

4 Ports USB3.2 Fiber Optic Converter

Overview

USB3.2 fiber optic converter absorbed the advantages of similar products at home and abroad,combined with the actual demand of the market,through the one-core optical fiber can transmit 4-channel Super Speed Plus ultra-high speed signal extension of 250 meters.

USB3.2 fiber optic converter uses a special USB PHY to meet the requirements of USB3.2 protocol,and uses 10Gbps SFP to complete the photoelectric conversion and realize the stable transmission of USB3.2 SuperSpeed Plus ultra-high-speed signal.

USB3.2 fiber optic converter consists of a transmitter and a receiver that provides 5V power through the host USB 3.2 type A connector,the transmitter is powered by an external power supply and supplies power to the USB3.2 device through the USB3.2 A type connector.

Note that the bandwidth of 10Gbps is not 10Gbps divided by 8 to get 1250MB/s,it uses the same 10-bit transmission mode as SATA,so its full speed is only 1000MB/s.

Note that 10Gbps (1000MB/s) is the theoretical transmission value. If several devices share a USB channel,the master control chip will allocate and control the bandwidth available to each device.

USB-IF released the latest USB naming specification,the original USB 3.0 and USB 3.1 will no longer be used,all USB 3.0 standards will be called USB 3.2,consider compatibility issues, USB 3.0/USB 3.1/USB 3.2 are called USB 3.2 Gen 1 (5G bps)/USB 3.2 Gen 2 (10G bps)/USB 3.2 Gen 2x2 (20G bps).

Product Picture



Application

Kinect somatosensory peripheral;
Industrial video transmission;
Machine vision system;

Hd video surveillance system;
 High-speed data acquisition system;
 Remote storage;
 Digital signage and TV wall;
 Industrial printer system;

Features

- 1.Complies with the general serial bus 3.2 specification;
- 2.Complies with USB power delivery 3.2 Gen 1 specification;
- 3.Supports SuperSpeed Plus (10G bps),SuperSpeed (5G bps) rate;
- 4.Meet the USB Type-C @ standard;
- 5.Internal USB PHY uses advanced CMOS process to achieve low power consumption;
- 6.Support 4 channels independent configuration of USB3.2 signal input;
- 7.Support PWM LED status indicator;
- 8.Plug and play,no driver;
- 9.Downward compatible with USB3.2 Gen 1 (3.0),not compatible with USB2.0 and USB1.1;

