

4K60 USB-C to USB-C Extender Kit with USB 3.2, 100W Charging and Touch Return, 40m

One USB-C Cable at the Lectern, One at the Interactive Display: DP Alt Mode Video, USB 3.2 Gen 1 Data and 100W Power Delivery over CAT6a

MPN: EXT-USBC2C4K-40M



Extends a laptop's USB-C port to a USB-C interactive display or monitor up to 40m/130ft away - 4K60 video, USB 3.2 data and touch return on one CAT6a cable, with 100W charging at the desk. The EXT-USBC2C4K-40M transmitter accepts a full-featured USB-C input (DisplayPort Alt Mode 1.4a, USB 3.2 Gen 1 data, Power Delivery 3.0) and the receiver delivers a full-featured USB-C output - DP Alt Mode 1.4a video plus USB 3.2 Gen 1 data on the same connector - so a SMART, Promethean, ViewSonic, BenQ, Dell or LG interactive panel plugs in with a single USB-C cable and its touch, camera and hub come back to the presenter's laptop. Three more USB 3.2 downstream ports, de-embedded analog audio and RS-232 pass-through sit at the display end.

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 cameras and touch, 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) pass over the USB-C link with HDR10+, Dolby Vision and HLG. Requires CAT6a U/FTP 23AWG minimum; 100W laptop charging is available when the transmitter is powered from its own 24V/7.5A supply. For HDMI displays and projectors use EXT-USBCPD4K-40M.

1 PRODUCT OVERVIEW

DESIGNED FOR

K-12 and higher-education classroom technologists, interactive-display integrators and corporate workplace teams whose room display is a USB-C interactive flat panel — SMART, Promethean, ViewSonic, BenQ, Dell, LG CreateBoard, Samsung Flip Pro, Sharp/NEC PN-ME — and whose lectern or table sits beyond USB-C cable reach.

THE CHALLENGE

Interactive panels now take one USB-C cable for video, touch and charging, but only within 2-5m of the laptop. Beyond that the choices are a 5-15m active optical USB-C cable (no in-wall run, no PoC, no RS-232) or an HDMI extender plus a separate USB extender for touch — two boxes and a dongle at the lectern, and the panel's single-cable design is lost. USB-C-to-USB-C extenders that keep DP Alt Mode at the far end are rare and cost \$1,400 and up.

THE KANEXPRO ADVANTAGE

The receiver's USB-C OUT is a full-featured port — DP Alt Mode 1.4a video and USB 3.2 Gen 1 data on one connector — so the panel connects exactly as it would to a laptop and its touch and hub come back over the CAT6a link at 2.5 Gbps, with 100W charging at the desk and RS-232 to the room controller. Within KanexPro it is the USB-C-output variant of EXT-USBCPD4K-40M (same transmitter, same link); use that kit for HDMI displays and projectors, this kit for USB-C panels, and CBL-AOCUSBC-05/10/15M for runs under 15m.

2 PRODUCT POSITIONING

EXT-USBC2C4K-40M is the USB-C-to-USB-C extender kit for classroom and meeting-room integrators who need a laptop to reach an interactive display's USB-C port — video, touch and 100W charging — up to 40m over one CAT6a cable, without losing the panel's single-cable design or paying HDBaseT prices.

3 APPLICATIONS



1. K-12 Classrooms

Teacher laptop at the lectern, interactive panel at the front wall up to 130 ft away: one USB-C cable each end, touch and annotation come back to the laptop, the laptop charges. Works with SMART, Promethean, ViewSonic, BenQ and LG boards.



2. Higher-Education Lecture Rooms

Podium to a USB-C interactive display or 98" panel over in-wall CAT6a; RS-232 passes to the room controller and the API reports link and signal status to the help desk.



3. Corporate Meeting & Training Rooms

A USB-C interactive display (Dell C-series, Samsung Flip Pro, Sharp/NEC PN-ME) at the wall, the presenter's laptop at the table: video, touch, room camera and 100W charging on one cable.



4. Healthcare Education & Consult Rooms

Clinician laptops present to a USB-C panel with touch for case review and teaching; metal enclosures and ESD protection suit high-traffic rooms.



5. USB-C Monitors at Hot Desks

Desk monitors with USB-C in (Dell U-series, LG, Samsung) at a hot desk far from the racked or docked laptop; monitor hub returns keyboard, mouse and webcam.



6. Retail & Experience Centers

USB-C touch displays on the floor driven from a laptop or mini PC in the back room; touch interaction returns over the same link.

4 WHO THIS IS FOR

Education

Corporate AV

Government & Judicials

Healthcare

Enterprises

Houses of Worship

Ideal User

Classroom or workplace technologist standardizing rooms around a USB-C interactive display; or the integrator installing 10-200 boards a year. Evaluates on whether touch and video arrive on the panel's USB-C exactly as with a direct cable, on in-wall CAT6a runs, and on total room cost against an active cable or a two-box extender pair.

