

USB→CAT5 Extenders

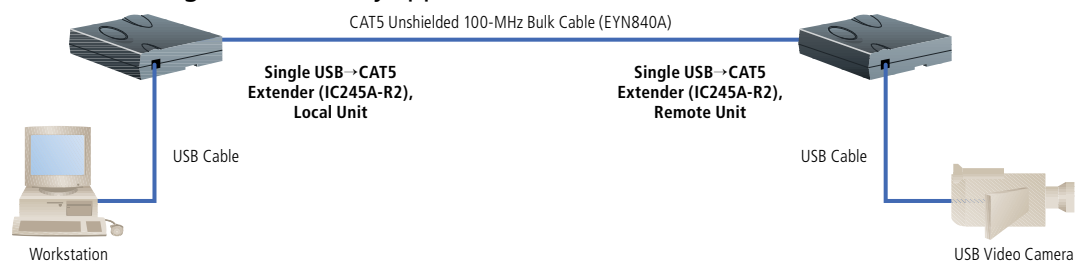
Extend your USB range by
50 or 100 meters, and supply
power to remote devices.



FEATURES

- » Extend the range of USB up to 50 or 100 meters (164 or 328 feet) over CAT5 cable.
- » Transmit power and data to one or two USB devices over the same CAT5 cable.
- » Deliver enough power to the remote unit to support most USB devices.
- » IC244A-R2 and IC246A-R2 support 12- and 1.5-Mbps USB devices; IC245A-R2 supports only 12-Mbps USB devices.
- » Connect up to four hubs between the workstation and the IC245A-R2's local unit.
- » Connect up to three hubs in series with the IC244A-R2 and IC246A-R2.
- » Contain an internal USB hub.
- » All include a local unit and a remote unit.

USB→CAT5 Extenders are great for security applications!



TECH SPECS

Standards — USB 1.1
CE Approval — Yes
Connectors — IC244A-R2–IC245A-R2: Local: (1) USB Type B, (1) RJ-45; Remote: (1) USB Type A, (1) RJ-45;
 IC246A-R2: Local: (1) USB Type B, (1) RJ-45; Remote: (2) USB Type A, (1) RJ-45
Operating Temperature — 39 to 104°F (4 to 40°C)
Power — IC244A-R2, IC246A-R2: From the USB bus; maximum 300-mA power to remote unit when local unit is supplied with 500 mA, maximum 600-mA power to remote unit when local unit is supplied with 1000 mA;
 IC245A-R2: From the USB bus; 5 VDC at 500 mA; USB power available at remote unit: 5 VDC at 300 mA
Size — Local and remote units: 1.2"H x 4"W x 2.8"D (3 x 10.2 x 7.1 cm) each
Weight — Local and remote units: 0.2 lb. (0.1 kg) each

Item

Code

Single USB→CAT5 Extenders 50-m (164-ft.) 100-m (328-ft.) ◆ Include (1) local unit and (1) remote unit.	IC244A-R2 IC245A-R2
Dual USB→CAT5 Extender 50-m (164-ft.) ◆ Includes (1) local unit and (1) remote unit.	IC246A-R2
For optimum performance, and a 20% savings, order...	
CAT5 Unshielded 100-MHz Bulk Cable, 24 AWG, Solid, 4-Pair, Beige	EYN840A-1000

NOTE: Each additional hub connected in series to the IC244A-R2 or IC246A-R2 reduces the USB→CAT5 Extenders' maximum range by 10 meters (32.8 feet).

Technically Speaking

USB.

USB's main attraction is that it makes adding peripherals to your computer incredibly easy. It enables you to connect peripherals to the outside of the computer so you don't have to open your PC.

A USB peripheral simply plugs right into the port and works. You don't need to install a card; you don't even need to turn off your computer. Because USB configuration happens automatically, built-in USB means you don't have to fiddle with drivers and software when adding most peripherals.

USB 1.1, the original USB standard, has two data rates: 12 Mbps for devices, such as disk drives, that need high-speed throughput and 1.5 Mbps for devices, such as joysticks, that need much lower bandwidth.

In 2002, **USB 2.0 (Hi-Speed USB 2.0)** gained wide acceptance in the industry. It increases the speed of the peripheral-to-PC connection from 12 Mbps to 480 Mbps, or 40 times faster than USB 1.1. This increase in bandwidth enhances the use of external peripherals that require high throughput, such as CD/DVD

burners, scanners, digital cameras, and video equipment. USB 2.0 also supports demanding applications where multiple high-speed devices run simultaneously, such as Web publishing. A USB 2.0 host will work with both USB 2.0 and USB 1.1 peripherals. USB 2.0 also supports Windows® XP through a Windows update.

Another USB standard, **USB On-The-Go (USB OTG)**, has also been developed. USB OTG enables devices other than a PC to act as a host. It enables portable equipment—such as PDAs, cell phones, digital cameras, and digital music players—to connect to each other without the need for a PC host.

There are four types of USB connectors: Type A, Type B, Mini B, and Mini A.

USB 1.1 specifies the Type A and Type B. USB 2.0 specifies the Type A, Type B, and Mini B. The Mini A connector was developed as part of the USB OTG specification and is used for smaller peripherals, such as cell phones.