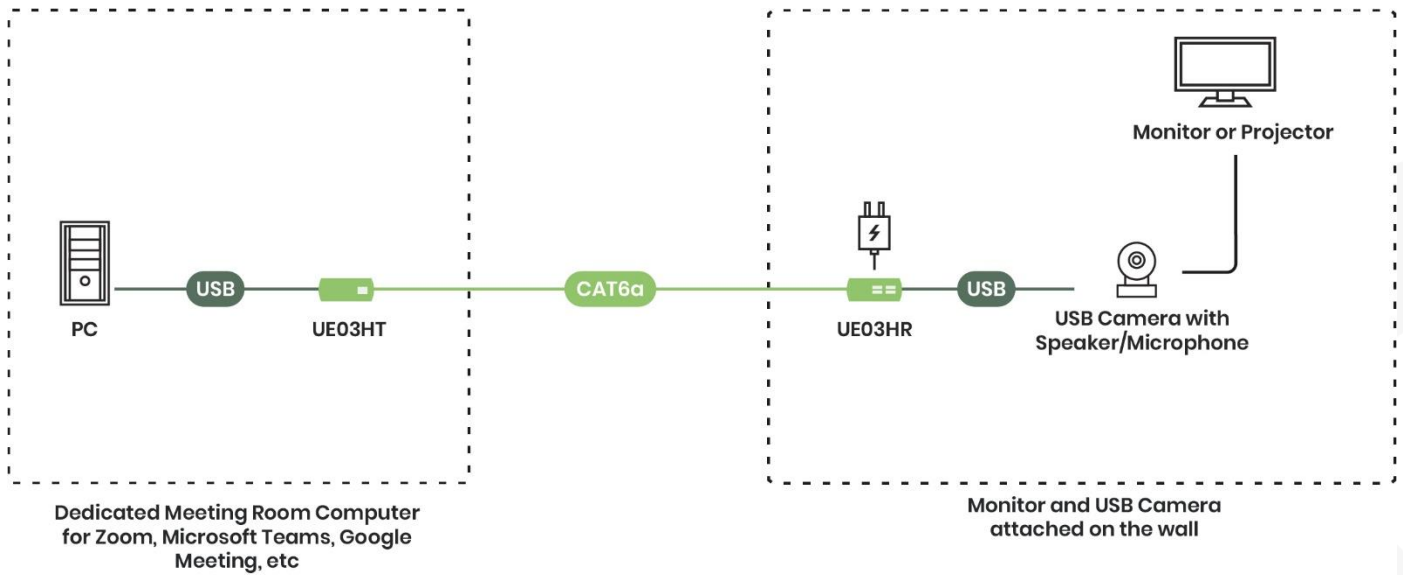- Multiple mounting options (Wall/Rack & Din Rail)

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Application Diagram

USB3 Extension for General Purposes

USB3 Extension for Security/Monitoring

USB3 Extension for Video Conferencing

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Dedicated Meeting Room Computer
for Zoom, Microsoft Teams, Google
Meeting, etc

Monitor and USB Camera
attached on the wall

USB3 Extension for Video Capture

PC for Video Capture (UVC)

