EX-1448MM
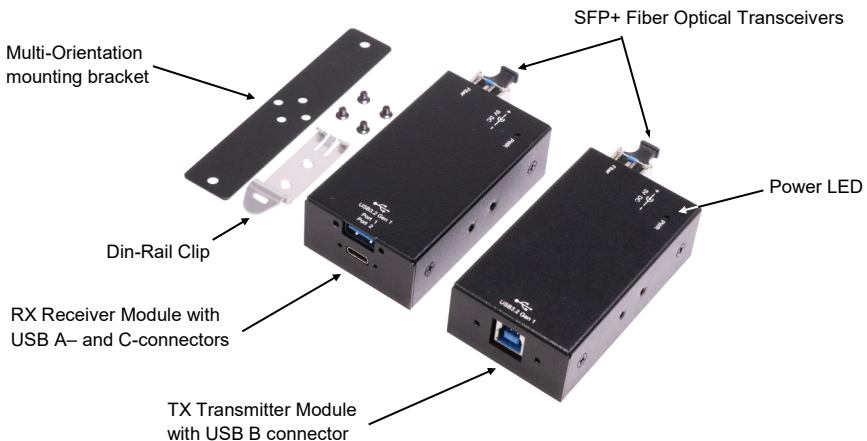## USB 3.2 Gen1 (USB 3.0) to
Fiber Optical Converter

1. Introduction

Thank you for purchasing this USB 3.2 Gen1 (before USB 3.0) to Fiber Optic Converter. It is designed to extend USB signals over optical fiber. It provides the most versatile connection possible between any USB 3.2 Gen1 equipment's using fiber optic cable. The optical fiber isolates the data signals from ground potential, ground loops and provides EMI/RFI protection. There support OM3 above Multimode with 2LC optical connector. The multi-mode converter is used to extend USB transmission distance up to 300 meter.
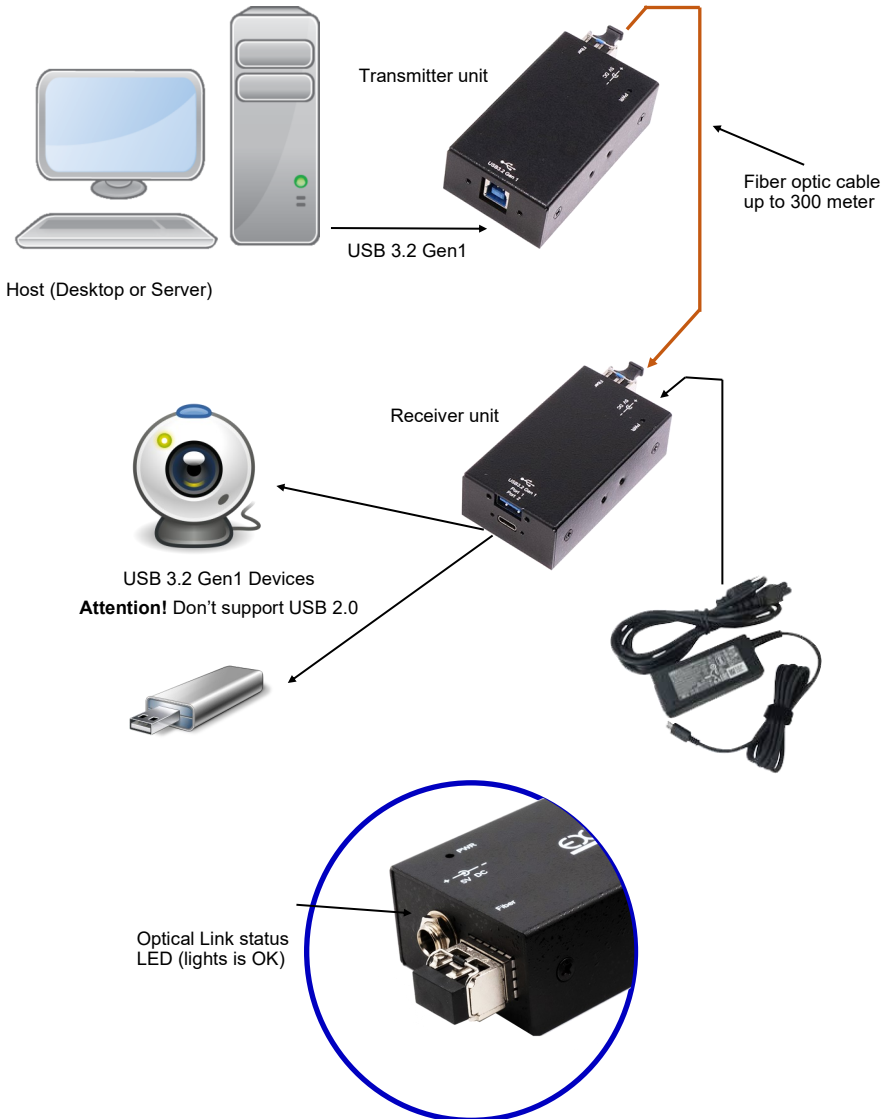
Features:

