

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



1 PRODUCT OVERVIEW

DESIGNED FOR

AV/IT integrators and systems designers specifying advanced USB-C AV docking extension for control rooms, broadcast studios, medical imaging suites, command centers, and large-venue dual-presenter environments.

THE CHALLENGE

Premium conference and control room environments need a single-cable solution that delivers USB, dual 4K video, audio, power, and control to a remote location at 100m — no such product exists from a single competitor at this price.

THE KANEXPRO ADVANTAGE

The only USB HDBaseT extender kit combining: dual USB-C host inputs with auto/manual switching, 100W USB-C PD charging, dual HDMI 2.0b 4K60 outputs, balanced/unbalanced audio de-embedding, RS-232, FSYNC GPIO, and 24V PoC in a single TX/RX pair at 100m.

2 PRODUCT POSITIONING

EXT-USBCPD2X4K-100M is the premium USB-C AV docking extension kit for mission-critical environments where two hosts must share a remote display, audio, and USB infrastructure over a single CAT6a cable at 100 meters.

3 APPLICATIONS



Control Rooms

Two-operator switchover at a remote display station without disturbing the source rack — auto/manual host switching enables seamless handoff between operators.



Boardrooms

Extend dual-laptop presenter capability to a remote display wall at 100m with dual 4K HDMI, audio de-embed for room speakers, and USB peripherals.



Broadcast Studios

Drive dual 4K confidence monitors from a production rack at 100m; balanced audio output feeds the studio's patchbay. FSYNC GPIO synchronizes cameras.



Medical Imaging

Extend imaging workstations to remote surgical or diagnostic displays with 4K60 fidelity, audio, and USB device access over one CAT6a run.



Lecture Halls

Enable two-lecturer redundancy or guest-presenter handoff to a remote 4K display with local audio de-embed for the hall PA system.



Command Centers

Dual-host redundancy ensures continuous display and USB access in unmanned or 24/7 operations centers — auto switching keeps the active host on-screen.

4 WHO THIS IS FOR

AV/IT Integrators

Corporate AV

Education

Industrial

Healthcare

Security

Ideal User

AV/IT integrator or systems engineer specifying mission-critical dual-host USB-C AV docking extensions.

Project Types

Control rooms, broadcast, medical imaging, command centers, large-venue dual-presenter.

Typical Buyer

AV integrator (specifier); AV director, IT director, or facilities manager (approver).

5 KANEXPRO PRODUCT COMPARISON

EXT-USBCPD2X4K-100M is the flagship dual-host AV docking extender in the KanexPro USB family:

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
EXT-USBCPD2X4K-100M	This product	Dual USB-C host, dual 4K HDMI, 100W PD, audio, RS-232, FSYNC, 100m	Maximum feature set for dual-host, dual-display AV docking environments
EXT-USBCPD4K-70M	Same family	Single USB-C host, single 4K HDMI, 100W PD, USB 2.0, 70m	Single-host, single-display BYOD; lower cost; 70m max
EXT-USBC-100M	Same family	USB-C host only, no video, 100m	Pure USB extension when video is not needed
EXT-USBC2XI-100M	Same family	USB-C + USB-B dual host, no video, 100m	Legacy USB-B host compatibility without video

► EXT-USBCPD2X4K-100M is the right choice for dual-host, dual-display AV docking at 100m where audio de-embed and 100W PD are required.

6 FREQUENTLY ASKED QUESTIONS

Q: Can both USB-C hosts be connected simultaneously?

Yes. Both USB-C host ports are connected at the same time, with auto or manual switching determining which host is active at the receiver. The inactive host can still be charged at 50W while the active host draws up to 100W.

Q: Does the dual HDMI output support different content on each display?

Both HDMI outputs can be configured to mirror or extend the active host's display, depending on the host's display settings.

Q: What audio formats does the analog de-embed support?

LPCM 2CH at 32–192kHz via the 5-pin phoenix connector. Balanced and unbalanced output is supported for direct connection to powered speakers, amplifiers, or audio DSPs.

Q: Is 100W PD supported when two laptops are connected?

Yes — in dual-host mode, each host can receive up to 50W. In single-host mode, the active host can receive the full 100W.

Q: Can it power the RX from the TX over the CAT6a cable?

Yes. Bidirectional 24V PoC powers the RX over the cable; connect the 24V/7.5A power supply to the TX.

Q: What HDMI resolutions are supported?

Up to 4K@60Hz (HDMI 2.0b, HDCP 2.2) on both outputs. Full HDR is not listed as supported on this product; verify source/display compatibility.

Q: How does auto host switching work?

When set to auto mode, the system monitors both hosts and switches to the available active host if the primary goes offline — enabling fail-over in unmanned environments.

7 SALES ANALYSIS

Channel Fit	AV distribution; specialist AV/IT resellers; direct for broadcast, medical, and command center project specification.
Deal Size	1–4 units per project for premium control room or broadcast. 5–20 for enterprise multi-room rollouts.
Sales Cycle	4–12 weeks for project specification. Spec-in typically with display and AV system procurement.
Key Objections	"Why not use a KVM switch?" (answer: KVM switches don't extend 100m or deliver USB-C PD; this eliminates the switch and the extender in one kit). "Do I really need dual 4K?" (answer: for dual-presenter or redundancy environments, yes — also enables extended desktop).
Win / Loss Themes	Win on: unique feature set (no direct competitor), 100m + dual HDMI + audio + 100W PD + dual-host. Lose on: premium price requires justification; complexity may be over-spec for simple single-presenter rooms.
Top Use Cases	1. Control room dual-operator workstation at 100m; 2. Broadcast studio dual-host 4K extension with audio de-embed.