Video Source connected
with an HDMI to USB
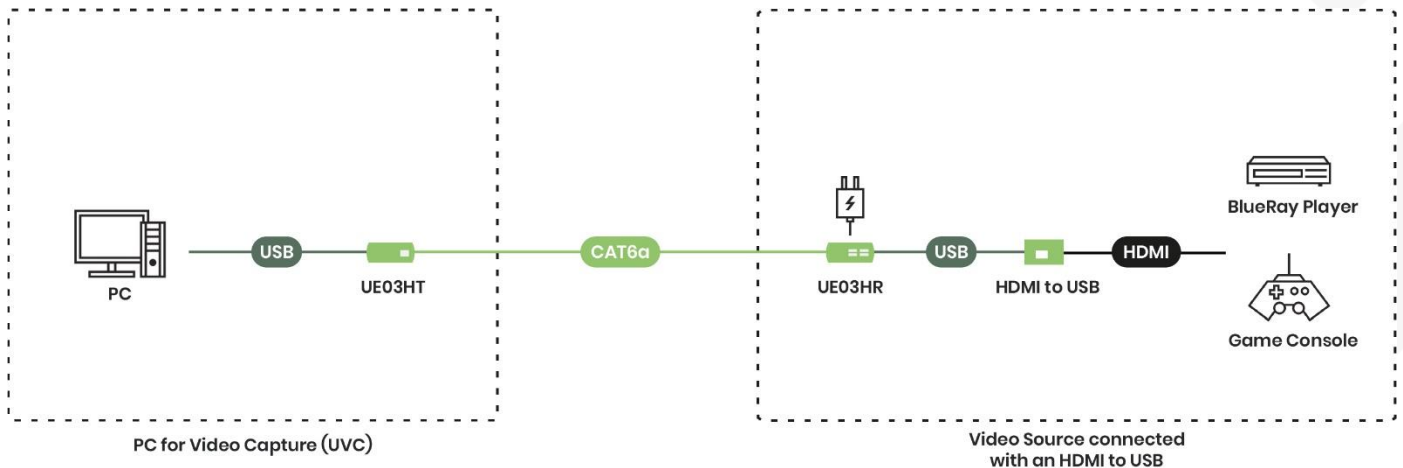
USB3 Extension using DisplayLink

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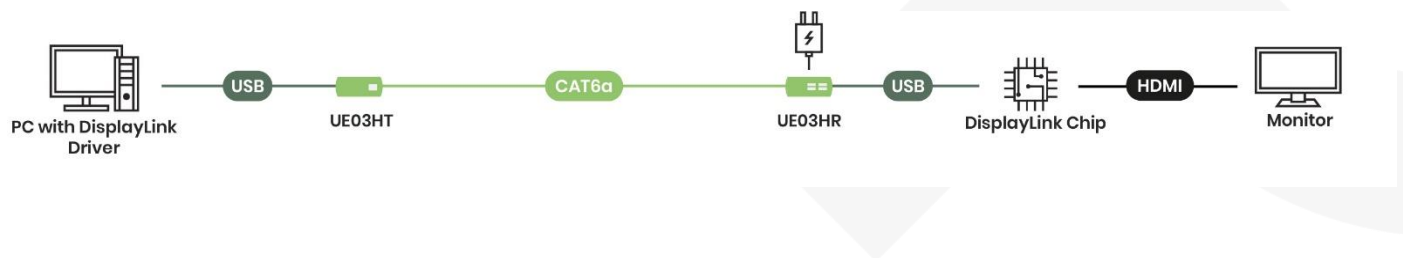
I/O Interface
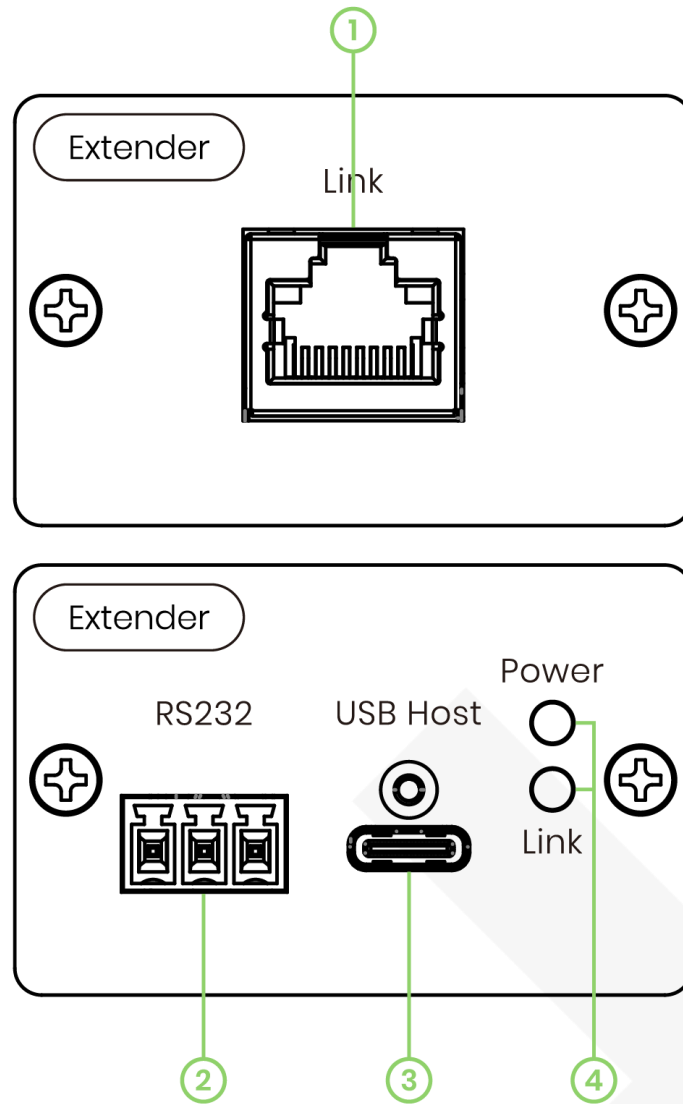
UE03HT

