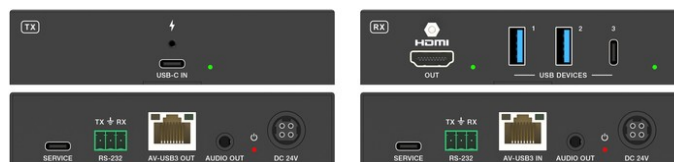


4K60 USB-C Extender Kit with USB 3.2, 100W Charging and HDMI Output, 40m

Single-Cable BYOD: DP Alt Mode Video, USB 3.2 Gen 1 Data and 100W Power Delivery over CAT6a to a Remote 4K Display

MPN: EXT-USBCPD4K-40M



Turns one USB-C port on a laptop into a complete room connection up to 40m/130ft away - 4K60 video, USB 3.2 peripherals and 100W charging on a single CAT6a cable. The EXT-USBCPD4K-40M transmitter accepts a full-featured USB-C input (DisplayPort Alt Mode 1.4a, USB 3.2 Gen 1 data and Power Delivery 3.0) and the receiver delivers HDMI 2.0b at up to 4K60 4:4:4, three USB 3.2 downstream ports, de-embedded analog audio and RS-232 pass-through at the display end, so a presenter plugs in one cable and the room's display, camera, speakerphone and touch panel all come up - with the laptop charging.

Bi-directional 24V PoC powers either end from a single supply, USB 3.2 Gen 1 runs at up to 2.5 Gbps for 4K room cameras and storage, and 25 EDID presets plus an ASCII API over the SERVICE port give integrators control of HDCP, EDID and USB port power. Resolutions up to 4096x2160@60, 5120x1440@60 and 5120x2160 (50Hz 4:4:4 / 60Hz 4:2:0) are supported over HDMI, with HDR10+, Dolby Vision and HLG pass-through. Requires CAT6a U/FTP 23AWG minimum; 100W laptop charging is available when the transmitter is powered from its own 24V/7.5A supply.

1 PRODUCT OVERVIEW

DESIGNED FOR

Commercial AV integrators and corporate IT teams standardizing BYOD rooms — huddle spaces, hot desks, lecterns and boardrooms — where the presenter's laptop is a USB-C machine and the display, camera and speakerphone are more than a few meters from the table.

The buyer is a commercial AV / collaboration integrator or corporate workplace-technology lead wiring huddle rooms, mid-size conference rooms, lecterns and classroom teaching walls where a single USB-C laptop or room PC must reach a display and a cluster of USB peripherals across the room — but not across the building. Core environments: corporate meeting rooms and boardrooms, higher-ed and K-12 classrooms, training rooms, telemedicine carts/rooms, and control positions where a workstation drives a remote monitor plus keyboard/mouse/camera. The integrator here already deploys BYOD/USB-C room systems (Teams Rooms, Zoom Rooms) and needs to move the laptop connection point away from the display without losing charging or high-speed peripherals. This is a within-room / within-suite tool ($\leq 40m$), not a between-floors backbone.

THE CHALLENGE

USB-C docks solve the one-cable problem only within 1–2m of the table; beyond that the room needs an HDMI extender for video, a separate USB extender for the camera and speakerphone, and a charger under the desk — three boxes, three power supplies and a dongle chain that every guest presenter has to figure out. The few USB-C extenders that carry video, USB and charging together are HDBaseT products that cost \$1,400–\$1,650 a pair and most still extend USB at 2.0 speeds and charge at 60W.

The moment a room needs the laptop or PC more than about two metres from the display — a lectern feeding a wall-mounted panel, a table feeding a far display, a workstation feeding a remote monitor and USB hub — the integrator loses the three things USB-C bundled, and existing fixes each surrender one: HDBaseT USB-C wall-plate extenders reach 70–100m and often deliver 100W PD, but their USB channel is USB 2.0 (480 Mbps), KVM-grade only; premium USB-C data extenders carry true USB 3.2 5 Gbps to 100m but supply only 15W PD; INOGENI's U-BRIDGE delivers 100W PD and 4K60 but its data path is USB 2.0; passive USB-C extension cables hold full spec only to ~1–3m. None delivers charging and SuperSpeed data and 4K/5K over one CAT run.

One USB-C cable at the table, one CAT6a to the display wall, and everything comes back: 4K60 4:4:4 HDMI, USB 3.2 Gen 1 at 2.5 Gbps to three ports, 100W charging and RS-232 — at \$699.95 for the kit, less than half the price of the INOGENI U-BRIDGE and below a Kramer EXT3-C-XR transmitter alone. Within KanexPro it is the performance tier above EXT-USBCPD4K-70M (\$599.95, HDBaseT 3.0, USB 2.0, PD on a second cable, 70m at 4K30): this kit trades 30m of 4K30 reach for USB 3.2 at 2.5 Gbps, DP 1.4a with 5120×1440 and 5K2K, analog audio out and true one-cable PD. It is also the USB-C sibling of EXT-HDMIKVM4K-40M — same receiver, same 40m link, laptop-side transmitter. It wins on price against INOGENI and Kramer, on USB 3.2 against every HDBaseT USB-C extender (all USB 2.0), and on 100W against the 60W class; its cost is reach (40m, where the HDBaseT field does 70–100m), and its USB data is 2.5 Gbps, not the full 5 Gbps of USB 3.2 Gen 1.

2 PRODUCT POSITIONING

EXT-USBCPD4K-40M is the single-cable USB-C extender kit for integrators building BYOD rooms who need 4K60 video, USB 3.2 peripherals and 100W laptop charging at the table without a dock, a second extender or a four-figure HDBaseT pair.

