

- Use as a 4 port USB2.0 high speed LAN extender or across a Gigabit ethernet network using existing cable infrastructure
- Extends up to 330ft (100m) as a direct extender
- USB extension over a Gigabit ethernet local area network, 1,000Base-T Layer 2 LAN
- Support for USB 3.0 host controllers and devices
- Transparent USB2.0 throughput up to 480Mbps
- Plug-and-play operation, no software drivers

### **Features and Benefits**

- Multi device transparent USB2.0 extension over a Gigabit ethernet LAN
- Supports USB2.0 throughput up to 480Mbps on all ports over 330ft (100 meters) of CATx cable when directly connected, point-to-point
- Supports Mass Storage Acceleration for USB2.0 device bulk transfers
- Extends USB2.0 peripherals such as flash drives, speakers, webcams, interactive whiteboards, keyboards and mice
- USB3.0 devices will operate at USB2.0 speeds
- A Gigabit LAN (1000BaseT) is recommended for optimum product performance.
- The remote unit features a 4-port USB2.0 hub.
  Support additional USB devices by adding a powered USB hub
- Transmitter and receiver units are "prepaired" to each other across the local LAN
- A switchable USB option enables dynamic switching of local and remote extender pairings across a LAN. When used in conjunction with a video matrix switch, it's possible to configure a fully compatible USb2.0 KVM network switch, controlled through a separate console or GUI software

### **Product Overview**

Small in size, this multi-function LAN extender can be used as an extension device across a Gigabit LAN, or as a point-to-point USB2.0 extender.

Simplicity of operation ensures the CrystalLink USB LAN Extender can be used for diverse applications including remote storage, security and USB camera monitoring, and matrix switch integration. The product has no jumpers, Plug-and-play operation is assured and so long as the USB devices are USB1.1, 2.0 or 3.0 compliant, they can be connected to the CrystalLink USB LAN Extender.

USB3.0 devices will operate at USB2.0 speed, subject to the available network bandwidth. With direct point-to-point operation, USB2.0 speeds of up to 480Mbps can be achieved.

For optimum performance, the CrystalLink USB LAN Extender should be connected to an existing and preconfigured Gigabit 1000Base-T local area network.

The performance of the USB network extension will be limited to the slowest link between the local and remote extender units. The LAN Extender units have unit address pairing that ensures the TX and RX units can locate and identify each other across the local area network.

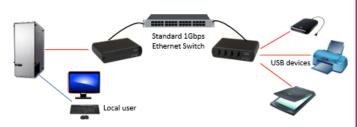
A power supply is required on the remote unit only.



# **Typical Application**



LAN Extender using direct CATx cable



LAN Extender over 1Gbps Ethernet LAN

#### Installation

The LAN Extender has some installation and operation guidelines:

- The Local and Remote units should be installed on the same subnet
- Cable distances between the host computer-to-TX unit, the RX unit to USB devices, and connections to the Ethernet switch(s) should be maintained as short as possible
- The preferred network configuration is a Gigabit Ethernet 1000Base-T network, or better
- The preferred CATx cabling should be CAT5e, solid core or better, with matching CATx connector types
- Communication on the local area network at a MAC address level should be unblocked.
- Original TX and RX units will be paired, but if not, then a re-pairing procedure is available
- The network speed is dependent on network configuration, bandwidth and performance

## **Specifications**

Dimensions	3.9" × 3.0" × 1.0"
(W × D × H)	100mm × 76mm × 26mm
	Local: from USB3.0 interface
Power	Remote: 100-240VAC, 50/60Hz,
	24VDC, 1A
USB port power	600mA at each USB receiver port
	concurrently
Maximum USB	30 devices on remote end using
devices supported	external USB hub
	Direct: up to 330ft (100m)
Cable distance	Ethernet: up to 330ft (100m) between
	network switches
Maximum	USB2.0 up to 480Mbps (subject to
throughput	network)
Data traffic	Layer 2
LED Indicators	Transmitter: power, link, host, activity
	Receiver: power, link, host, activity
Connectors	Transmitter:
	1 × USB2.0 type B connector
	1 × RJ45 link port
	Receiver:
	4 × USB2.0 type A connectors
	1 x RJ45 link port
	1 × 24VDC power connector
Environment	Operating temp: 32°F – 122°F (0°C –
	50°C)
	Storage temp: -4°F – 158°F (-20°C –
	70°C)
	Rel. humidity: 20% – 80%, non-
	condensing
Approvals	FCC, CE, RoHS2

## Part numbers

CLK-4U2TP-LNGB	CrystalLink USB2.0 Extender, 4 port, over Gigabit LAN
CLK-4U2TP-LNGB/S- USB	CrystalLink USB2.0 Extender, 4 port, over Gigabit LAN with switchable USB
RM-UD/CLK-USB	Shelf, wall or under desk bracket



Transmitter unit – rear panel



Receiver unit – rear panel



