## **USB over Category Cable Extenders**



- Provide reliable, high-speed USB signal extension for most USB 1.1 or 2.0 devices<sup>1</sup>
- Compatible with Crestron® USB over Category Cable Extender Wall Plates (USB-EXT-2-LOCAL-1G and USB-EXT-2-REMOTE-1G)
- Extend USB signals up to 330 ft (100 m) over CAT5e (or better) twisted-pair cable<sup>2</sup>
- 100-240 VAC power supply (included)
- Enable transparent point-to-point USB extension without any configuration or programming
- Plug-and-play compatible with most types of USB 1.1 and 2.0 devices and hosts<sup>1</sup>
- No drivers required with Windows®, macOS®, or Linux® operating systems¹
- Transport USB over CAT5e at speeds up to 480 Mbps
- Mass Storage Acceleration maximizes USB 2.0 bulk transfer speeds
- Expandable using up to 4 USB hubs (not included)
- USB-EXT-2-REMOTE provides 2 USB Type A ports

The Crestron® USB over Category Cable Extenders (USB-EXT-2-LOCAL and USB-EXT-2-REMOTE) deliver reliable, high-speed USB signal extension for 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 extenders enable wire runs up to 330 ft (100 m) over a single CAT5e (or better) unshielded twisted-pair (UTP) cable. The USB extenders support most USB device types and are plug-and-play compatible with computers running Windows®, macOS®, and Linux® operating systems.

Two types of USB extenders are available:

- USB-EXT-2-REMOTE Provides connectivity for up to two USB devices (keyboards, whiteboards, mobile devices, etc.) at one location
- USB-EXT-2-LOCAL Provides connectivity for a single USB host (computer, media server, codec, etc.)

Linking the two extenders requires one run of CAT5e unshielded twisted-pair cable.<sup>2</sup> Both extenders are powered by a single 100-240 VAC power supply, which can be connected at either end to an AC power receptacle.<sup>3</sup> The USB-EXT-2-LOCAL and USB-EXT-2-REMOTE are compatible with the USB over Category Cable Extender Wall Plates (USB-EXT-2-LOCAL-1G and USB-EXT-2-REMOTE-1G).

NOTE: The USB-EXT-2-LOCAL and USB-EXT-2-REMOTE are simple point-to-point USB signal extenders. They do not switch or route USB signals, and do not connect to a network. For KVM and other applications routing USB signals over an Ethernet network, please refer to the USB over Category Cable Extenders (USB-NX2-LOCAL-1G and USB-NX2-REMOTE-1G) or the USB over Ethernet Extenders with Routing (USB-EXT-DM-LOCAL and USB-EXT-DM-REMOTE).



## **USB over Category Cable Extenders**

### **Specifications**

#### Communications

Link USB extension up to 330 ft (100 m) over

solid-core CAT5e (or better) unshielded

twisted pair (UTP) cable<sup>2</sup>

USB 1.0/1.1 and 2.0 compatible including **USB Device** mass storage and isochronous devices<sup>1</sup> Support

**USB Hub Support** Any signal chain may include up to 4 USB

hubs plus one USB-EXT-2-LOCAL and

one USB-EXT-2-REMOTE<sup>1</sup>

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

**Devices USB** devices

Host Computer OS Windows®, macOS®, and Linux®

Support operating systems

**USB Throughput** USB 2.0 up to 480 Mbps, USB 1.1 up to

12 Mbps

#### Connectors - Local extender

24 V 1 A (1) 2.1 x 5.5 mm DC power connector;

24 VDC power input (power supply

included)3

Config For factory use only

(1) 8-pin RJ45 connector, female; Link

Connects directly to a Remote extender<sup>2</sup>

(1) USB Type B connector, female **USB** 

USB 2.0 device port for connection to the USB host computer, media server, game console, annotator, codec, etc.

#### Connectors - Remote extender

(1) 2.1 x 5.5 mm DC power connector; 24 V 1 A

24 VDC power input (power supply

included)3

Config For factory use only

Link (1) 8-pin RJ45 connector, female;

Connects to Link port on the Local

 $extender^2$ 

(2) USB Type A connectors, female; **USB** 

USB 2.0 host ports for connection of USB devices such as mice, keyboards,

and other USB devices1

Available USB Power: 1 A maximum per

port, 1.5 A maximum total

#### Indicators - Local extender

(1) Amber LED, indicates data activity on the Activity

Link interface

(1) Green LED, indicates a valid connection to Host

the USB host

(1) Green LED, indicates a valid Link Link

connection to the Remote extender

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

(1) Blue LED, indicates operating power is Power

supplied via the local power supply or the Link

connection3

#### Indicators - Remote extender

(1) Amber LED, indicates data activity on the Activity

Link interface

(1) Green LED, indicates a valid connection to Host

the USB host at the Local extender

(1) Green LED, indicates a valid Link Link

connection to the Local extender

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

(1) Blue LED, indicates operating power is Power supplied via the local power supply or the Link

connection3

#### **Power**

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

USB-EXT-2-LOCAL USB powered via the USB host interface<sup>3</sup>

Input: 100-240 VAC, 50/60 Hz; USB-EXT-2-**REMOTE** 

Output: 0.75 A @ 24 VDC

#### **Environmental**

32° to 122° F (0° to 50° C) **Temperature** 

Humidity 20% to 80% RH (non-condensing)

### Construction

Housing Metal, black finish, adhesive rubber feet Mounting Includes four slots for wire ties or other

third-party mounting hardware

#### **Dimensions**

1.03 in. (26 mm) without feet Height

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

### Compliance

CE, IC, FCC Part 15 Class B digital device



## **USB over Category Cable Extenders**

### Models

USB-EXT-2-LOCAL
USB over Category Cable Extender, Local

**USB-EXT-2-REMOTE**USB over Category Cable Extender, Remote

**USB-EXT-2 KIT**USB over Category Cable Extender, Local and Remote

#### Notes:

- The USB extender 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 extender. Certain USB
  devices may require additional driver installation if not directly supported
  by the computer's operating system.
- For the Link connection between the Local and Remote extenders, as a
  minimum, use high quality, solid core CAT5e (or better) unshielded twisted
  pair (UTP) cable. If connecting either extender 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, including the USB-EXT-DM-REMOTE, USB-EXT-DM-LOCAL,
  USB-NX2-REMOTE-1G, USB-NX2-LOCAL-1G.
- 3. The power supply must be connected to either the Local or Remote extender, not both. Power is passed to the secondary extender via the Link connection. Crestron recommends installing this ferrite bead on the included 24 VDC power supply cable close to the device. When using a power source other than PoE, Crestron recommends installing this ferrite bead on the power supply cable close to the device.

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

This product is covered under the Crestron standard limited warranty. Refer to <a href="https://www.crestron.com/warranty">www.crestron.com/warranty</a> for full details.

The specific patents that cover Crestron products are listed online at

patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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