	Interface	Description
1	RJ45	To connect to UE03HR
2	Terminal Block	To connect to an RS232 device
3	USB Type-C	To connect an USB Host
4	LED	To indicate the status of Power and Link

4
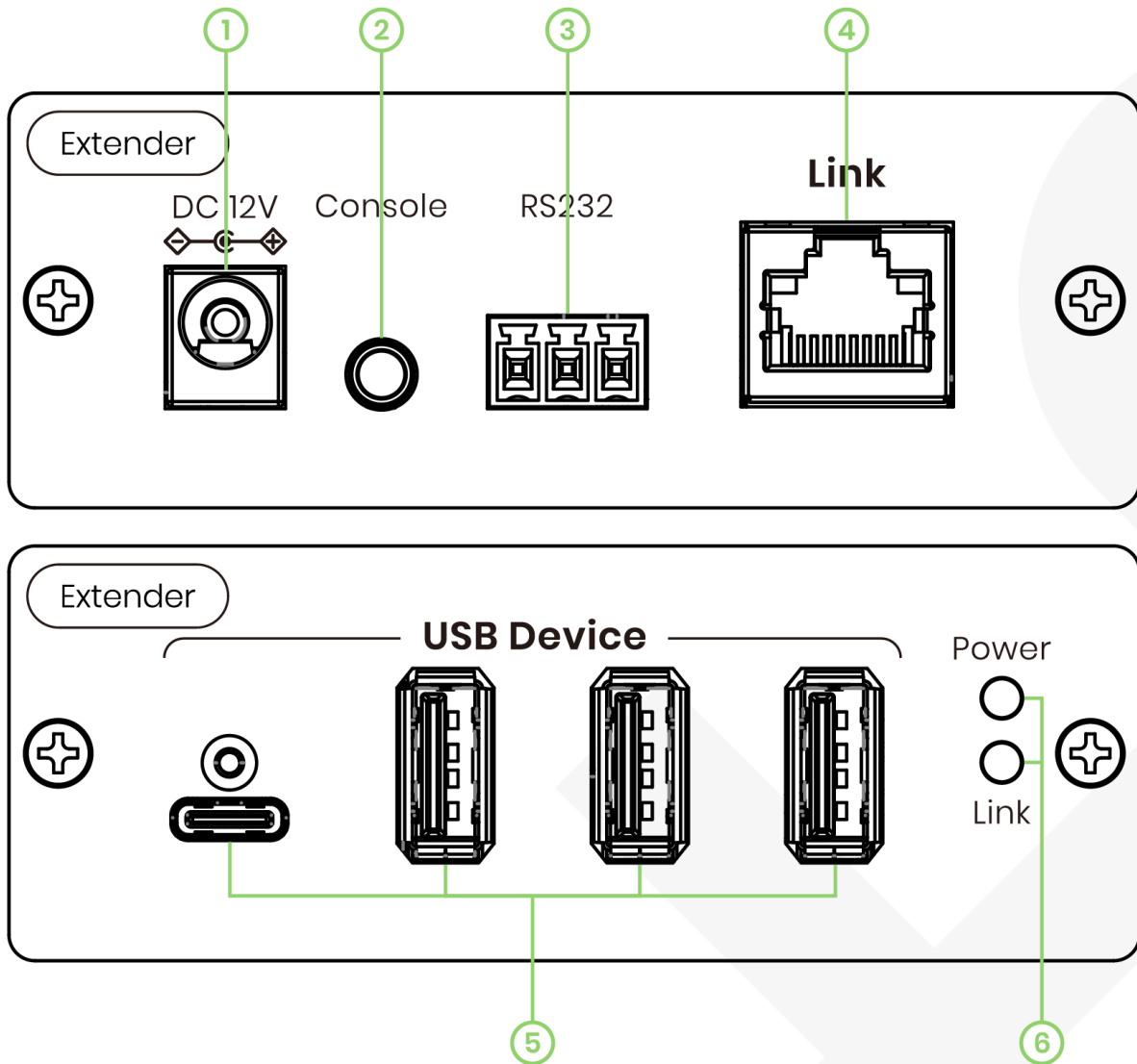
UE03HR

	Interface	Description
1	DC Jack	To connect to DC 12V
2	3.5mm Phone Jack	To update FW (need 3.5mm Phone Jack to RS232)
3	Terminal Block	To connect to an RS232 device
4	RJ45	To connect to UE03HT
5	USB Type-C/Type-A	To connect USB devices
6	LED	To indicate the status of Power and Link

5

LED Indication

Interface	LED Status	Description
Power	On	Power On
	Off	Power Off
Link	On	UE03HT & UE03HR linked
	Off	No connection with UE03HT/UE03HR

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Technical Specification

UE03H	UE03HT	UE03HR
Compliance		
Standard	USB3.2 Gen1 USB2.0 USB1.1	
Max. Transmission Distance	100M over CAT6a/7	
Data Rate	USB3 up to 5Gbps bidirectional	
Ports & Interfaces		
USB Data	1 x USB Type-C	3 x USB Type-A 1 x USB Type-C
Transmission Medium	1 x RJ45	1 x RJ45
RS232	1 x 3-Pin Terminal Block	1 x 3-Pin Terminal Block
Console		1 x 3.5mm Phone Jack
Power		
Power Supply	5V 0.5A	12V 1.5A
