



- ▶ Extends low-speed (1.5Mbps) and full-speed (12Mbps) devices up to 130ft (40m) over CATx cable
- ▶ Up to 275ft (84m) may be achieved extending USB HID Keyboard and Mouse
- ▶ Add a self-powered USB hub to increase the number of USB devices supported
- ▶ Robust ESD/EFT immunity for industrial environments
- ▶ No external power required to operate, power comes from host device

Features and Benefits

- Extends full-speed USB 1.1 up to 130 feet (40 meters) over CATx cable
- Can extend 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 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.

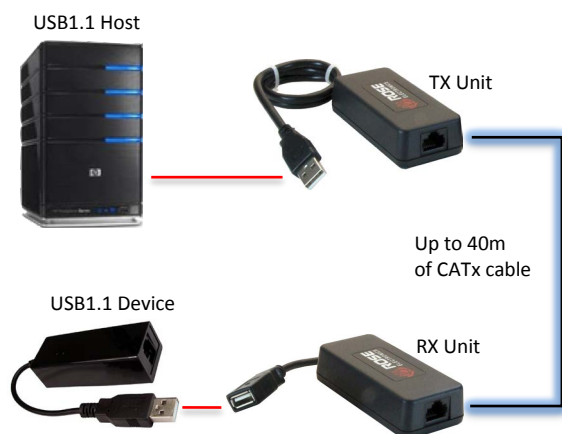
The CrystalLink USB1.1 extends USB devices up to 130 feet (40 meters) over CATx UTP/STP cable. Individual USB devices such as a keyboard or mouse, USB printer and USB joystick can be located at a distance from the host PC using the CrystalLink USB1.1 extender. Additional USB devices can be connected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

The CrystalLink USB1.1 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 product. The Transmitter gets its power from the USB host such as a PC. The Receiver gets its power from the Transmitter unit.

Typical Application

The CrystalLink USB1.1 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 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 between buildings or for outdoor extension requirements.

Installation The CrystalLink USB1.1 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 USB device to the Receiver. No power supplies are required. The CrystalLink USB1.1 draws the required power from the USB host interface.

Adding USB hubs If you need to connect more than one USB device 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).

Operation When the host PC is powered on and a USB device is connected to the Receiver unit, the USB device recognition/installation process should be displayed on the monitor. If the USB device does not install correctly, make sure the latest USB driver is installed on the host PC. Alternatively, add a self-powered USB hub between the USB device and the Receiver unit.

Specifications

Dimension (W x D x H)	1.57" X 3.34" X .98" 40 X 85 X 25mm
Distance	USB1.1 – up to 130ft (40m) USB HID – up to 275ft (84m)
USB host	EHCI (USB2.0) and OHCI/UHCI (USB1.1)
USB hub	Supports up to three USB hubs in a chain, total extension distance will reduce by 42ft (13m) with each hub added
USB speed	Full-Speed at 12 Mbps Low-Speed at 1.5 Mbps
Transmitter connectors	USB: 1 x USB Type A male Link: 1 x RJ45
Receiver connectors	USB: 1 x USB Type A female Link: 1 x RJ45
Interconnect cable	CATx, UTP/STP, EIA/TIA 568A/B CAT 5, 5e, 6, 7, solid cable preferred
Power source	Transmitter: From USB host Receiver: From Transmitter unit
Max current at Receiver	400mA at the Receiver, when the Transmitter unit is supplied with 600mA
Environment	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
Approvals:	FCC, CE, RoHS

Part numbers

CLK-1U1TP-40M	CrystalLink USB1.1 Kit, Transmitter and Receiver
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