



- ▶ Extends two low speed (1.5Mbps) and full speed (12Mbps) devices up to 130ft (40m) over CATx cable
- ▶ Up to 275ft (84m) distance may be achieved with USB-HID keyboard and mouse extension
- ▶ Add a powered USB hub to increase the number of remote USB devices supported
- ▶ Robust ESD/EFT immunity for industrial environments
- ▶ No external power required to operate this product

## Features and Benefits

- Extends full speed USB 1.1 up to 130 feet (40 meters) over CATx cable
- Can extend two low speed USB HID devices such as keyboard and mouse up to 275 feet (84 meters)
- Will also extend USB 2.0 devices, but at USB 1.1 speeds
- Supports full speed (12Mbps) or low speed (1.5Mbps) USB devices
- Transmitter unit powered by computer USB, Receiver unit powered by Transmitter unit
- Plug and play, no software drivers required
- Supports all major Operating Systems: Windows, Mac OS X, Linux
- Receiver unit supplies up to 400mA power to USB devices
- Connect up to three self-powered USB hubs to the Receiver to support more USB devices
- Robust ESD and EFT immunity for industrial environments
- Made in North America

## Product Overview

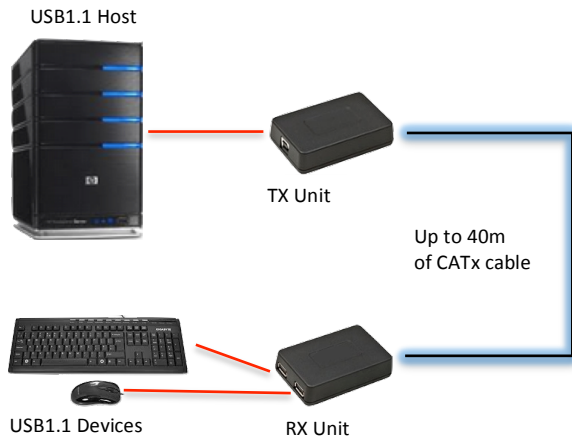
The CrystalLink USB1.1 Dual-Port is a versatile extender device that can be used in many different applications. It is a great way to put your peripherals where they are convenient to the user or to secure the USB host from unwanted access.

The CrystalLink USB1.1 extends USB devices up to 130 feet (40 meters) over CATx UTP/STP cable. Individual USB devices such as a keyboard or mouse, USB printer, or USB joystick can be located at a distance from the host PC using the CrystalLink USB1.1 Dual-Port extender. Additional USB devices can be connected using a self-powered USB hub.

The CrystalLink USB1.1 Dual-Port extension system consists of two units, a Transmitter and a Receiver. The Transmitter connects directly to a computer's USB port. The Transmitter and Receiver are linked via CATx solid core cable and USB devices are directly connected to the Receiver unit.

No external power supply is required to operate this device.

## Typical Application



The CrystalLink USB1.1 Dual-Port is ideal for use in commercial or industrial environments, or in a computer room where USB devices need to be connected at short distances away from a host PC.

**Cable Requirements** The CATx extension cable can be CAT5e, 6 or 7, UTP/STP cable. The CrystalLink USB1.1 Dual-Port performs best with solid core cable. Stranded (patch) cable and the use of patch panels will reduce the maximum operational distance. STP cable with grounded metal hoods is recommended. Do not use CrystalLink USB1.1 Dual-Port between buildings or for outdoor extension requirements.

**Installation** The CrystalLink USB1.1 Dual-Port extender is simple to install. Connect the Transmitter device to a free USB port on the host PC. Connect the Transmitter and Receiver units with CATx cable, and then connect one or two USB devices to the Receiver. No power supplies are required. The CrystalLink USB1.1 Dual-Port draws the required power from the USB host interface.

**Adding USB hubs** If you need to connect more than two USB devices at the Receiver, simply add a self-powered USB hub. Up to three hubs can be added in a chain. Each hub will reduce the maximum CATx extension cable distance by approximately 42ft (13m).

## Specifications

<b>Dimension (W X D X H)</b>	2.17" x 3.34" x .87" (55 x 85 x 22mm)
<b>Distance</b>	USB 1.1 – Up to 130ft (40m) USB HID – Up to 275ft (84m)
<b>USB host</b>	EHCI (USB2.0) and OHCI/UHCI (USB1.1)
<b>USB hub</b>	Supports up to three USB hubs in a chain, total extension distance will reduce by 42ft (13m) with each hub added
<b>USB speed</b>	Full-Speed (USB 1.1) at 12 Mbps Low-Speed (USB 1.1) at 1.5 Mbps
<b>Transmitter connectors</b>	1 x USB Type B female, 1 x RJ45
<b>Receiver connectors</b>	2 x USB Type A female, 1 x RJ45
<b>Interconnect cable</b>	CATx, UTP/STP, EIA/TIA 568A/B CAT 5, 5e, 6, 7 solid cable preferred
<b>Power source</b>	Transmitter – From PC via USB Receiver – From Transmitter unit
<b>Max current at Receiver</b>	400mA at the Receiver, when the Transmitter unit is supplied with 600mA
<b>Environment</b>	Operating temp: 32°F – 122°F (0°C – 50°C) Storage temp: -4°F – 158°F (-20°C – 70°) Rel. humidity: 20% – 80%, non-condensing
<b>Approvals</b>	FCC, CE, RoHS

## Part numbers

<b>CLK-2U1TP-40M</b>	CrystalLink USB1.1 Dual-Port Extender Kit, Transmitter and Receiver
<b>CAB-USBA<sup>nnn</sup></b>	USB type A/B cable, nnn=length



CrystalLink USB1.1 Dual Port – Transmitter Unit



CrystalLink USB1.1 Dual Port – Receiver Unit

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