

# 4K60 HDMI VIDEO EXTENDER OVER FIBER

HDMI 2.0b, 4K60, Local Out, 2-Way IR, RS-232, SM Fiber, 10Km

Model: DSG-HDMI-460SMF



This HDMI Extender can extend HDMI signals up to 10 Km (33,000 feet) over a single-mode fiber cable. It supports video resolutions up to 4K@60Hz 4:4:4. The Transmitter supports local video loop output, audio embedding, and EDID management functions. The Receiver supports audio extraction. Additionally, the Extender supports bidirectional IR control and RS-232 signal pass-through. This allows you to easily control the display device from the signal source side or control the signal source device from the display side when using this Extender.

- ☆ HDMI 2.0b, HDCP 2.2 and DVI 1.0 compliant
- ☆ Supports 18Gbps video bandwidth
- ☆ Supports video resolutions up to 4K@60Hz 4:4:4
- ☆ HDMI audio formats: LPCM 2/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby TrueHD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
- ☆ Supports 3D and HDR format video, does not support CEC control
- ☆ Transmission distance up to 33000 feet/10 km using SFP+ Single LC optical transceiver (over single-mode fiber cable). It is possible to use multi-mode fiber with the SFP module but the distance cannot be guaranteed.
- ☆ Supports bidirectional IR control, RS-232 pass-through and EDID management for simple and convenient control
- ☆ Transmitter supports local video loop-out (sharing local HD video and audio) and audio embedding functionality
- ☆ Receiver supports audio extracting output functionality
- ☆ Compact design for easy and flexible installation

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## SPECIFICATIONS

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	480i ~ 1080p50/60Hz, 4K@24/30Hz, 4K@60Hz
Colour Space	RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0
Colour Depth	8-bit, 10-bit, 12-bit
HDMI Audio Formats	LPCM 2/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby TrueHD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Transmission Distance	Up to 33000 feet/10 km using SFP+ Single LC Optical Transceiver over single-mode fiber cable
IR Frequency	20KHz to 60KHz
RS-232 Baud Rate	4800 to 115200bps
ESD Protection	Human body model — ±8kV (air-gap discharge) and ±4kV (contact discharge)
Connections	
Transmitter	<p>Input: 1 x HDMI IN [Type A, 19-pin female] 1 x LINE IN [3.5mm Stereo Mini-jack] 1 x IR IN [3.5mm Stereo Mini-jack] 1 x RS-232 [3.81mm Phoenix connector] 1 x SERVICE [Micro-USB, Update port]</p> <p>Output: 1 x HDMI OUT [Type A, 19-pin female] 1 x IR OUT [3.5mm Stereo Mini-jack]</p> <p>Network: 1 x Optical SM Fiber [LC female]</p>
Receiver	<p>Input: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x SERVICE [Micro-USB, Update port]</p> <p>Output: 1 x HDMI OUT [Type A, 19-pin female] 1 x RS-232 [3.81mm Phoenix connector] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x AUDIO OUT [3.5mm Stereo Mini-jack]</p> <p>Network: 1 x Optical SM Fiber [LC female]</p>

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Mechanical and Environmental	
Housing	Metal Enclosure
Colour	Black
Dimensions	Transmitter / Receiver: 134mm [W] x 68mm [D] x 18mm [H]
Weight	Transmitter: 280g Receiver: 278g
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	Transmitter: 3.85W (Max) Receiver: 2.7W (Max)
Operating Temperature	32°F to 104°F / 0°C to 40°C
Storage Temperature	-4°F to 140°F / -20°C to 60°C
Relative Humidity	20 to 90% RH (non-condensing)