Power Consumption	2.35W	2.35W
Ambient Temperature		
Operation	0 to 55℃	
Storage	-40 to 80℃	
Operating Altitude	2000m	
Humidity	Up to 95%	
Physical Characteristics		
Dimension	50 x 93 x 32mm	87 x 123 x 32mm

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Caution

- This product is designed for indoor applications. If it is desired for outdoor use, please install additional equipment for waterproof protection and surge protectors to prevent damages caused by lighting.
- Do not put anything on the power and system cables, place them where they cannot be stepped on. Please be sure there is nothing resting on any cables.
- Avoid using this product close to water places, or near high temperature devices such as radiators, stoves, etc.
- Shut down the power supply and unplugged all equipment immediately if:
    o water or any kind of liquid has been spilled into the product;
    o the product has been damaged by external force;
    o the product does not operate normally as this manual indicates;
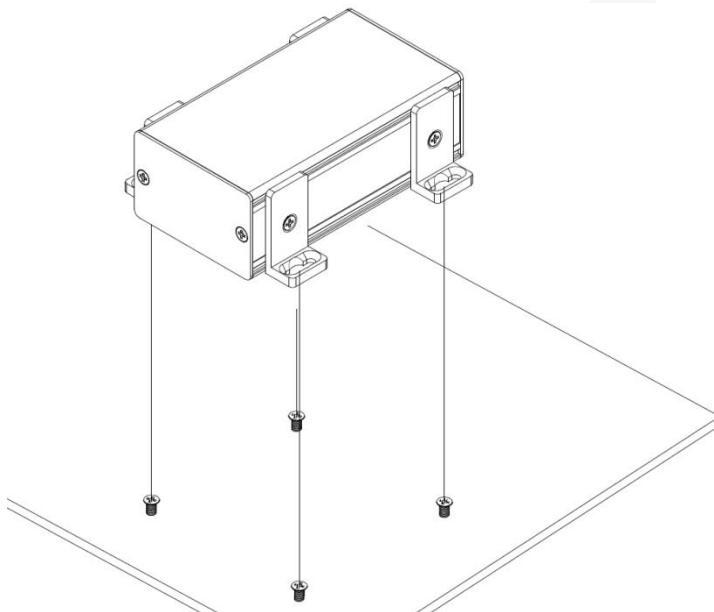   o Please contact us for further repair if above conditions happen.

