Full 4K HDMI 2.0 compatible optical transmitter

Ref. EXT-HDMI20-OPT-TX

ANALOG WAY®
Pioneer in Analog, Leader in Digital

HDMI 2.0 over optical fiber transmitter for long range signal management



4K60 4:4:4 | **HFR up to 144Hz** | **HDMI 2.0** | **HDCP 2.2** | **HDR** | **FIBER OPTICAL**

Overview

The Analog Way **EXT-HDMI20-OPT-TX** is an HDMI 2.0 over fiber transmitter designed to transfer uncompressed HDMI 2.0 class 4K signal with embedded audio to up to 600m (~2000 ft.) or a full HD signal to up to 1200m (~3900 ft.) over one multimode fiber cable. It supports resolutions up to 4K60 8 bits 4:4:4 or 4K60 10 bits 4:2:2 as well as custom formats such as 8192×1080@60Hz. It also handles up to 8 embedded audio channels and features advanced HDCP 1.4 and 2.2 handshake as well as HDR compatibility. Its solid aluminum housing provides a mechanical protection as well as excellent heat dissipation.

Key features

- Single fiber output port (standard SC connector)
- Input port fully compatible with HDMI 2.0
- Uncompressed video up to 18 Gbps bandwidth
- True 4K60 4:4:4 performance
- Status LED for easy troubleshooting
- HDR compliant with HDR10 and HLG
- Supports up to 8 embedded audio channels per output (PCM)
- EDID management
- Compliant with HDCP 1.4 and HDCP 2.2
- Ruggedized design

Enclosure dimensions
- W 4.35'' x H 0,45' x D 1.40.''
- W 110.5 mm x H 11.4 mm x D 35.5 mm

Length of pigtail HDMI cable
- 31.5"" / 800mm

Length of pigtail USB cable
- 39.4"" / 1000mm

Weight
- 145g / 0.32 lbs

Operating conditions
- Temperature: 0 to 50°C (32 to 122°F)
- Humidity: 10% to 90%, non-condensing

Power consumption
- 1.5W (1080p60) / 2W (4K/60)

Warranty
- 3-year warranty on parts and labor back to factory
- Broken connectors are not covered by warranty

Safety Compliance (general)
- Compliance: CE
- EMC compliance: IEC/EN 55032:2015 and IEC/EN 55035:2017
- Safety: IEC/EN 62368-1:2014

Safety Compliance (laser)
- IEC/EN 60825-1:2014-05 Ed. 3.021CFR Subchapter J Parts 1040.40 and 1040.11
- Laser class: Class 1

Technical Specifications

Standard SC output connector
Multimode fiber
Laser class 1
Up to 18 Gbps bandwidth
8-bit formats up to: - UHD/4K@60Hz 4:4:4 (no chroma subsampling) - 2560x1440@144Hz 4:4:4
10-bit formats up to: - 4K60 with 4:2:2 chroma subsampling - 4K30 4:4:4 - 2560x1440@60Hz 4:4:4
Extra-wide custom formats such as 8192×1080@60Hz (8k x 1k) or 1080×8192@60Hz
Up to 1200m (~3900 ft.) in full HD
Up to 600m (~2000 ft.) in 4K
Compliant with HDCP 1.4 and HDCP 2.2
Supports BT.709 and BT.2020 color spaces
No additional latency
Compatible with Analog Way's Aquilon HDMI 2.0 over fiber input card (ref. ACC-AQL-IN-HDMI-FBR) and HDMI 2.0 over fiber receiver (ref. EXT-HDMI20-OPT-RX)
External power adaptor / USB (A-type connector) / HDMI
Aluminum machined housing
Rack mountable in Analog Way's power trays (ref. OPT-POWERTRAY-SC, OPT-POWERTRAY-NTD and OPT-POWERTRAY-NTQ)

Specifications subject to change without prior notice

EXT-HDMI20-OPT-TX-EN-05/12/2025