## OPTICAL FIBER MODULES

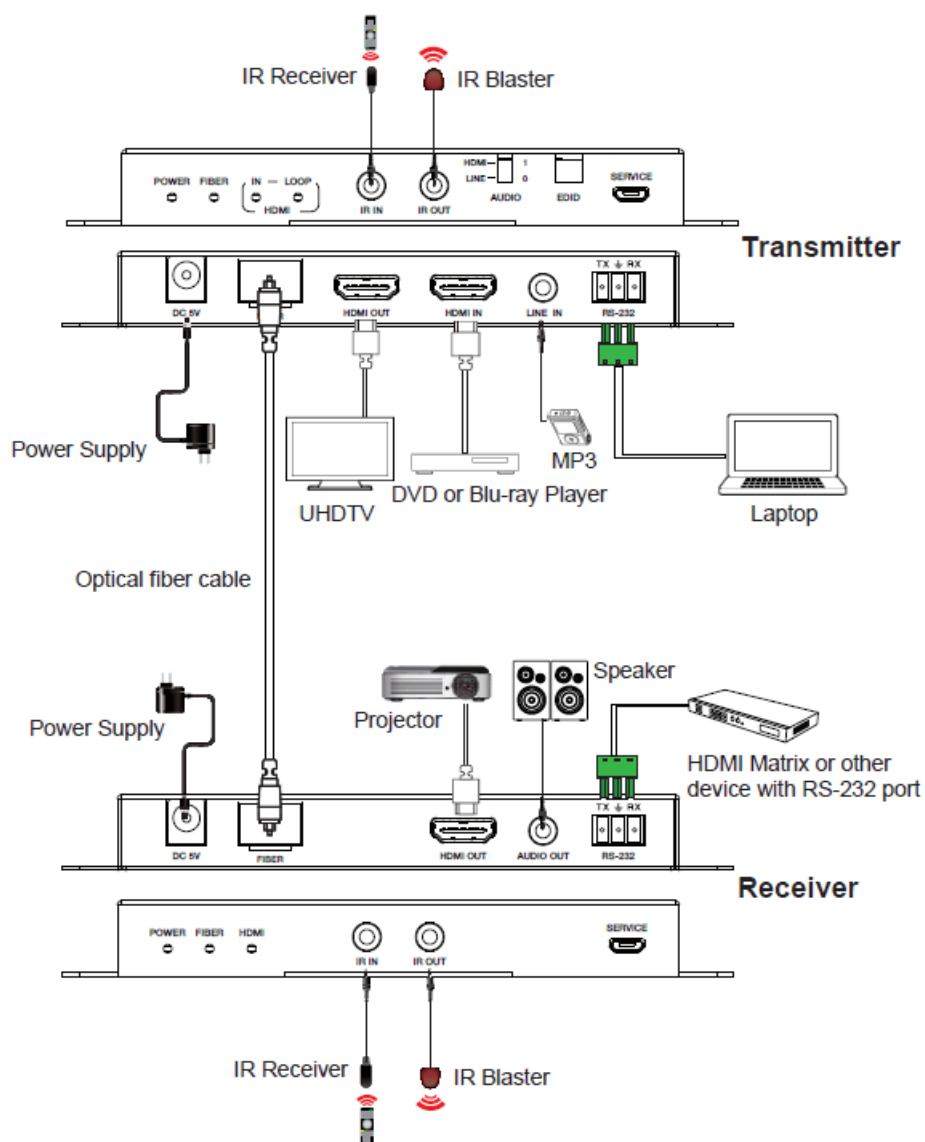


Attributes	SFP-BL32TG-10DC (Transmitter)	SFP-BL23TG-10DC (Receiver)
Brand Name	FIBERTOP	FIBERTOP
Country of Origin	China	China
Use	10Gbps Optical Systems	10Gbps Optical Systems
Form Factor	SFP+ BiDi	SFP+ BiDi
Max Data Rate	10Gbps	10Gbps
Max Distance	10 Km	10 Km
Wavelength	1330nm TX / 1270nm RX	1270nm TX / 1330nm RX
Optical Components	1330nm DFB / PIN photodiode	1270nm DFB / PIN photodiode

# 4K60 HDMI VIDEO EXTENDER OVER FIBER

Attributes	SFP-BL32TG-10DC (Transmitter)	SFP-BL23TG-10DC (Receiver)
Operating Temperature	0°C to 70°C	0°C to 70°C
Storage Temperature	-40°C to 85°C	-40°C to 85°C
Fiber Type	SMF	SMF
Connector	Single LC	Single LC

## CONNECTION DIAGRAM



# 4K60 HDMI VIDEO EXTENDER OVER FIBER

## PACKAGE CONTENTS

- ① 1 × 18Gbps HDMI over Optical Fiber Extender (Transmitter)
- ② 1 × 18Gbps HDMI over Optical Fiber Extender (Receiver)
- ③ 1 × IR Blaster cable (1.5m)
- ④ 1 × IR Receiver cable (1.5m)
- ⑤ 2 × 5V/1A Power Adapter
- ⑥ 2 × 3-pin 3.81mm Phoenix connector
- ⑦ 1 × User Manual

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