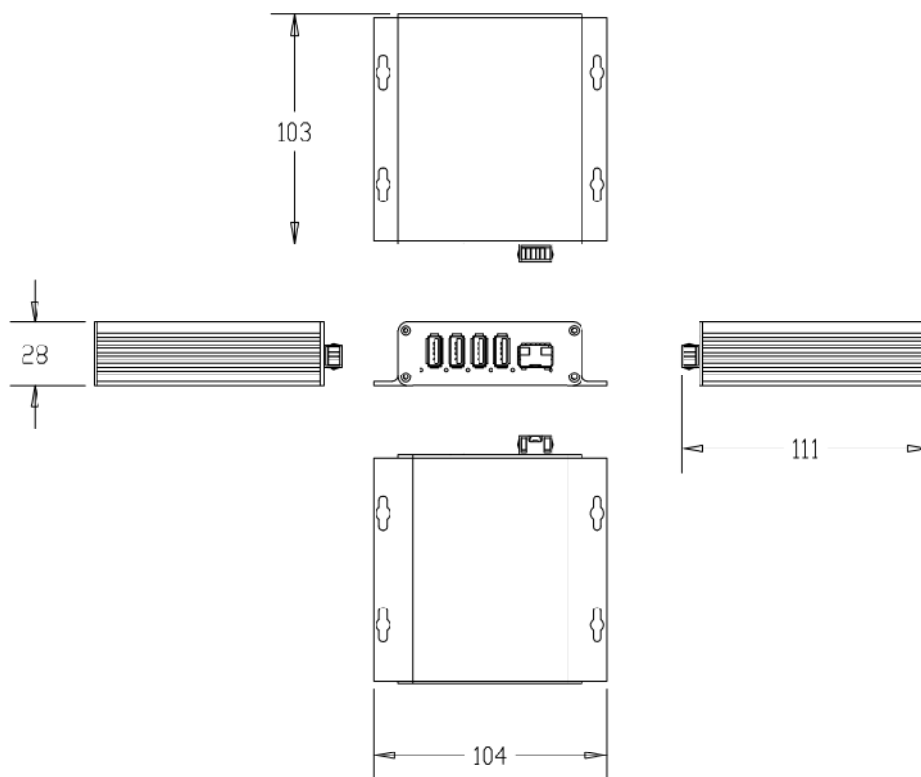
Technical Indexes

Fiber index	
Wavelength	1270-1330nm
Rate	10Gbps
Tx power	> -3db
Rx sensitivity	> -10db
Fiber connector	LC (Single fiber MM/SM)
USB index	
Version	Universal Serial Bus 3.2
Transmission rate	10Gbps (1000MB/s)
USB toal load current	≤2A
Supply voltage	5V
Single USB port supply current	900mA
Physical interface	USB3.2 Type A connector
Power index	
Transmitter input voltage	DC 12V
Transmitter power consumption	1.2W
Receiver input voltage	DC 5V
Receiver power consumption	1.2W
Mechanical index	
The shell metal	Aluminium alloy
Product size	104*104*28mm
Net weight	0.4KG
Way to install	Wall-mounted type (desktop type)
Color	Black

Packing	
Material	Kraft paper
Package size	275*220*55mm
Gross weight	0.65KG
Other index	
Working temperature	-20 °C ~75 °C
Storage temperature	-40°C~85°C
Relative humidity	From 5 to 95% (non-condensing)

Dimension Drawing (mm)

Transmitter



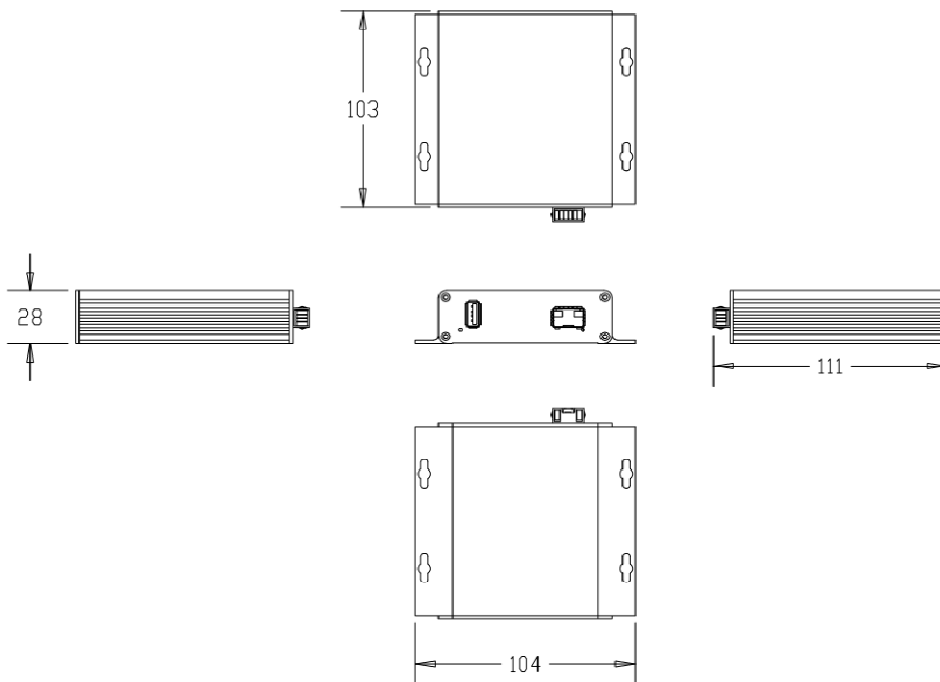
Transmitter panel printed / indicator description



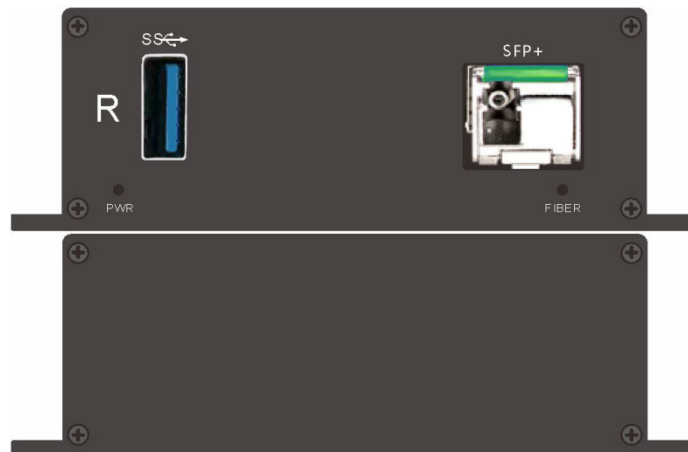
PWR	On: The device is powered on Off: The device is powered off
FIBER	On: fiber signal Off: no fiber signal
USB 1	Slow flash: The USB device is recognized Off: The USB device is not recognized
USB 2	Slow flash: The USB device is recognized Off: The USB device is not recognized
USB 3	Slow flash: The USB device is recognized Off: The USB device is not recognized
USB 4	Slow flash: The USB device is recognized Off: The USB device is not recognized

