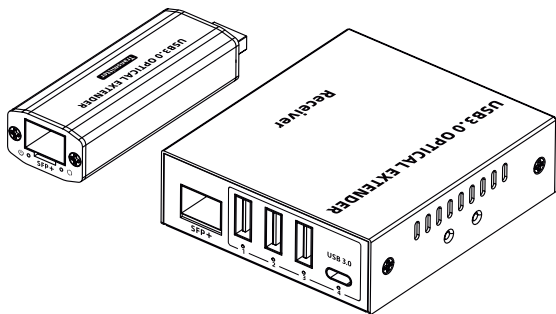


USB3.0 Optical Extender



• Important Safety Instructions:

1. To prevent electric shock, please ensure that all devices are properly grounded.
2. Do not place this device near or over a radiator or heat register, or where it is exposed to direct sunlight.
3. Do not place the device on an uneven or unstable surface, the device may fall resulting in a malfunction.
4. Do not expose this device to rain or place it near water. Any liquid that goes into the device may cause a failure, fire, or electric shock.
5. If a third-party power supply is used, please ensure that the power supply specifications meet the product requirements.

• Introduction

This 4-Ports super-speed USB3.0 optical extender kit, extending the USB 3.0 signals up to 150 meters through LC single-mode optical fiber. Supports 1-to-1 connection and supports 4 channels of USB 3.0 devices input, such as printer, camera, scanner, USB flash drive, keyboard, mouse, touchscreen, etc. Widely used in security monitoring, gaming, industrial control, professional audio-visual, smart medical and other fields.

• Features

1. The Transmitter supports USB 3.0 Super-Speed, compatible with USB 3.2 Gen1, USB 3.1 Gen1; The Receiver supports USB 3.0 Super-Speed, USB 2.0 High-Speed, compatible with USB 1.1 Full-Speed.
2. Supports four USB 3.0 input and one USB 3.0 outputs.

3. Transmission distance of USB 3.0 signals up to 150 meters through LC single-mode optical fiber.
4. Supports USB hub connection.
5. The transmitter is powered by the source device directly, no additional power supply is required.
6. Supports hot-plugging of USB devices.
7. Lightning protection, surge protection, ESD protection.
8. Supports stable 24/7 operation.

• Package Contents



Transmitter x1



Receiver x1



DC 12V/2A x1



User manual x1



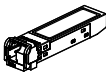
Mounting ear x2



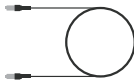
Screw x5



Grounding
Screw x1

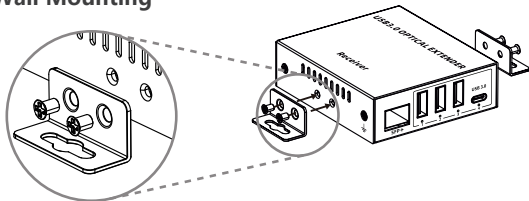


Single-mode optical
fiber SFP optical
module x2



10 meters single-mode
optical fiber x1

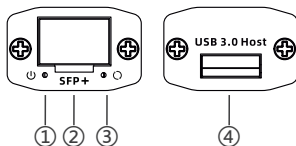
• Wall Mounting



Choose the wall mounting position and attach the mounting ears to the unit according to the diagram.

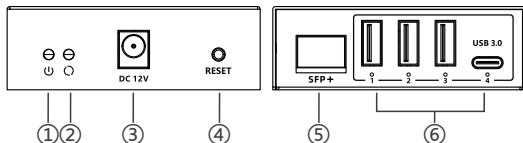
• Panel Description

1. Transmitter (Local Side/TX)



①	Power indicator	1) Steady on: Power on 2) Light off: Power off
②	SFP+ Signal input port	Insert SFP+ 10G optical fiber module
③	Status indicator	1) Light off: Transmitter and the receiver have not established a connection 2) Steady on: Optical fiber communication between transmitter and receiver successful
④	USB Host 3.0 port	Connect USB 3.0 port of computer host, compatible with USB 3.2 Gen1, USB 3.1 Gen1