Project Types

Education; Corporate AV; Government & Judicials; Healthcare; Enterprises; Houses of Worship.

Typical Buyer

District/campus AV standards owner or workplace-technology lead selects; the IFP dealer or integrator carries it into the bid; procurement executes against the classroom or room standard.

5 KANEXPRO PRODUCT COMPARISON

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
EXT-USBCPD4K-40M	USB-C in, HDMI out kit, 40m	4K60 USB-C Extender Kit with USB 3.2, 100W Charging and HDMI Output, 40m	Choose it for HDMI displays, projectors and signage; choose this kit when the display has a USB-C input and touch must return.
EXT-USBCPD4K-70M	USB-C in, HDMI out over HDBaseT 3.0, 70m, \$599.95	18Gbps USB-C 4K60 HDBaseT 3.0 Extender with 100W PD (70m)	EXT-USBCPD4K-70M (USB-C in, HDMI out over HDBaseT 3.0, 70m, \$599.95): that kit adds reach and HDBaseT interoperability but runs USB 2.0, PD on a separate CHARGE port, and no USB-C output; this kit keeps a full-featured USB-C output with USB 3.2 Gen 1 and touch return.
EXT-HDMIKVM4K-40M	HDMI KVM kit, racked PC	4K60 & Ultrawide HDMI KVM Extender with USB 3.2 over CAT6a (40m/130ft)	EXT-HDMIKVM4K-40M (HDMI KVM kit, racked PC): that kit takes HDMI in + USB-B host and outputs HDMI, for control rooms and KVM, not BYOD; this kit is USB-C-to-USB-C for a laptop reaching an interactive panel.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
CBL-AOCUSBC-05M	/ 10M / 15M (active optical USB-C cables, video + data + PD in one cable to 15m at \$299-\$499): no boxes, no PoC, no RS-232	Adaptive USB-C 3.2 Gen2 Active Optical Cable - 5M	Sell those under 15m; sell this kit beyond 15m or in-wall.

6 FREQUENTLY ASKED QUESTIONS

Q: Which interactive displays work with the USB-C receiver?

Any display whose USB-C input accepts DisplayPort Alt Mode video. Verified on manufacturer spec pages: SMART Board MX V5 / MX Pro, Promethean ActivPanel 9, ViewSonic ViewBoard IFP50-5 and CDE30, BenQ Board RE04, Dell C5522QT / C6522QT / C8621QT, LG CreateBoard TR3DK, Samsung Flip Pro WMB and Sharp/NEC MultiSync PN-ME. Samsung QBC/QMC, Sony BZ40L, LG UH5N/UR640S and Philips Q-Line signage, and installation projectors, have no USB-C video input - use EXT-USBCPD4K-40M (HDMI out) for those.

Q: Does touch come back to the laptop?

Yes. The receiver's USB-C OUT carries USB 3.2 Gen 1 data together with the DP Alt Mode video, so the panel's touch controller, camera and hub enumerate on the laptop exactly as with a direct USB-C cable. Verify on your specific board model before a large rollout.

Q: The panel supplies 65W or 90W on its USB-C port - is that a problem?

No. The receiver does not draw power from the display; the display simply sees a source that does not request PD. Laptop charging (up to 100W) is delivered at the transmitter end from the included 24V/7.5A supply.

Q: Why not an active optical USB-C cable?

KanexPro's CBL-AOCUSBC-05M/10M/15M are the right answer up to 15m with a surface run. This kit is for runs beyond 15m, in-wall CAT6a, sites that want PoC-powered ends, RS-232 to a controller, and the API for monitoring.

Q: How does it compare to the INOGENI U-BRIDGE?

INOGENI also offers USB-C at the far end but extends USB at 2.0 speeds (480 Mbps) and lists at \$1,645. This kit runs USB 3.2 Gen 1 at 2.5 Gbps and lists at \$699.95.

Q: What cable does it need?

CAT6a U/FTP 23AWG minimum, direct-wired (T568B both ends), shielded terminations recommended. 40m/130ft at 4K, 35m/115ft at 5K. USB-C cables at each end: USB 3.2 Gen 1 passive up to 1.5m, or USB 2.0 passive up to 2m.

Q: Which KanexPro extender for which room?

USB-C interactive display or monitor: this kit. HDMI display or projector with a laptop at the table: EXT-USBCPD4K-40M. Racked PC with HDMI and USB-B: EXT-HDMIKVM4K-40M. 70m HDBaseT reach with USB 2.0: EXT-USBCPD4K-70M. Under 15m: CBL-AOCUSBC active cables. ---