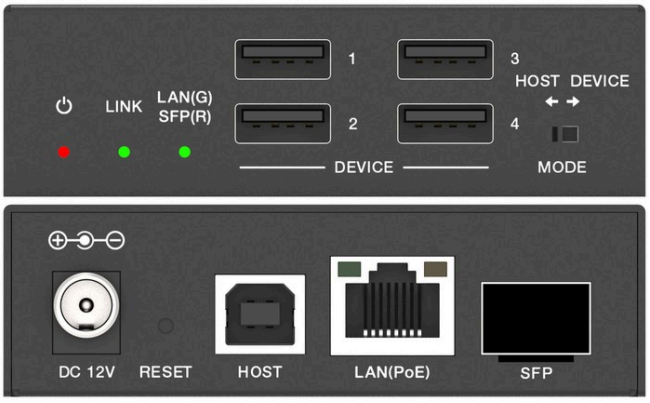
USB 2.0 over IP 1GbE Network Extender with SFP Fiber, PoE & 4-Port USB-A

Extend USB Over the Existing LAN Without a Dedicated Cable Run — 4-Port USB 2.0, Copper or Fiber, PoE-Powered at Either End

MPN: EXT-USB2IP



Puts four USB 2.0 ports wherever the building network reaches, with no dedicated cable run between the computer and its peripherals. The EXT-USB2IP is a compact black metal unit (3.35 x 4.63 x 1.00 in) that carries USB 2.0 at up to 480Mbps across a managed 1GbE network over RJ45 copper or SFP fiber. A switch on the panel sets each unit as the Host, which takes one Type-B connection to the computer, or the Device, which gives four Type-A ports for peripherals. Power comes from PoE as an IEEE 802.3at Class 4 or 802.3af powered device, or from the included 12V locking supply, so the far end needs no outlet. It is the right choice for conference rooms, lecture halls, control rooms and dispatch centers where reaching across the existing LAN matters more than USB 3.0 bandwidth or a point-to-point cable.

Copper and fiber are in the same housing. The unit selects between them automatically and gives fiber priority when both are connected, so one part covers a copper drop at one end and a fiber link at the other. Keyboard and mouse extension works one-to-one and one-to-many, so one host can be operated from more than one station. It runs on the same Gigabit switch as AV-over-IP encoders and decoders, which puts USB beside the video at every endpoint. The strongest advantage is that one SKU serves both ends: the same unit becomes the Host or the Device, so a project stocks one part number and one spare covers either end of every link. Each extension link uses two units; the second unit is sold separately.

1 PRODUCT OVERVIEW

DESIGNED FOR

Rooms where the computer and the people using it are in different places. The PC or codec sits in an IDF, credenza or equipment closet, and the touch panel, keyboard, mouse, camera or printer sits at the table, the lectern or the operator console. Typical sites are corporate meeting spaces, higher-ed teaching rooms, control and dispatch centers, healthcare and lab stations, and campus or government buildings where the link has to cross a switch or run on fiber.

THE CHALLENGE

A USB cable only reaches so far, and the usual workarounds each cost something. Point-to-point Cat extenders need a dedicated cable pulled between the two ends, which means new pathway, new labor and no way to use the network drops already in the room.

THE KANEXPRO ADVANTAGE

- Runs over the managed 1GbE switch already on site, on the same network as AV-over-IP encoders and decoders, so USB reaches the endpoint without a dedicated cable run.
- RJ45 copper and SFP fiber in one housing, selected automatically with fiber priority.
- PoE powered device to IEEE 802.3at Class 4 and 802.3af, so the table, lectern or console end needs no outlet, with up to 5V 0.9A per port on 802.3at.
- One unit becomes the Host or the Device with a switch, so a project stocks one part number and one spare replaces either end.
- Keyboard and mouse one-to-many from the standard unit.

2 PRODUCT POSITIONING

> ***The EXT-USB2IP is four-port USB 2.0 over the network for commercial AV integrators: one PoE-powered SKU that runs on copper or fiber at either end of the link, so a project no longer needs a dedicated USB cable run or separate copper, fiber and PoE models.***

3 APPLICATIONS



1. Conference room touch panel with the host in the rack

The room PC or codec host sits in an IDF or credenza rack, and a USB touch overlay or touch panel sits at the table. A Device unit at the table is powered by a PoE 802.3at switch port, so no outlet is needed under the table. A Host unit sits at the rack. USB 2.0 touch data crosses the existing LAN, and the room needs no dedicated USB cable.



