

Prestel EFC-4K1000UC

4K60 USB-C over Fiber Extender



Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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1. Introduction

This fiber extender can extend video and audio signal up to 10km over a single-mode fiber cable. Video resolution up to 4K2K@50/60Hz RGB 4:4:4. This product has the advantages of strong anti-interference, high safety performance, small size and light weight, and has incomparable advantages in long-distance transmission.

2. Features

- ☆ Compliant with USB Type C DisplayPort Alternative Mode
- ☆ Compliant with HDCP2.2/2.3 and 1.x
- ☆ Support HBR3, HBR2, HBR and RBR (8.1/5.4/2.7/1.62Gbps)
- ☆ Video resolution is up to 4K2K@50/60Hz 4:4:4
- ☆ Support any VESA standard resolution transmission
- ☆ HDR10, HDR10+, Dolby Vision, HLG pass-through
- ☆ Support LPCM 7.1CH, Dolby 5.1, Dolby TrueHD, Dolby Atmos and DTS-HD Master, DTS:X Audio
- ☆ Transmission distance is up to 10km over a single-mode fiber cable
 - * Multi-mode fiber is supported in SFP modules. The distance over OM4 is up to 300m
- ☆ EDID transmission from receiver to transmitter
- ☆ Compact design for easy and flexible installation

3. Package Contents

- ① 1× 4K60 USB-C over Fiber Extender (Transmitter)
- ② 1× 4K60 USB-C over Fiber Extender (Receiver)
- ③ 2× 5V/1A Multinational Power Supply
- ④ 1× User Manual

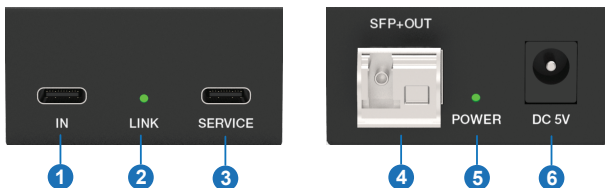
4. Specifications

Technical	
USB-C Compliance	USB Type-C 1.1 DisplayPort ALT Mode
HDCP Compliance	HDCP 2.3/2.2/1.x
Video Bandwidth	32.4Gbps (8.1/5.4/2.7/1.62Gbps)
Input & Output Video Resolution	4096x2160p60, 4096x2160p50, 3840x2160p60, 3840x2160p50, 3840x2160p30, 3840x2160p25, 1920x1200p60RB, 1920x1080p60, 1920x1080p50, 1360x768p60, 1280x800p60, 1280x720p60, 1280x720p50, 1024x768p60 Any VESA resolution is supported.
Color Space	RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0
Color Depth	8-bit, 10-bit, 12-bit
Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DTS:X
HDR	HDR10, HDR10+, Dolby Vision, HLG
Fiber Optic Module	10G SFP+ module
Transmission Distance	Up to 10km over single-mode fiber cable Up to 300m over multi-mode OM4 fiber cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Transmitter	Input: 1x IN [USB-C, 24-pin female] 1x SERVICE [USB-C, update port] Output: 1x SFP+OUT [LC female]
Receiver	Input: 1x SFP+IN [LC female] 1x SERVICE [USB-C, update port] Output: 1x OUT [USB-C, 24-pin female]

Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter / Receiver: 81mm [W] x 49mm [D] x 25mm [H]
Weight	Transmitter / Receiver: 138g
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	Transmitter: 2.7W (Max), Receiver: 2.5W (Max)
Operating Temperature	32°F - 104°F / 0°C - 40°C
Storage Temperature	-4°F - 140°F / -20°C - 60°C
Operating Humidity	20% - 80% (relative humidity, non-condensing)
Storage Humidity	10% - 90% (relative humidity, non-condensing)

5. Operation Controls and Functions

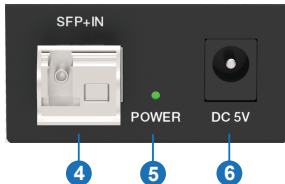
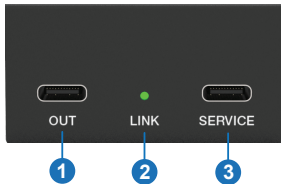
5.1 Transmitter Panel



No.	Name	Function Description
1	IN	USB-C input port, connected to source device such as PC with USB cable.

No.	Name	Function Description
2	LINK indicator	The green LED is always on when the Transmitter and Receiver have a connection with normal optical fiber signal.
3	SERVICE port	Used for firmware update.
4	SFP+OUT	Fiber optic SFP port, connected to the SFP+IN port on Receiver via LC fiber optic cable.
5	POWER indicator	The green LED is always on when the Transmitter is powered on.
6	DC 5V	DC 5V/1A power input port.

5.2 Receiver Panel



No.	Name	Function Description
1	OUT	USB-C output port, connected to a display device such as monitor with USB cable.
2	LINK indicator	The green LED is always on when the Transmitter and Receiver have a connection with normal optical fiber signal.
3	SERVICE	Used for firmware update.
4	SFP+IN	Fiber optic SFP port, connected to the SFP+OUT port on Transmitter via fiber optic cable.
5	POWER indicator	The green LED is always on when the Receiver is powered on.
6	DC 5V	DC 5V/1A power input port.

6. Application Example