SFP+	10G SFP fiber module
DC 12V	12V power supply

Receiver

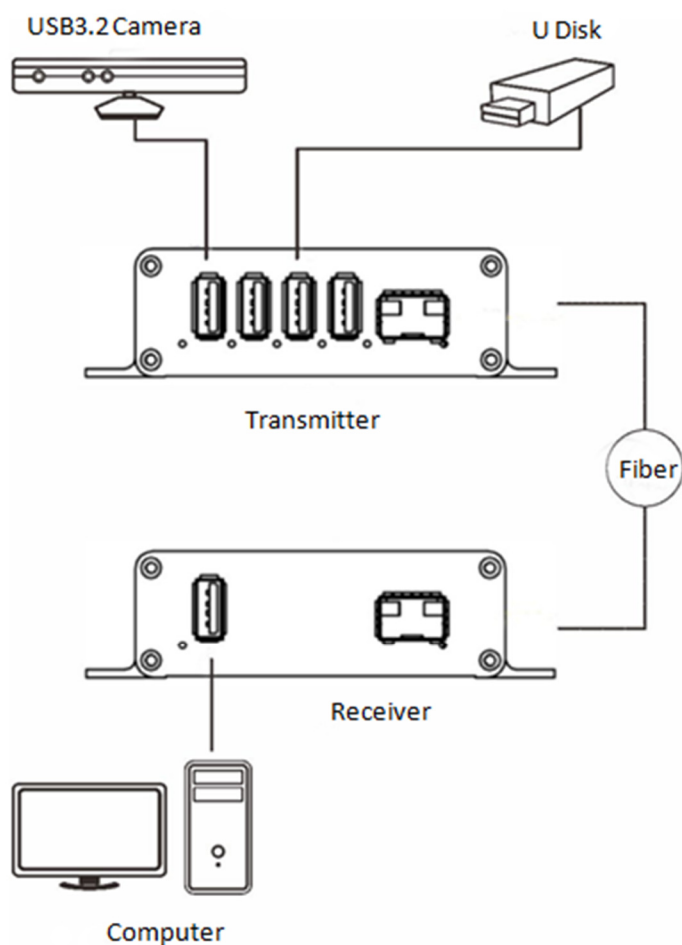


Receiver panel printed / indicator description



PWR	On: The device is powered on Off: The device is powered off
FIBER	On: fiber signal Off: no fiber signal
SFP+	10G SFP fiber module

Connection Diagram



The connection diagram is for reference only

Sequence of power-on operations

1. The host optical converter (receiver R) is plugged into a USB connector of computer;
2. 12V power adapter is connected to the optical converter (transmitter T) ;
3. Connect the USB device to the optical converter (transmitter T).

Note: After the optical fiber is connected, the indicator is on, otherwise off; after the USB device is inserted and identified, the USB indicator is on, otherwise off.

4. Please do the back-to-back staple fiber test to verify that the function of the equipment is normal before doing long-distance transmission;
5. When a USB device is plugged into the computer, the computer cannot be started normally.

Note: The USB device may be set as the first boot device in the BIOS of the computer boot sequence. You can check the first boot device in the BIOS and set the hard disk as the first boot device.

Packing List

S.N	Name	Unit	Quantity
1	Transmitter	pcs	1

2	Receiver	pcs	1
3	12V power adapter	pcs	1
4	USB3.0 wire material	pcs	1
5	User's Manual	pcs	1
6	LC-LC patch cord	pcs	1
7	Certification	pcs	1

Attention

Lightning protection,static electricity and grounding:

It is recommended that when install the device,consideration should be given to the impact of grounding by lightning,and take prevention measures.Strong static electricity will damage the optical device and data chip in the equipment.It is recommended that when plug/unplug the data port of the optical converter,please disconnect the power supply of the optical converter first.Equipment housing is not waterproof,equipment installation box should be fully considered waterproof.

Fiber and optical components:

Be careful when plugging the optical fiber as optical components of the optical converter is very fragile,and it should avoid causing damage to the optical components.It should be noted that the light source produced by the optical components of the optical converter will be harmful to eyes,so do not have direct eye contact with the optical components of optical converter.If you need to detect the optical power of the optical converter,please use the optical power meter.

Equipment and installation procedures:

- (1) Optical fiber installation:please carefully insert the optical fiber into the optical fiber interface of the optical terminal after confirming that the optical fiber link meets the installation requirements.
- (2)Power amplifier audio signal cannot be directly given to the transmitter,which will lead to the burning machine.
- (3) Equipment installation:The equipment can be distinguished between transmitter and receiver,and it is stated clearly on the label and printed on the chassis of the equipment.



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