2. Lectern keyboard and mouse in a lecture hall

The teaching PC lives in a secured equipment closet. The Device unit's four Type-A ports at the lectern take the keyboard, mouse, a presenter clicker receiver and a flash drive. Keyboard and mouse one-to-many lets one host be operated from more than one station in a divisible room, subject to pairing configuration.



3. Campus or government links over fiber

Where the host and the user station are past 100m, or in separate buildings, the SFP port carries the link over fiber. Copper is used at the other end, and the unit selects between the two automatically. One SKU covers both the fiber and the copper sides. **The fiber distance and module type are not yet stated in the manual. Confirm them before quoting a distance.**



4. Control room operator stations

The operator's keyboard and mouse are extended from hosts in a cooled equipment room to the console over the facility network. One-to-many keyboard and mouse supports supervisor and operator positions.



5. Kiosk and digital signage peripherals

A signage player or kiosk PC sits in a back room or ceiling space. Its USB peripherals sit at the kiosk face over a PoE drop: a receipt printer, a touch overlay, a card reader or a camera. The metal enclosure is compact (85 x 117.5 x 25.5mm); the included mounting ears are for the optional 6U V2 rack.



6. Healthcare and lab workstations

Hosts stay in a secured IT room while USB input devices, printers and capture peripherals sit at the nurse station or lab bench, linked over the network. The ±15kV air-gap and ±8kV contact ESD rating to IEC 61000-4-2 suits high-touch environments.

4 WHO THIS IS FOR

Corporate meeting spaces | Higher-ed teaching spaces | Government and defense facilities | Healthcare | Control rooms | Digital signage and kiosks

Ideal User	commercial AV integration engineer or IT/AV systems designer. They spec the network and AV system together, are comfortable with VLANs, PoE budgets and SFP, and care about spares and remote serviceability.
Project Types	corporate meeting spaces, higher-ed teaching spaces, government and defense facilities (where fiber matters), healthcare, control rooms, digital signage and kiosks.
Typical Buyer	- The design engineer or consultant writes it into the spec. - The integrator's purchasing team picks the brand within the spec, which is where price matters. - The end customer's IT team approves anything that touches the network, which is where PoE class and 1GbE matter.

5 FREQUENTLY ASKED QUESTIONS

Q: How many units do I need for one extension link?
Two. Each unit can be set to Host or Device with a switch. One unit connects to the computer through its USB Type-B Host port, and the second sits at the far end and provides four USB Type-A ports for devices. The same part works at either end, so one spare covers both ends of every link on the project.

Q: Does it need a dedicated cable, or can it run over the existing network?
It runs over a standard 1GbE network, through the switches already on site. Each unit connects to the network by an RJ45 port over CAT6/6A/7 up to 328ft (100m), or by its SFP fiber port. Where both are connected, fiber takes priority; the unit switches between copper and fiber automatically.

Q: Do I need power outlets at both ends?
Not if the switch provides PoE. Each unit is a PoE powered device to IEEE 802.3at (Class 4) and also accepts 802.3af. Where PoE is not available, use the included 12V/2.5A locking power supply. USB port power depends on the source: - 12V local power: up to 5V 1A from each of the four Device ports - 802.3at PoE: up to 5V 0.9A per port - 802.3af PoE: 5V 1.2A total across all four ports Specify 802.3at PoE or local power for bus-powered devices that draw more current.

Q: What USB devices does it support?
It is a USB 2.0 extender with a maximum rate of 480Mbps. It supports USB flash drives, cameras, printers, fax machines, touch panels, keyboards, mice and other USB 2.0 devices. Test any device with special timing requirements on the installed network before deployment.

Q: Can one computer be controlled from more than one location?
Yes, for keyboard and mouse. The unit supports keyboard and mouse extension one-to-one and one-to-many, so a single host can be operated from more than one station. General USB data is carried one-to-one.

Q: What is in the box?
One USB 2.0 over IP 1GbE network extender, one 12V/2.5A locking power supply, two mounting ears and four KM3x6 machine screws. Order two units for each extension link.