

EXTENDERS · HDBASET EXTENDER + KVM

BLU-HDTX150-KVM

4K60 and full KVM, 150 m down one cable.

An 18Gbps HDBaseT extender set that carries HDMI, bi-directional IR and USB KVM up to 150 m over a single CAT6 cable, with bi-directional PoC. Convert HDMI to HDBaseT at the source, take it back at the display, and drive the far-end source or screen from either end. 4K2K@60Hz YUV 4:4:4.



150 m @ 1080P60	120 m @ 4K60 4:4:4	USB KVM PASS-THROUGH	Bi-dir IR + POC	18Gbps HDBASET
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SPECIFICATION SUMMARY

Type	HDBaseT extender (TX + RX)
HDMI	HDMI 2.0b
HDCP	HDCP 2.2
USB	USB 1.1 (KVM)
Bandwidth	18Gbps
Max Resolution	4K2K@60Hz YUV 4:4:4
Reach	150 m @ 1080P60 / 120 m @ 4K60
Link cable	Single CAT6
Control	Bi-directional IR, USB KVM
Power	DC 24V/1A, PoC
Consumption	10W

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KEY FEATURES

- HDMI 2.0b, HDCP 2.2 and USB 1.1 compliant
- 18Gbps, 4K2K@60Hz YUV 4:4:4
- 150 m @ 1080P60 / 120 m @ 4K60 over one CAT6
- Bi-directional IR and USB KVM pass-through, bi-dir PoC

Console here, screen 150 m away. One CAT6 run carries uncompressed 4K60 HDMI, bi-directional IR, USB keyboard/mouse and power — so an operator at the display can drive the source, and either end powers the other.



one CAT6 carries 4K60 HDMI, bi-directional IR, USB KVM and power

HDBASET EXTENSION · 4K60 HDMI, IR AND USB KVM OVER ONE CAT6

01 Overview

What the extender does, and what's in the box.

This **18Gbps HDBaseT Extender** extends an HDMI signal, bi-directional IR control and USB KVM up to **150 m over a single CAT6 cable**. It converts HDMI to standard HDBaseT and transmits over LAN cable; the bi-directional IR pass-through lets you control the source or display from the remote end. Video reaches **4K2K@60Hz YUV 4:4:4**, and USB KVM plus bi-directional PoC are supported. Ideal for video-conference systems, multimedia broadcasting and HDMI signal extension.

FEATURES

- HDMI 2.0b, HDCP 2.2 and USB 1.1 compliant
- Supports 18Gbps video bandwidth
- Video resolution up to 4K2K@60Hz YUV 4:4:4
- 150 m @ 1080P60 / 120 m @ 4K60 4:4:4 over one CAT6
- Bi-directional IR and USB KVM signal pass-through
- Bi-directional PoC (Power over Cable)
- Compact design for easy and flexible installation

AT A GLANCE

Set TX + RX	HDMI 2.0b	HDCP 2.2
BW 18Gbps	Reach 150m	KVM USB
IR Bi-dir	PoC Yes	

PACKAGE CONTENTS

2×	18Gbps HDBaseT Extender (TX + RX)
1×	IR Blaster Cable (1.5m)
1×	IR Receiver Cable (1.5m)
1×	USB Cable (1.5m)
4×	Mounting Ears
8×	Machine Screws (KM3*4)
1×	24V/1A Locking Power Supply
1×	User Manual

02 Specifications

Technical, connection, mechanical and environmental figures.

TECHNICAL

HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
USB Compliance	USB 1.1
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@60Hz YUV 4:4:4
Transmission Distance	1080P@60: 150m / 4K60: 120m
IR Level	5Vp-p
IR Frequency	Wideband 20K–60KHz
Color Space	RGB, YCbCr 4:4:4 / 4:2:2
Color Depth	8/10/12-bit (1080P60, 4K30), 8-bit (4K60 4:4:4)
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Format	LPCM 7.1CH, Dolby TrueHD, DTS- HD Master
ESD Protection	±8kV (Air-gap), ±4kV (Contact)

TRANSMITTER (TX)

Input	1× HDMI [19-pin female] 1× IR IN [3.5mm] 1× SERVICE [Micro-USB] 1× USB [USB-B]
Output	1× HDBT OUT [RJ45] 1× IR OUT [3.5mm]

RECEIVER (RX)

Input	1× HDBT IN [RJ45, w/ light] 1× IR IN [3.5mm] 1× SERVICE [Micro-USB]
Output	1× HDMI OUT [19-pin female] 1× IR OUT [3.5mm] 2× USB [USB-A]

