USB-EXT-2

USB over Twisted Pair Extender

- > Extends USB signals up to 100 meters (330 feet) over CAT5e twisted-pair cable^[1]
- > Enables transparent point-to-point USB extension without any configuration or programming
- > Plug-and-play compatible with all types of USB 1.1 and 2.0 devices and hosts^[2]
- No drivers required with Windows®, macOS®, or Linux® [2]
- > Supports up to 480 Mbps throughput
- > Mass Storage Acceleration maximizes USB 2.0 bulk transfer speeds
- > Provides two USB Type A ports for USB devices
- > Supplies 1.5 Amps USB power across both ports (1 Amp maximum per port)
- > Expandable using up to four USB hubs (not included)
- > 100-240V AC power pack (included) can be connected at the host (local) or device (remote) end^[S]

The Crestron® USB over Twisted Pair Extender (USB-EXT-2) delivers reliable USB signal extension for all types of USB 1.1 and 2.0 devices in a conference room, classroom, auditorium, command center, medical facility, public space, or residence. Without requiring any special configuration or drivers, the USB-EXT-2 enables wire runs up to 100 meters (330 feet) over a single CAT5e twisted-pair cable [1].

The USB-EXT-2 is compatible with USB 1.1 and High-Speed USB 2.0, supporting virtually any USB device type including keyboards and mice, whiteboards, game controllers, cameras, audio devices, mobile devices, printers, flash drives, hard drives, and hubs. It is plug-and-play compatible with computers running Windows®, macOS®, and Linux® operating systems without requiring any additional drivers to be installed.^[2]

The USB-EXT-2 is composed of two extender components. The "local" extender connects to your computer, conferencing system, media server, game console, or other USB host. The "remote" extender provides two USB ports for connecting USB devices (HID, cameras, microphones, mass storage, smartphones, etc.) at a remote location. Linking the two extender components requires just one run of CAT5e (or better) unshielded twisted-pair cable. [1] Both extender components are powered by a single 100-240V AC power pack, which can be connected at either end wherever an AC power receptacle is available. [3]

Note: The USB-EXT-2 is a simple point-to-point USB signal extender. It does not switch or route USB signals, and does not connect to a network. For KVM and other applications routing USB signals over an Ethernet network, please refer to the USB-EXT-DM-LOCAL and USB-EXT-DM-REMOTE.



SPECIFICATIONS

Communications

Link: USB extension up to 100 m (330 ft) over solid-core CAT5e (or better) unshielded twisted pair (UTP) cable [1]

USB Device Support: USB 1.1 and 2.0 compatible including mass storage and isochronous devices $^{\text{[2]}}$

USB Hub Support: Any signal chain may include up to 4 USB hubs plus one USB-EXT-2 system $^{\text{[2]}}$

Maximum USB Devices: 30 USB devices, or 4 USB hubs with 26 USB devices

Host Computer OS Support: Windows, macOS, Linux USB Throughput: USB 2.0 up to 480 Mbps, USB 1.1 up to 12 Mbps

Connectors - Local Extender

24V 1A: (1) 2.1 x 5.5 mm DC power connector; 24 Volt DC power input (power pack included) [3]

Link: (1) 8-pin RJ45 connector, female; Connects to Link port on the Remote Extender [1]

USB: (1) USB Type B connector, female (USB B to A cable included); USB 2.0 device port for connection to the USB host computer, media server, game console, annotator, codec, etc.

Config (front): (For factory use only)

Connectors - Remote Extender

24V 1A: (1) 2.1 x 5.5 mm DC power connector; 24 Volt DC power input (power pack included) [3]



USB-EXT-2 USB over Twisted Pair Extender



USB-EXT-2 Local Extender – Front View



USB-EXT-2 Local Extender – Rear View

Link: (1) 8-pin RJ45 connector, female; Connects to Link port on the Local Extender^[1]

Config (front): (For factory use only)

USB (front): (2) USB Type A connectors, female;

USB 2.0 host ports for connection of USB mice, keyboards, whiteboards, game controllers, cameras, audio devices, mobile devices, printers, flash drives, hard drives, hubs, and other USB devices [2];

Available USB Power: 1 Amp maximum per port, 1.5 Amps maximum total

Indicators - Local Extender

Mode: (1) Recessed pushbutton (for factory use only)

Power: (1) Blue LED, indicates operating power is supplied via the local power pack or via the Link connection [3]

Link: (1) Green LED, indicates a valid Link connection to the Remote Extender

Host: (1) Green LED, indicates a valid connection to the USB host **Activity:** (1) Amber LED, indicates data activity on the Link interface

Indicators - Remote Extender

Power: (1) Blue LED, indicates operating power is supplied via the local power pack or via the Link connection [3]

Link: (1) Green LED, indicates a valid Link connection to the Local Extender Host: (1) Green LED, indicates a valid connection to the USB host at the Local Extender

Activity: (1) Amber LED, indicates data activity on the Link interface Mode (rear): (1) Recessed pushbutton (for factory use only)

Power

Power Pack (included) [3]: Input: 100-240 Volts AC, 50/60 Hz; Output: 1 Amp @ 24 Volts DC

Available USB Power: Supplies 1 Amp maximum per each of two USB Type A ports, 1.5 Amps maximum total



USB-EXT-2 Remote Extender – Front View



USB-EXT-2 Remote Extender – Rear View

Environmental

Temperature: 32° to 122° F (0° to 50° C) Humidity: 20% to 80% RH (non-condensing)

Construction (Typical per Unit)

Housing: Metal, black finish, adhesive rubber feet

Mounting: Includes four slots for wire ties or other third-party mounting

hardware

Dimensions (Typical per Unit)

Height: 1.03 in (26 mm) without feet

Width: 2.96 in (75 mm) Depth: 3.43 in (87 mm)

Compliance

CE, IC, FCC Part 15 Class B digital device

MODELS & ACCESSORIES

Available Models

USB-EXT-2: USB over Twisted Pair Extender

Notes:

- 1. For the "Link" connection between the Local Extender and Remote Extender units, use high quality, solid core CAT5e (or better) unshielded twisted pair (UTP) cable. If connecting either unit through a wall jack, a stranded patch cord may be used. The maximum aggregate cable length is 330 ft (100 m) between units. The minimum cable length is 6 ft (1.8 m). Do not connect the Link ports to an Ethernet LAN or any other network or device.
- 2. The USB-EXT-2 is engineered to deliver maximum compatibility with the widest possible range of devices. Crestron does not guarantee that all USB devices or hosts are compatible with the USB-EXT-2. Certain USB devices may require additional driver installation if not directly supported by the computer's operating system.
- The power pack must be connected to either the Local Extender or Remote Extender unit, not both. Power is passed to the secondary device via the Link connection.



USB-EXT-2 USB over Twisted Pair Extender

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at https://www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

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