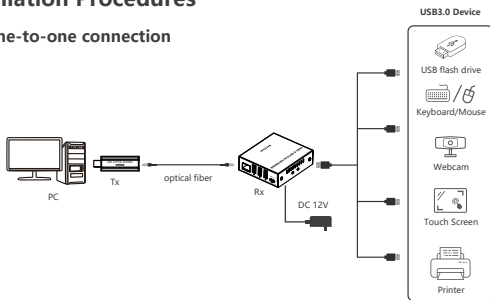
2. Receiver (Remote Side/RX)



①	Power indicator	1) Steady on: Power on 2) Light off: Power off
②	Status indicator	1) Light off: Transmitter and the receiver have not established a connection 2) Steady on: Optical fiber communication between transmitter and receiver successful
③	Power input	Connect with DC 12V/2A power adapter
④	Reset	Press to restart the device
⑤	SFP+ Signal output interface	Insert SFP+ 10G optical fiber module
⑥	USB 3.0 port	Connect with USB 3.0 device, such as printer, camera, scanner, U disk, keyboard/mouse, touch screen, etc. *The Type-C port on the receiver does not support double-sided plug, if your receiving device does not respond after connecting to the receiver, please plug the cable into the receiver with a different side

• Installation Procedures

1.1 One-to-one connection



1.2 Connection Instructions

1. The transmitter connects to the computer host, the receiver connects to USB devices, such as: printer, camera, scanner, U disk, keyboard/mouse, touch screen, etc.;
2. For one to one connection, connect the transmitter and receiver SFP+ fiber optic module input/output interface via LC fiber optic cable.
3. TX gets power from the device , RX connects to the power supply, then the product starts to work.
4. This USB 3.0 Extender (Model RX) provides 4 ports and is backward compatible with USB 2.0/1.1/1.0 devices. For optimal performance, it is recommended to use no more than 2 USB 3.0 devices simultaneously for data read/write operations.
 - When 2 USB 3.0 devices are connected and reading/writing, the transmission distance can reach up to 150 meters.
 - When 1 USB 3.0 device is connected and reading/writing, the transmission distance is ≥ 150 meters.

Note:

- 1) Keyboard and mouse can be used simultaneously under all the above scenarios.
- 2) The actual transmission distance may vary due to connected device performance, cable quality, and environmental factors.
- 3) Ensure your computer /laptop is USB3.0 port when connecting the TX.
- 4) When you use Mac Os computer/ laptop, normally it will work well when RX connected devices are USB3.0. However, the USB2.0 or 1.1 devices (like keyboard, mouse, and touch screen) will not be recognized or very slowly.

• FAQ

Q: USB device is not recognized when connected?

A: 1) Check whether USB port of the transmitter is connected to the USB 3.0 interface properly.

2) Power the transmitter or receiver again.

Q: The receiver is unstable when connected to an external hard drive?

A: When connecting high-power USB devices, it is necessary to offer additional power to external devices.

• Specification

Items	Parameters
Transmitter USB	USB 3.0, compatible with USB 3.2 Gen1, USB 3.1 Gen1 (Only connect to USB 3.0 interface)
Receiver USB	USB 3.0, compatible with USB 3.2 Gen1, USB 3.1 Gen1, USB 2.0, USB 1.1
Maximum transfer rate	5Gbps
Transmission Distance	Single-mode optical fiber 150 Meters (Under ideal conditions)
USB Device	Support printer, camera, scanner, USB flash drive, keyboard, mouse, touch screen... etc
USB Hot-Plug	Support

USB Port	3 USB-A 3.0 input and 1 Type C 3.0 input 1 USB-A 3.0 output
Physical Properties	
Housing	Tx: Aluminium; Rx: Iron
Dimensions	Tx: 84.5(L) x 27.5(W) x 17(H) mm; Rx: 85.0(L) x 76.0(W) x 25.0(H) mm
Weight	Tx:37g Rx:175g
Color	Black
Power	
Power Supply	TX: powered by the source device RX: DC 12V/2A
Power Consumption	TX $\leq$ 2W RX $\leq$ 3W
Operating Environment	
Working Temperature	-20 ~ 60°C
Storage Temperature	-30 ~ 70°C
Humidity	0 ~ 90% (No condensation)
Protection	ESD protection 1a Contact discharge level 2 ($\pm$ 4KV) 1b Air discharge level 3 ($\pm$ 8KV) Implementation of the standard: IEC61000-4-2
	Lightning protection, Surge protection
Application	
Industrial Control, Professional AV, Security and Monitoring, Gaming, etc.	

Disclaimer

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