MECHANICAL

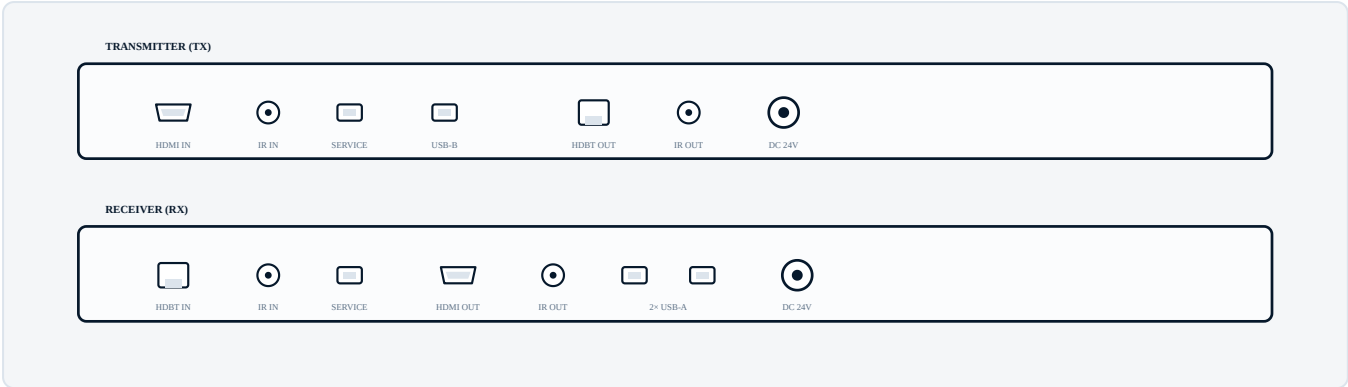
Housing	Metal, black
Dimensions	140 (W) × 65 (D) × 18 (H) mm each
Weight	TX 246g, RX 246g

POWER

Power Supply	DC 24V/1A, PoC supported
Power Consumption	10W

03 Interfaces & control

The transmitter and receiver panels, and how KVM and IR flow.



- 1 TX – HDMI IN / IR Source-side inputs: HDMI, IR, a Micro-USB service port and the USB-B host link for KVM. / SERVICE / USB-B
- 2 TX – HDBT OUT / HDBaseT output over RJ45 to the receiver, plus IR out. IR OUT
- 3 RX – HDBT IN / IR Display-side HDBaseT input (RJ45 with link light), IR and service. / SERVICE
- 4 RX – HDMI OUT / HDMI to the display, IR out, and two USB-A ports for the remote keyboard/mouse. IR OUT / 2x USB-A
- 5 DC 24V / PoC 24V supply on either end; PoC powers the far unit down the CAT6.

KVM both ways. Plug keyboard and mouse into the receiver's USB-A ports to drive the source at the far end — and bi-directional IR controls the source or display from either side.

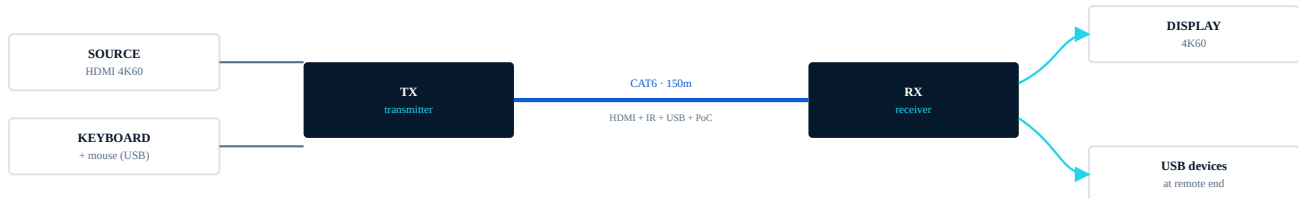
One power supply. Bi-directional PoC means a single 24V adapter at one end powers both units over the same CAT6.

EDID AND STATUS LEDs

EDID DIP switch (TX)	COPY: copies the EDID of the receiver's HDMI OUT port · STD: default 1080P 2CH (factory default is COPY)
PWR LED (TX / RX)	Red, lit when the unit is powered on
Link Signal LED (green)	Solid: good TX–RX connection · Flashing: poor connection · Off: not connected
Data Signal LED (yellow, TX)	Solid: HDMI signal with HDCP · Flashing: HDMI without HDCP · Off: no HDMI signal

04 Application example

Rack the source, put the operator at the display 150 m away.



one CAT6 carries 4K60 HDMI, bi-directional IR, USB KVM and power

Remote operation. The source lives in a rack or back room; an operator at the screen 150 m away sees 4K60 and drives it with a real keyboard and mouse over USB KVM.

One cable, everything. HDMI, IR, USB and power all ride a single CAT6 — ideal for conference rooms, control desks and signage.

ORDERING

BLU-HDTX150-KVM

18Gbps HDBaseT Extender Set (150m) with KVM — TX + RX, HDMI 2.0b / HDCP 2.2 / USB 1.1, 18Gbps, 4K2K@60Hz 4:4:4, 150m @ 1080P60 / 120m @ 4K60 over one CAT6, bi-directional IR + USB KVM, bi-directional PoC, 24V PSU

bluKnot

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