HDBaseT HDMI Extender over Cat6 — 150M (492 ft.) with PoE

1080p@60Hz | PoE | HDMI Loop-Out | RS-232 | Bi-directional IR | Dolby Atmos | 3-Year Warranty

MPN: EXT-HDBT150M

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Note: Use Cat6 STP (shielded twisted pair) with proper grounding for the full 150M reach. Do not run Cat6 cable parallel to or in the same conduit as power cables. ESD precautions recommended during installation.

Product Overview

The **KanexPro EXT-HDBT150M** is a professional HDBaseT HDMI extender TX+RX kit that extends 1080p@60Hz HDMI signals up to 150 meters (492 ft.) over a single Cat6 STP cable using HDBaseT technology. Bi-directional PoE powers the RX unit from the TX over the Cat6 cable — one locking 24V/1A power supply serves both units. RS-232 (Phoenix connector) and IR pass-through enable full source and display control from either end. Full Dolby Atmos, DTS:X, TrueHD, and DTS-HD MA audio pass-through, ±8kV ESD protection, and metal enclosure make this a commercial-grade solution. Backed by KanexPro's 3-year warranty.

⚡ **PoE — Power over Ethernet:** Connect the included locking 24V/1A power supply to *either* the TX or RX unit. The powered unit supplies DC power to the other unit over the Cat6 cable. No second power run required at the remote end.

Key Features

- Extends 1080p@60Hz HDMI over single Cat6 up to 150M (492 ft.) — HDBaseT protocol
- PoE (Power over Ethernet) — one locking 24V/1A supply powers both TX and RX over Cat6
- HDMI loop-out on TX for local preview monitor or secondary display
- Bidirectional RS-232 (Phoenix) control pass-through over HDBaseT link
- Bidirectional IR control — wideband IR emitter and receiver cables included
- Full audio: Dolby Atmos, DTS:X, Dolby TrueHD, DTS-HD MA, LPCM 7.1
- HDMI 1.4 / HDCP 1.4 compliant — 225MHz per channel video bandwidth
- ESD protection: ±8kV air-gap, ±4kV contact discharge — built for commercial installs
- Metal enclosure, locking power connector — CE/FCC/UL certified power supply
- 3-year KanexPro parts and labor warranty

Specifications

Specification	Value
Protocol	HDBaseT over Cat6
HDMI / HDCP	HDMI 1.4 | HDCP 1.4
Video Bandwidth	225MHz per channel
Max Resolution	1080p@60Hz | YUV 4:4:4 | RGB 4:4:4
Color Space	RGB | YUV 4:4:4 | YUV 4:2:2
Color Depth	8-bit
Max Distance	150M (492 ft.) over Cat6 STP
PoE	Bi-directional — powers unpowered unit over Cat6
HDMI Loop-Out	Yes — TX unit
RS-232	Phoenix connector — bidirectional pass-through
IR	Bi-directional — wideband emitter/receiver included
Audio	Dolby Atmos | DTS:X | TrueHD | DTS-HD MA | LPCM 7.1
ESD Protection	±8kV air-gap | ±4kV contact discharge
Power	DC 24V/1A locking (1 supply powers both units via PoE)
Dimensions	140 × 65 × 18mm (TX & RX)
Weight	406g (TX & RX)
Certifications	CE/FCC/UL (power supply)
Operating Temp	0°C to 40°C
Warranty	3-year parts and labor

Package Contents

1× TX Unit | 1× RX Unit | 1× Locking DC 24V/1A Power Adapter | 1× Wideband IR Emitter Cable | 1× Wideband IR Receiver Cable | 1× User Manual

Safety: Do not expose to moisture. Use only the included 24V/1A locking power adapter. Ensure adequate ventilation. The locking connector prevents accidental disconnection — twist to lock/unlock. Maximum Cat6 cable length: 150M.

Panel Descriptions

TRANSMITTER (TX)

NO.	NAME	DESCRIPTION
1	HDMI IN	HDMI 1.4 input. Connect to source (PC, media server, Blu-ray).
2	HDMI LOOP OUT	HDMI loop-out for local preview monitor.
3	RJ45 OUT	HDBaseT Cat6 output to RX — up to 150M. Use Cat6 STP with proper grounding.
4	RS-232	Phoenix RS-232 connector. Bidirectional serial control to/from RX over HDBaseT.
5	IR OUT	3.5mm IR blaster — point at source device.
6	IR IN	3.5mm IR sensor at TX location.
7	DC 24V (Locking)	Locking 24V/1A power input. PoE supplies power to RX via Cat6 — only one PSU required.

RECEIVER (RX)

NO.	NAME	DESCRIPTION
1	RJ45 IN	HDBaseT Cat6 input from TX. Receives HDMI, RS-232, IR, and PoE power.
2	HDMI OUT	HDMI 1.4 output to remote display — up to 1080p@60Hz.
3	RS-232	Phoenix RS-232 connector for display/control system at remote end.
4	IR OUT	3.5mm IR blaster — point at remote display.
5	IR IN	3.5mm IR sensor at RX location.

Application Example

Setup: HDMI source → TX HDMI IN. Optional local monitor to TX LOOP OUT. Cat6 STP from TX RJ45 OUT to RX RJ45 IN (max 150M). Remote display to RX HDMI OUT. Connect locking 24V PSU to TX or RX — PoE powers the other unit automatically.
RS-232: Wire control system to Phoenix connector on TX; wire display to Phoenix on RX for bidirectional serial control across the HDBaseT link.
IR: Connect included wideband IR emitter/receiver cables to 3.5mm IR jacks on TX and RX.

Troubleshooting

Q: No signal at 150M
A: Verify Cat6 STP is used with proper grounding. Avoid power cable proximity. Check both RJ45 connectors are fully seated. Test with a shorter cable to isolate. Verify locking PSU is fully engaged (twist to lock).

Q: RX unit has no power
A: Confirm the locking 24V/1A PSU is connected to TX or RX and fully locked (twist clockwise). PoE carries power across the Cat6 link — if the powered unit is active, the other should receive power automatically. Check Cat6 cable continuity.

Q: RS-232 control not passing through
A: Verify Phoenix connector wiring: TX on the source device connects to RX on the extender's Phoenix, and vice versa. Confirm baud rate matches the control system and display. RS-232 passes bidirectionally across the HDBaseT link.