√ Compliant with USB Specification 3.2 Gen 1
√ Compliant with MSA SFP+ Specification SFF-8431
√ Extends 1 x USB-C and USB-A Connectors
√ Multi-mode optical transceiver, 300m maximum distance
√ Optional Single-mode optical transceiver, 10km maximum distance
√ Compact metal cases, DIN Rail and multi oriental wall mounting bracket
√ Supports 15KV ESD Level 4 Protection for Each Port
√ Power Input: 5V DC with 5.5/2.1mm Barrel Plug

2. Layout

SFP+ Fiber Optical Transceivers

Multi-Orientation mounting bracket

Power LED

Din-Rail Clip

RX Receiver Module with USB A– and C-connectors

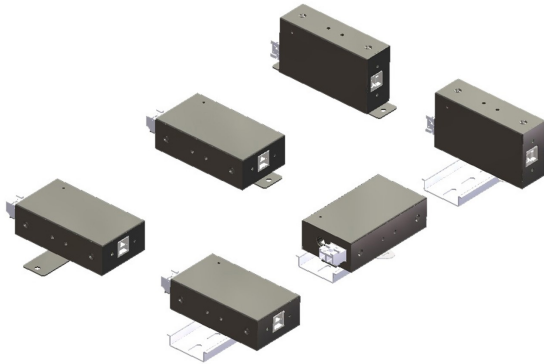TX Transmitter Module with USB B connector

3. Hardware Installation

1. The Extender Kit consists of a local Transmitter unit and a remote Receiver unit. Please connect the Transmitter unit to your host PC and plugged the USB devices on the remote unit. Connect both units with a Fiber optic cable.

Transmitter unit

Fiber optic cable up to 300 meter

USB 3.2 Gen1

Host (Desktop or Server)

Receiver unit

USB 3.2 Gen1 Devices
Attention! Don't support USB 2.0

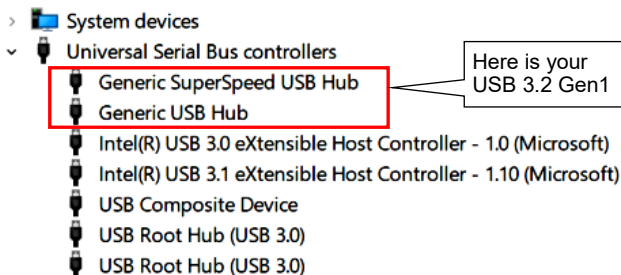Optical Link status LED (lights is OK)

2. Transmitter unit is powered by the USB cable from the host PC, so it doesn't need any external power supply. However, the Receiver unit needs a 5V DC power adapter to operate and power its downstream devices.

3. After installed, please verify the Link status LED next to each Fiber transceiver socket lights steadily, it indicates that the fiber cable is correctly installed and ready to communicate.

4. Mount your hub on the wall (with the Multi-Orientation Bracket) or DIN Rail (with the DIN Rail Clip) if required. Please see the following picture for different options:

4. Checking the HUB installation

To check the USB3.2 Gen 1 hub installation in Windows device manager, please follow the following steps:

1. Click **Start è Control Panel è System è Device Manager** button
2. Double click **Universal Serial Bus Controller**
3. Double click **Generic USB Hub**, the message will show that this device is working properly.

5. Specifications

Type	Specifications
Connectors:	TX: B female RX: A-and C-female
	2 LC Optic cross over
Maximal distance	300 meter (Multi-Mode-Fiber)
Operating Voltage	DC 5V / 2A
Electrical Power Consumption	TX: 5V/127mA RX: 5V/245mA
Wave:	Multi-Mode 50/125um
Operating Temperature:	0°C to +55°C
Storage Temperature	-20°C to +75°C
Operating Humidity	5 to 95% RH
Dimension	TX: 81.50 x 46.10 x 24.50 (L x W x H mm) RX: 81.50 x 46.10 x 24.50 (L x W x H mm)
Weight:	TX: 155g / RX: 155g

6. Packaging contents

√   Transmitter module

√   Receiver module

√   USB 3.0 cable A-to-B screw lock

√   Power supply 5V/3A screw lock

√   Din-Rail and Wall mounting Kit

√   Manual