# CrystalLink USB2.0 Flex-Power



# **Features and Benefits**

- Supports CATx cable distances up to 330 feet (100 meters) at speeds up to 480Mbps
- Unique Flex-Power feature requires an external power supply at one end only
- Uses standard solid core CATx cable
- Operates with USB1.1 and USB2.0 hosts
- Plug and play, no software drivers required
- Supports all major Operating Systems: Windows<sup>®</sup>, MAC OS X<sup>®</sup>, Linux<sup>®</sup>
- Remote extender provides up to 1A power to a single attached USB device
- Attach up to 4 powered USB hubs and up to 26 USB devices for additional remote USB device support
- Mounting slots present on both units to facilitate rack mounting using cable tie wraps
- Robust ESD and EFT immunity for industrial environments
- Made in North America

- Extends USB2.0 and USB1.1 devices up to 330ft (100m) over CATx cable
- Supports transparent USB2.0 extension at speeds up to 480Mbps
- Single power adapter can connect at either end
- Add a powered USB hub to increase the number of remote USB devices supported
- Robust ESD/EFT immunity for industrial environments
- Uses a single solid-core CATx cable

## **Product Overview**

The CrystalLink USB2.0 Flex-Power is a versatile extender device that can be used in a variety of applications. It is an ideal way to put your peripherals where they are convenient to the user or to secure the USB host from unwanted access.

The product is used in commercial, industrial, residential, medical, data center, and other environments where USB devices need to be connected up to 330 feet (100m) away from a host.

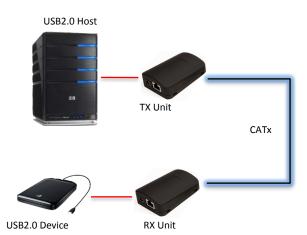
Individual USB devices such as a keyboard, mouse, touchscreen, disk drive, printer, joystick, communication device, or others can be located up to 330 feet (100 meters) from the host computer. Additional USB devices can be connected by using up to four self-powered USB hubs.

The CrystalLink USB2.0 Flex-Power extension system consists of two units: a transmitter and a receiver. The Transmitter connects directly to your CPU's USB port. The Transmitter and Receiver are linked via CATx solid core cable and your USB device is directly connected to the Receiver unit.

Only one external power supply is required to operate this device.



# **Typical Application**



**Cable requirements** The CATx extension cable can be CAT5e, 6, or 7 UTP/STP cable. The performance is optimized for use with solid core cable. Stranded (patch) cable and using patch panels will reduce the maximum operational distance. STP cable with grounded metal hoods is recommended.

**Installation** The CrystalLink USB2.0 Flex-Power extender is simple to install. Connect the transmitter device to a free USB port on the host PC. Connect the transmitter and receiver units together with the CATx link cable. Connect one USB device to the receiver end. You can choose at which end to place the single external power adapter. Power is transmitted along the CATx cable to the unpowered unit. Do not use CrystalLink USB2.0 Flex-Power between buildings or for outdoor extension requirements.

Adding USB hubs If you need to connect more than one USB device at the receiver end, add a powered USB hub. Add up to four hubs in a chain with a maximum of ten attached USB devices. The USB port on the receiver unit outputs 1A power.

**USB device operation** When the host is powered on and a USB device is connected to the Receiver unit, the USB device recognition and installation process will be performed automatically. If the USB device does not install correctly, then make sure that the latest USB driver is installed on the host.

# **Specifications**

Dimensions	2.6" x 3.4" x 1.2" (65 x 87.5 x 30mm)	
Weight	1.4 lb (0.64 kg)	
Power	100-240 VAC 50-60Hz	
	One external adapter, +24V DC, 1A	
Distance	330ft (100m) over a single CATx cable	
USB host	EHCI (USB 2.0) and OHCI/UHCI (USB 1.1)	
USB hubs	Up to four USB hubs, 26 devices total	
USB speed	High-Speed (USB 2.0) at 480Mbps	
	Full-Speed (USB 1.1) at 12 Mbps	
	Low-Speed (USB 1.1) at 1.5 Mbps	
Connectors	Transmitter:	
	USB host: USB Type B receptacle	
	Link: RJ45 jack	
	Power: Barrel jack (24V/1A)	
	Receiver:	
	USB device: Type A receptacle	
	Link: RJ45 jack	
	Power: Barrel jack (24V/1A)	
Link cable	CATx, UTP/STP, EIA/TIA 568A/B	
	CAT 5, 5e, 6, 7, solid core cable preferred	
Receiver	1 Amp maximum	
current		
Status LED's	Power (blue), Link (green), Host (green),	
	Activity (amber). Same LED's on TX and RX	
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, CPSIA (flammability)	

#### Part numbers

CLK-1U2TPB-100M/FP/PE	Kit, Transmitter, Receiver, and power supply
CLT-1U2TPB-100M/FP/PE	Transmitter unit only
CLR-1U2TPB-100M/FP/PE	Receiver unit only
CAB-USBAB005	USB-AB cable, 6ft (2.0m)
CAB-USBAB010	USB-AB cable, 10ft (3.0m)



Transmitter front



**Receiver front** 



Transmitter back



Receiver back



## WWW.ROSE.COM = sales@rose.com = (800) 333-9343

Rose Electronics • 10707 Stancliff Road • Houston, Texas 77099 Rose USA (281) 933-7673 • Rose Europe +49 (0) 2454 969442 Rose Asia +65 6324 2322 • Rose Australia +61 (0) 421 247083 datasheet-crystallink-usb2.0-catx-flex-power-revb-2018-02-27