

4K HDMI 2.0 Fiber Extender with EDID Management

Model: PANIO HD6500F

Fiber Optic Transmission Technology

- Adopts fiber optic transmission and uses LC fiber optic cables to transmit audio and video signals.
- Enables 10km long-distance transmission without compression and with low latency, ensuring ultimate image quality.

4K 60Hz Ultra-High Resolution

- Supports 3840×2160 60Hz resolution and RGB 4:4:4 color format.
- Comes with 18Gbps bandwidth, fully supporting HDR and 3D imaging for vivid and detailed visuals.

Bidirectional IR Remote Control

- Features bidirectional IR signal transmission, allowing users to remotely control devices via infrared remote at either the signal source or display end, which enhances operational convenience.

Signal Extension with Local Output

- Supports 1-in 2-out architecture: The transmitter is equipped with an HDMI local output for real-time monitoring of local signals, while extending the signal via fiber to remote displays.
- Ideal for multi-screen meeting rooms, remote teaching, or security monitoring systems.

Audio Separation Output

- Has a built-in audio separation function, enabling the receiver to independently output HDMI audio to external speakers.
- Supports various audio formats, including LPCM 2/5.1/7.1CH, Dolby Digital, and DTS.

Long-Distance Transmission Capability

- Achieves a 10km transmission distance (4K 60Hz) with single-mode fiber, breaking through the length limitations of traditional HDMI cables.
- Suitable for large venues and cross-floor wiring requirements.

RS-232 Passthrough and EDID Management

- Supports RS-232 command passthrough for mutual transmission of control commands between the transmitter and receiver.
- Has built-in EDID management, which automatically matches the optimal resolution to ensure device compatibility.

Detailed Specifications

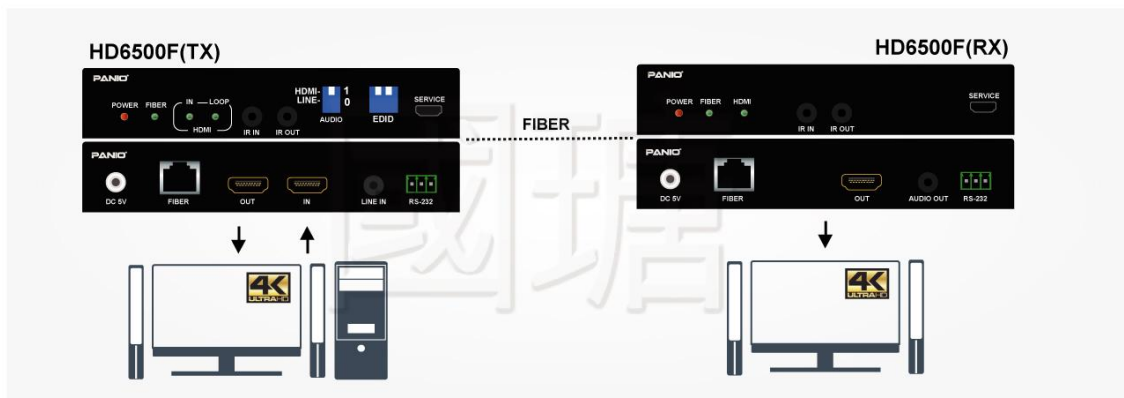
- Transmits 4K 60Hz HDMI, audio, IR, and RS-232 signals uncompressed via optical fiber cables to remote display devices, ensuring no loss of image quality during long-distance transmission.
- Equipped with a pair of LC fiber optic modules, featuring a plug-and-play design that eliminates the hassle of additional purchases.
- 1-in 2-out architecture: The local HDMI loop output enables real-time monitoring, while the remote synchronous display meets the requirements for meeting presentations and multi-screen control.
- Compliant with HDMI 2.0 and HDCP 2.2, supporting mainstream audio-visual devices to ensure normal playback of copyrighted content.
- Extensive transmission distance: 4K 60Hz video can be transmitted up to 10 km over single-mode fiber.
- Diverse audio support: De-embedded HDMI audio provides outputs in formats such as LPCM 2.0/5.1/7.1CH, Dolby True HD, and DTS-HD Master Audio.
- Bidirectional IR and RS-232 control: Remote and local devices can control each other, making it suitable for remote operation of projectors and signal source devices.
- Metal enclosure with ESD protection: Compliant with IEC 61000-4-2 (air discharge $\pm 8\text{kV}$, contact discharge $\pm 4\text{kV}$), enhancing system stability.
- Specifically designed for projector signal extension, effectively resolving the challenge where most extenders fail to transmit signals smoothly to projectors and creating a seamless projection environment.

Specifications

Item	Detailed Specifications
Image Resolution	4K2K 60Hz (4:4:4), 1080p 60Hz
Bandwidth	18Gbps
Audio Formats	PCM 2/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS,

	DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Transmission Distance	10Km (Included with 2 single-mode LC optical fiber modules)
Power Supply	DC 5V/1A (Transmitter max. 3.85W, Receiver 2.7W)
Dimensions	134 × 68 × 18mm (Each unit)

Diagram



Package Contents

- 1 × HD6500F-T Transmitter
- 1 × HD6500F-R Receiver
- 2 × LC Single-Mode Fiber Optic Modules
- 2 × 5V/1A Transformers
- 2 × IR Cables
- 2 × 3-pin Phoenix RS-232 Cables
- 1 × User Manual