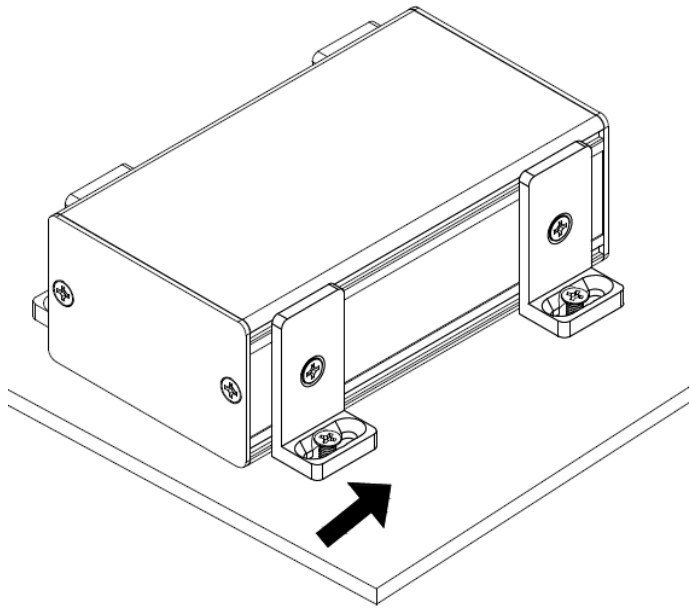# Installation

Installed on a Platform

Step 1 Use machine screws to fix angle brackets on both sides of your product
