5Gbps Dual-Host USB-C Extender over CAT6a (100m/328ft) with Dual 4K HDMI Out

TX/RX Kit with 100W USB-C PD Charging, Balanced/Unbalanced Audio Output, RS-232 & FSYNC GPIO

MPN: EXT-USBCPD2X4K-100M



Extend two USB-C host laptops to a remote location up to 100 meters away — with dual 4K displays, USB peripherals, analog audio, and control — over a single CAT6a cable. The KanexPro EXT-USBCPD2X4K-100M is a 5Gbps USB 3.2 Gen 1 extender kit that carries USB, two HDMI displays, analog audio and control to the far end. Two selectable USB-C host ports on the transmitter support auto/manual switching for seamless presenter handoff, while USB-C PD charging up to 100W powers laptops directly from the TX.

At the receiver, dual HDMI 2.0b outputs deliver mirrored or extended displays at up to 4K@60Hz. Balanced and unbalanced analog audio is de-embedded via a 5-pin phoenix connector for integration with existing speaker systems. Three downstream USB device ports on each unit support webcams, PTZ cameras, keyboards, mice, and touch panels. RS-232 pass-through enables third-party control system integration, while FSYNC GPIO provides industrial camera synchronization. Bi-directional 24V PoC allows flexible power deployment at either end of the cable run.

100m Reach USB 3.2 Gen 1 at 5Gbps over one CAT6a cable	**Dual Host** Two USB-C inputs with auto/manual switching	**100W PD** Charges laptops directly from the transmitter	**Dual 4K@60Hz** Two HDMI 2.0b outputs, mirrored or extended	**Full Control** RS-232, FSYNC GPIO and analog audio out

KEY FEATURES

- Extends USB 3.2 Gen 1 (5Gbps) up to 100m/328ft over a single CAT6a cable via HDBaseT
- Dual USB-C host inputs on TX with auto/manual switching for two-laptop redundancy or presenter handoff
- USB-C PD charging up to 100W (1x100W or 2x50W) powers laptops from the transmitter
- Dual HDMI 2.0b outputs on RX up to 4K@60Hz, mirrored or extended (Synaptics DisplayLink driver required)
- Balanced and unbalanced analog audio de-embedding via 5-pin phoenix (LPCM 2CH, 32-192kHz)
- Three downstream USB device ports on each unit (1x USB-C, 2x USB-A) for webcams, PTZ cameras, keyboards and touch panels
- RS-232 pass-through on TX and RX, plus ASCII API via SERVICE or RS-232 port
- FSYNC GPIO pass-through for industrial camera sync; bi-directional 24V PoC powers either end

SPECIFICATIONS

USB Protocol	USB 3.2 Gen 1, up to 5Gbps
HDMI Compliance	HDMI 2.0b, 18Gbps
Video Resolution	Up to 4K@60Hz
Color Depth / Space	8/10/12-bit; RGB, YCbCr 4:4:4 / 4:2:2 / 4:2:0
Audio	HDMI: LPCM 2.0/5.1CH; analog de-embedding: LPCM 2CH (32-192kHz)
Transmission Distance	100m/328ft via CAT6a (F/FTP)
TX Connections	2x USB-C HOST in; 2x USB-A + 1x USB-C DEVICE out; 1x HDBT-USB3 RJ45 (24V PoC)
RX Connections	1x HDBT-USB3 RJ45; 2x USB-A + 1x USB-C DEVICE; 2x HDMI OUT; 1x AUDIO OUT (5-pin phoenix)
Control	RS-232 + FSYNC on 4-pin phoenix (TX and RX); SERVICE USB-C
Power Supply	AC 100-240V to DC 24V/7.5A (TX input 24V/7.5A; RX 24V/3.75A)
Power Consumption	TX: 120W max (incl. PD 100W); RX: 19.44W max
Dimensions / Weight	180 x 95 x 23mm each; TX 482g, RX 486g
Package Contents	1× USB 3.2 Extender (TX) • 1× USB 3.2 Extender (RX) • 1× 24V/7.5A Locking Power Supply • 2× 4pin-3.5mm Phoenix Connector • 1× 5pin-3.5mm Phoenix Connector • 4× Mounting Ears • 8× Machine Screws (KM3*4)

APPLICATIONS

BYOD conference room	**Lecture hall with presenter handoff** Two USB-C hosts land at the lectern	**Courtroom or council chamber evidence presentation** Counsel connect at the table	**Industrial machine vision** A USB 3.2 Gen 1 industrial camera at the RX	**Streaming or production control with a redundant host** A primary and a backup laptop both connect at the TX