

User Manual



FOE.USB3 USB3.1/2.0/1.1 Fiber Extender



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Version: FOE.USB3_2022V1.0

Product Introduction

The USB optical fiber extender uses optical fiber conversion technology to realize the optical fiber transmission of USB3.1/2.0/1.1 signals. When used for long-distance transmission of USB3.1 signals, the data rate can up to 5Gbps, and the non-real-time transmission distance can be up to 300m and the real-time transmission distance can up to 100m by using single-mode or multi-mode fiber. When used for long-distance transmission of USB2.0/1.1, the non-real-time transmission distance can up to 10km and the real-time transmission can up to 6km by using single-mode fiber, or the transmission distance can up to 500m by using multi-mode fiber.

The extender adopts metal enclosure and has four mounting holes for easy installation. It has an integrated USB 3.1 hub with four ports and supports Plug-and-Play (PnP), no need to install driver is required.

This product adopts advanced optical fiber transmission technology to ensure good anti-electromagnetic interference ability.

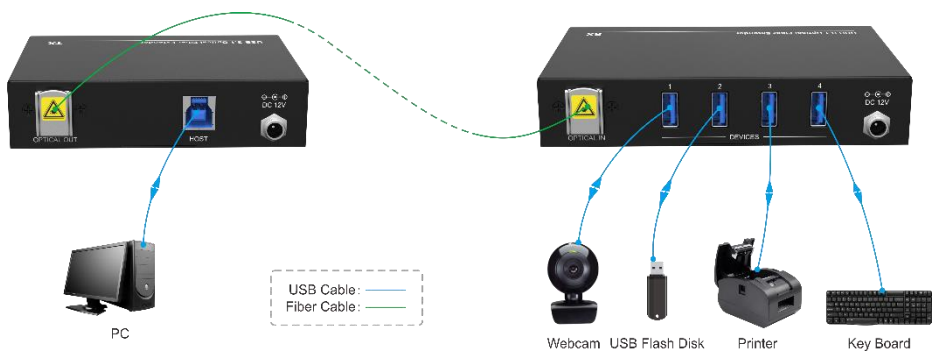
Features

- Compatible with USB3.1/2.0/1.1.
- USB3.1 Gen1 data rate is 5Gbps.
- USB2.0 data rate is 480Mbps, USB1.1 data rate is 12Mbps.
- Integrated USB 3.1 hub with four ports, support all USB 3.1, 2.0, 1.1 devices.
- Transmits audio and video signal over Single-mode Fiber or OM3 multi-mode fiber.
- 1xLC Fiber connector.
- Supports the technology of converting USB3.1 to optical fiber without delay.
- External DC 12V power supply.
- Strong anti-interference ability.

Application

- Machine vision
- Security monitoring
- Data storage
- Video conference
- Medical equipment system

Application Diagram



Specification

Distance	USB3.1 Gen1 Single-mode fiber or OM3 multi-mode fiber: Non-real-time transmission: 300m Real-time transmission: 100m
	USB2.0/1.1 Single-mode fiber: Non-real-time transmission:10km Real-time transmission:6km OM3 multi-mode fiber: 500m
Data rate	USB3.1 GEN1: 5Gbps USB2.0: 480Mbps USB1.1: 12Mbps
Transmitter (FOE.USB3T)	USB Interface: 1xUSB3.0 type-B male connector Fiber Interface: 1xLC Dimensions: 135mm x 75mm x 26mm Installation: 4 mounting holes for fixing Enclosure Material: Metal Power Supply: External DC 12V
Receiver (FOE.USB3R)	USB Interface: 4xUSB3.0 type-A female connector Fiber Interface: 1xLC Dimensions: 160mm x 85mm x 26mm Installation: 4 mounting holes for fixing Enclosure Material: Metal Power Supply: External DC 12V
Environment	Operating Temperature: -10 to +60°C (+50° to +140°F) Storage Temperature: -45 to +85°C (-49° to +185°F) Operating Humidity: 20% to 80% relative humidity, non-condensing Storage Humidity: 10% to 80% relative humidity