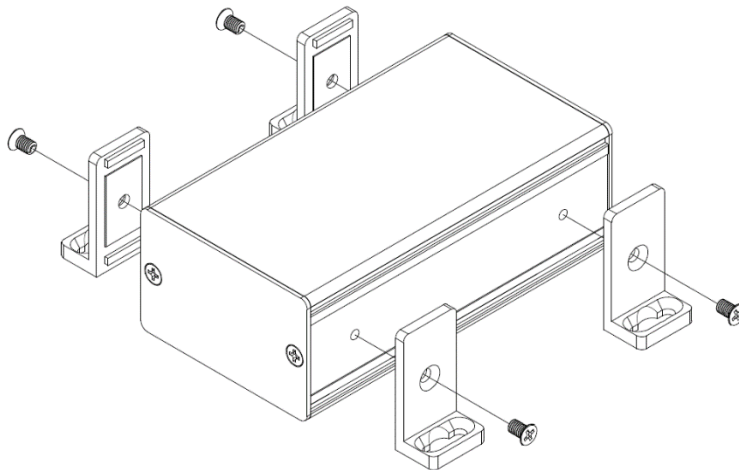
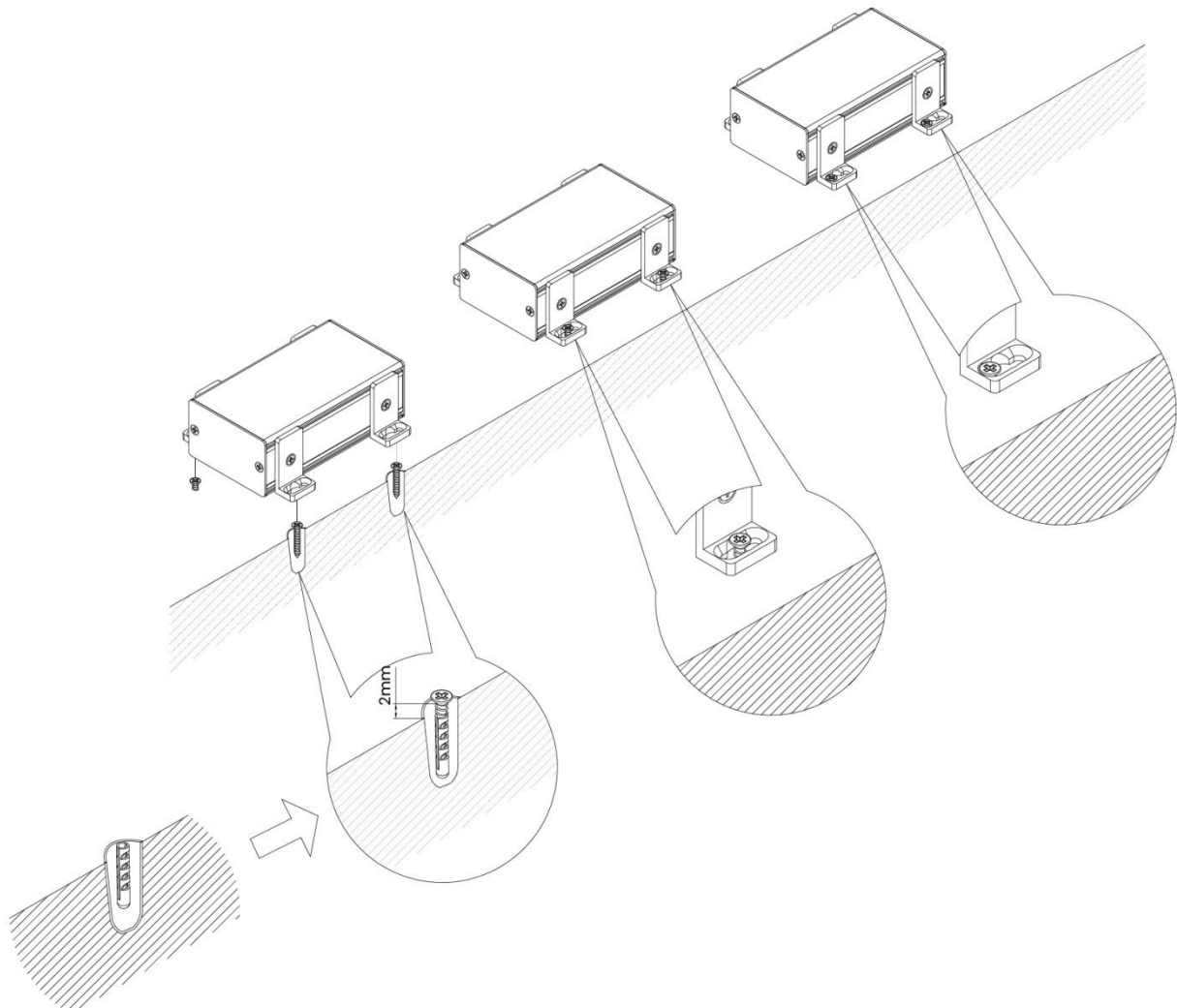**Step 2** Use self-drilling screws to fix the product on a platform