3 APPLICATIONS



1. Huddle Rooms & Small Meeting Rooms

One USB-C cable at the table drives the wall display at 4K60, connects the 4K camera and speakerphone over USB 3.2, and charges the laptop at up to 100W. No dock, no second extender.



2. Hot Desks & Flexible Workspaces

A CAT6a drop per desk with a USB-C pigtail: employees and guests plug one cable into any laptop and get display, peripherals and power. IT keeps the receiver and display at the wall.



3. Classrooms & Lecterns

Instructor laptops of any brand connect at the lectern; the projector or display, document camera and room audio sit up to 130 ft away. RS-232 passes through to the room controller.



4. Executive Offices & Boardrooms

Clean table with a single USB-C connection; the boardroom display and conferencing camera are at the far wall. 5120×1440 ultrawide displays supported over HDMI.



5. Healthcare Consult & Training Rooms

Clinician laptops present to a wall display and drive a USB camera for telehealth or teaching from a single cable; metal enclosures and ESD protection suit high-traffic rooms.



6. Retail Demo & Kiosk Counters

A USB-C laptop or mini PC behind the counter feeds a customer-facing 4K display and touch overlay at the front, charging while it runs; RS-232 to a display for power scheduling.

4 WHO THIS IS FOR

Corporate AV

Education

Government & Judicials

Healthcare

Enterprises

Hospitality

Ideal User

Commercial AV integrator or corporate workplace-technology lead designing BYOD rooms at scale. Fluent in DP Alt Mode, PD negotiation and USB device enumeration; evaluates on whether one cable reliably brings up the whole room for a guest presenter, and on total room cost against a dock-plus-extender bill of materials.

Project Types

Corporate AV; Education; Government & Judicials; Healthcare; Enterprises; Hospitality.

Typical Buyer

Integrator or workplace-technology lead selects; facilities or IT procurement executes against a room standard. In education and government the spec is written by an AV consultant, where the USB 3.2, 100W PD and RS-232 line items decide inclusion.

5 KANEXPRO PRODUCT COMPARISON

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
EXT-USBCPD4K-70M	USB-C HDBaseT 3.0 kit, 70m, \$599.95, the reach tier	18Gbps USB-C 4K60 HDBaseT 3.0 Extender with 100W PD (70m)	This kit is the performance tier: USB 3.2 Gen 1 at 2.5 Gbps, DP 1.4a, 5120×1440/5K2K, audio out, and PD on the same USB-C cable.
EXT-HDMIKVM4K-40M	HDMI KVM kit, same receiver, 40m	4K60 & Ultrawide HDMI KVM Extender with USB 3.2 over CAT6a (40m/130ft)	Choose it for control rooms and KVM; choose this kit for BYOD tables.
EXT-USBCPD4KC-40M	USB-C both ends, special order		Special order; HDMI receiver covers 95% of rooms.
EXT-USB3100M	USB 3.0 extender, 100m, no video	USB 3.0 Extender Over Cat6 100M HDBaseT	Pair with a video extender when the job needs full 5 Gbps or 100m; this kit replaces both boxes for 40m rooms.
EXT-HDMIKVM70M	value HDMI KVM, USB 2.0, 70m	4K60Hz HDMI KVM Extender over Cat6 - 70M	The value tier of the extender family.

6 FREQUENTLY ASKED QUESTIONS

Q: Why not just use a USB-C dock?

A dock only works within the length of a USB-C or HDMI cable - about 2m. The EXT-USBCPD4K-40M does what a dock does (video, USB, charging) but puts the display, camera and peripherals up to 40m/130ft away over one CAT6a cable.

Q: How does it compare to the INOGENI U-BRIDGE or Kramer EXT3-C-XR at \$884-\$1,645?

Both extend USB at 2.0 speeds (480 Mbps); this kit runs USB 3.2 Gen 1 at 2.5 Gbps. Kramer charges at 60W, this kit at 100W. The full KanexPro kit is \$699.95 - less than a Kramer transmitter alone and 43% of the INOGENI kit.

Q: Does the laptop really charge at 100W?

Yes, up to 100W via USB-C Power Delivery 3.0, when the transmitter is connected to the included 24V/7.5A supply. If you power the link from the receiver end via PoC, video, USB and audio still work but charging is not available.

Q: Is the USB 3.2 port 5 Gbps?

No. USB 3.2 Gen 1 devices operate at up to 2.5 Gbps on this extender - more than 5x USB 2.0 and enough for 4K room cameras, speakerphones, touch displays and storage. Devices that require a full 5 Gbps link are not supported.

Q: What cable does it need?

CAT6a U/FTP 23AWG minimum, direct-wired (T568B both ends, not crossover), shielded terminations recommended. 40m/130ft at 4K, 35m/115ft at 5K. The USB-C source cable should be a USB 3.2 Gen 1 passive cable up to 1.5m.

Q: Does it work with MacBooks, ThinkPads and Surface devices?

Any laptop with a full-featured USB-C or Thunderbolt port that supports DisplayPort Alt Mode - all Macs since 2016 and virtually all current business laptops. USB-C ports that carry data only (no DP Alt Mode) will not send video.

Q: How does it differ from EXT-USBCPD4K-70M and EXT-HDMIKVM4K-40M?

EXT-USBCPD4K-70M (\$599.95) is the reach tier: HDBaseT 3.0 to 70m at 4K30 (40m at 4K60), USB 2.0 with four ports, and 100W PD from a separate CHARGE port, so the laptop uses two cables. This kit is the performance tier: USB 3.2 Gen 1 at 2.5 Gbps, DP Alt Mode 1.4a with 5120x1440 and 5K2K, analog audio out, and video, data and 100W charging on one USB-C cable - at 40m. EXT-HDMIKVM4K-40M shares this kit's receiver but takes HDMI + USB-B from a racked PC: choose it for control rooms and KVM, this kit for laptops at a table.