

DL-STPEXT UHD/4K HDMI Extender Transmitter



Product Overview

The Datalux DL-STPEXT 4K HDMI Extender Transmitter enables the transmission of high-quality 4K@60Hz video and audio over a single Cat6/6a network cable for distances of up to 70 meters. Additionally, this features KVM functionality, allowing the transfer of USB 2.0 signals for controlling peripherals such as a keyboard and mouse. The KVM capability can also support signal transmission for PTZ cameras or touch screen devices.

Applications:

This device is perfect for digital signage, healthcare AV systems, control rooms, educational institutions, airports, command centers, and home theater setups.

Note:

For optimal AV signal transmission, it is recommended to use a low-impedance CAT5e/6 cable with shielded twisted pairs (STP) and proper

Features

- ✓ Supports 4K @ 60 Hz, 4:4:4 video format.
- ✓ High bandwidth – 18 Gbps.
- ✓ HD audio support including Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio.
- ✓ Up to 70 m transmission over shielded CATx cable.
- ✓ RS-232 and IR pass-through for control.
- ✓ HDCP compliant, EDID pass-through.
- ✓ Operates with local power or via PoE/PoC from receiver.
- ✓ Compact, durable metal chassis with status LEDs.

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Technical Parameter

Specification	Details
Type	HDMI twisted pair transmitter supporting high-quality video, audio, and control distribution over a single shielded CATx cable.
Video Input	1 × HDMI (female), HDCP-compliant.
Video Output	1 × RJ-45 port for CATx transmission
Supported Resolutions	4K @ 60 Hz, 4:4:4 chroma sampling; backward compatible with lower resolutions such as 1080p, 720p, and 480p.
Data Rate	18 Gbps
Audio Support	1 × Analog audio input, Digital Audio: HD lossless audio formats support including Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio, LPCM up to 7.1 channels.
Transmission Distance	Up to 70 m over shielded CATx cable at 4K/60 (4:4:4).
Control Interfaces	1 × RS-232 (bidirectional) and 1 × IR pass-through for control signal extension.
HDCP & EDID	Fully HDCP 2.3 compliant; EDID pass-through, emulation for optimal device compatibility.
Remote Power	Supports both local DC power supply and remote powering from compatible receiver via CATx (PoE/PoC).
Status Indicators	Front-panel LEDs for power, signal presence, and link activity.
Cable Compatibility	Works with shielded CAT5e, CAT6, or higher; STP recommended for best performance.
Enclosure	Compact, durable metal chassis with ESD protection; fanless design for silent operation.
Dimensions	Approx. 120 mm (W) × 80 mm (D) × 25 mm (H)
Weight	Approx. 0.35 kg (0.77 lbs).
Environmental – Operating	Temperature: 0°C to 40°C; Humidity: 10% to 90% non-condensing.
Environmental – Storage	Temperature: -20°C to +60°C; Humidity: 10% to 90% non-condensing.
Power Supply	12V DC (local), PoE/PoC from compatible receiver; power consumption ≤ 6 W.
Regulatory Compliance	CE, FCC, RoHS
Mounting Options	Suitable for shelf, wall, under-table, or behind-display installation with optional brackets.