**Step 3** Move the product to get fixed and then lock the screws

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Installed on Wall

Step 1 Same way as "**Installed on a Platform**", but need to put screw plugs into the pilot hole before inserting the screws (leave 2mm space from the platform)
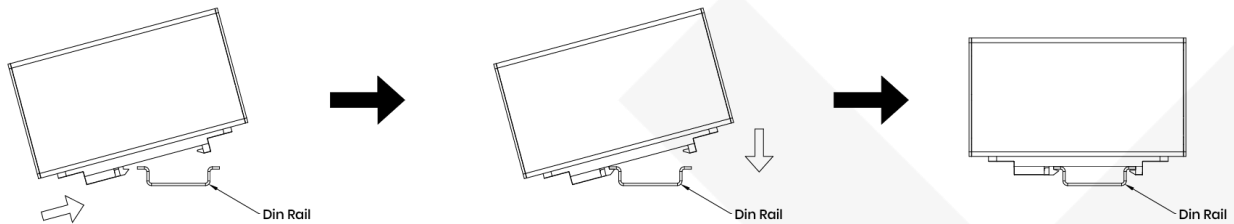

2mm

Installed on a DIN-rail

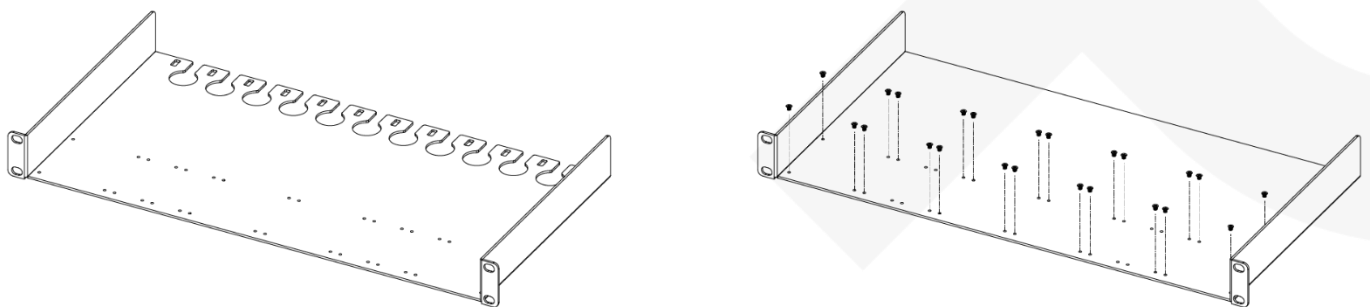**Step 1** Use machine screws to fix a DIN-rail mounting plat on the side of your product
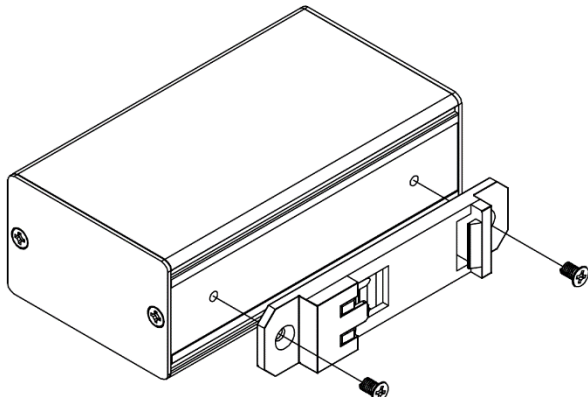
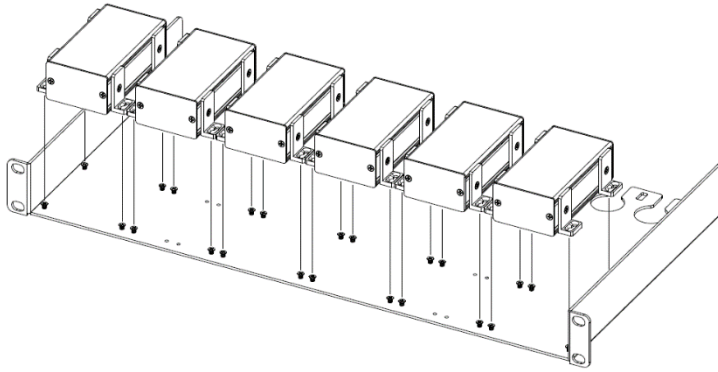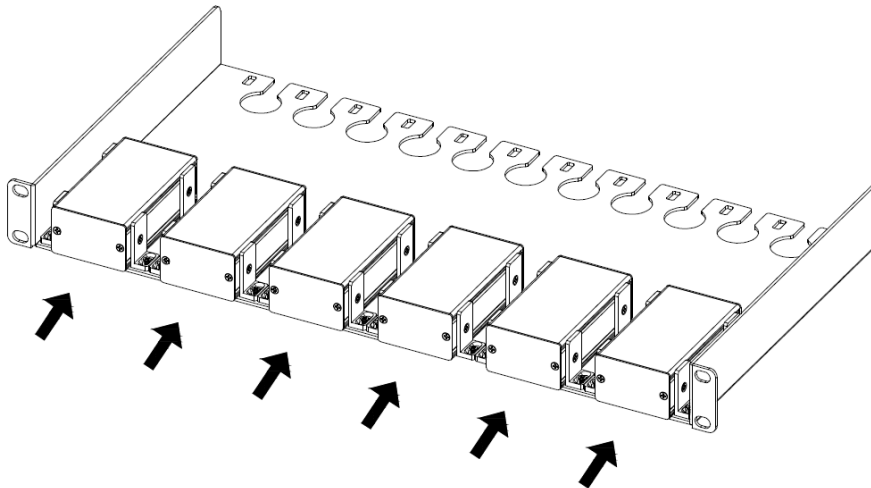**Step 2** Install your product on a DIN-rail as following instruction

Din Rail

Din Rail

Din Rail

Installed on a Rack

Step 1 Lock machine screws in the rack

Step 2 Put your products on the rack

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Step 3 Push the products to the other side of the rack

Step 4 Install the rack in a cabinet

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Production

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