

18Gbps HDMI over CAT Extender with eARC/ARC (100m)



User Manual

VER 1.1

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, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

1. Introduction.....	1
2. Features.....	1
3. Package Contents.....	1
4. Specifications.....	2
5. Operation Controls and Functions.....	4
5.1 Transmitter Panel.....	4
5.2 Receiver Panel.....	6
5.3 Input & Output Switching.....	7
5.4 Audio De-embedding.....	10
5.5 IR Pin Definition.....	10
6. Application Example.....	11

1. Introduction

This 18Gbps HDMI over CAT Extender, which is based on SDVoE technology, can extend uncompressed HD/UHD video and audio signals, eARC/ARC, RS-232, bi-directional IR, and 1GbE Ethernet signals up to 100m/328ft via a single CAT6A/7 cable. Video resolution is up to 4K2K@50/60Hz 4:4:4. Both transmitter and receiver support audio de-embedding. The Extender supports eARC/ARC from RX's HDMI output pass through to TX's HDMI input or de-embedding to TX's HDMI output and SPDIF output ports. It also supports CEC pass-through and bi-directional POC function.

The Extender offers the most convenient solution for HDMI extension via a single CAT cable with long distance capability, and is the perfect solution for home/commercial application.

2. Features

- ☆ HDMI 2.0b and HDCP 2.3 compliant
- ☆ Uncompressed 4K2K@50/60Hz 4:4:4 up to 18Gbps video bandwidth
- ☆ HDR, HDR10, HDR10+, Dolby Vision and HLG pass through
- ☆ LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD pass through
- ☆ Signal extended distance up to 328ft/100 meters via a single CAT6A/7 cable
- ☆ Supports eARC/ARC function (the eARC/ARC audio is returned to the HDMI IN port, HDMI OUT port and SPDIF OUT port of the transmitter.)
- ☆ Supports SPDIF audio from RX to TX transmission
- ☆ Bi-directional IR, RS-232 (only supports 115200bps) and 1G Ethernet signal pass-through
- ☆ Supports CEC pass-through
- ☆ Bi-directional 24V POC function

3. Package Contents

- ① 1 x HDMI Extender (Transmitter)
- ② 1 x HDMI Extender (Receiver)
- ③ 1 x IR Blaster Cable (1.5 meters)
- ④ 1 x IR Receiver Cable (1.5 meters)
- ⑤ 2 x 3pin-3.81mm Phoenix Connectors
- ⑥ 2 x Mounting Ears
- ⑦ 4 x Machine Screws (KM3*6)
- ⑧ 1 x 24V/1A Locking Power Supply
- ⑨ 1x User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.3
Video Bandwidth	18Gbps
Video Compression Standard	SDVoE
Video Network Bandwidth	10G
Video Resolution	480i ~1080p50/60Hz, 4Kx2K@24/30Hz, 4k2k@60Hz
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8/10/12-bit (up to 4K30Hz) 8-bit (4K60Hz)
Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
L/R Audio Formats	PCM 2.0
SPDIF Audio Formats	LPCM 2.0, LPCM5.1, Dolby Digital 2.0/5.1CH
IR Level	12Vp-p
IR Bandwidth	Wideband 20K - 60KHz
RS-232	Only supports 115200bps
Transmission Distance	MAX: CAT6A/7--100m/328ft; CAT6--55m/180ft
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Transmitter	Input: 1 x HDMI IN [Type A, 19-pin female] Output: 1 x HDMI OUT [Type A, 19-pin female] 1 x CAT OUT [RJ45, 8-pin female] 1 x SPDIF OUT [S/PDIF] 1 x L/R OUT [3.5mm Stereo Mini-jack] Control: 1 x IR IN [3.5mm Stereo Mini-jack] 1 x IR OUT [3.5mm Stereo Mini-jack] 1 x RS-232 [3pin-3.81mm Phoenix jack] 1 x SERVICE [Micro USB, 5-pin female] 1 x LAN [RJ45]