



CopperLink™ Ethernet Extender

Model 2172

Patton's CopperLink 2172 breaks both distance and speed barriers with up to 50-Mbps full-duplex and distances of up to 5,500 feet (1,700 meters). Now a single twisted-pair can go the distance without sacrificing speed or cost

Ethernet Extension

Extends 10/100Base-TX Ethernet up to 6,000 feet over 2-wire AWG 26 unconditioned lines.

Operates Over Twisted Pair

Reduces the cost and hassles of new installations. Utilizes installed voice-grade twisted pairs to eliminate the expense of fiber or Cat5e cabling.

Full-duplex data-line rate of 100 Mbps

Provides near fiber performance for bandwidth intensive applications such as Triple Play services.

Plug and Play

No configuration or cable hassles during installation with auto-sensing 10/100, full or half duplex.

Multiple Line Rates Supported

Switch-selectable lines rates ensure the best possible line rate for each application

Asymmetric or Symmetric

Adapts to service provider and enterprise applications

Transparent LAN Bridging

Passes higher layer protocols and supports 802.1Q VLAN tagged and untagged traffic

The CopperLink™ Model 2172 Ultra-High-Speed Ethernet Extender leverages existing copper infrastructure to deliver high-speed Ethernet extension. Providing data rates up to 50 Mbps in each direction for an aggregated full-duplex speed of 100 Mbps, the Model 2172 is the perfect solution for delivering triple-play communications services and other bandwidth-intensive applications. CopperLink™ Ethernet Extenders easily inter-connect remote devices or remote networks to a central LAN for such applications as medical imaging, video-conferencing, Ethernet bridging, Triple Play, and VoIP.

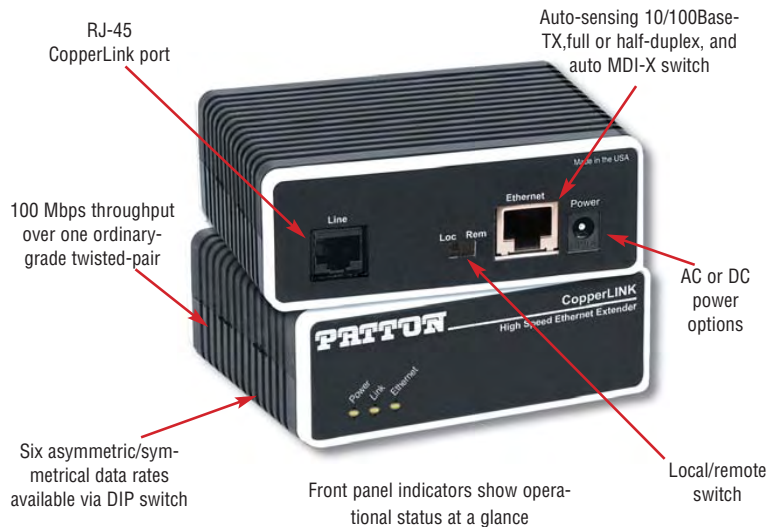
Six user-selectable settings for symmetrical

and asymmetrical rates provide the flexibility required to achieve the optimal speed-distance combination for each and every connection. Multi-rate symmetrical line rates allow each connection to be tuned for the length and gauge of the copper wire, in order to achieve the maximum possible data rate for the environment. Multi-rate asymmetrical line rates make the Model 2172 the ideal solution for service providers who want to differentiate their services or extend the reach of their customer base.

Get near-fiber performance without the expense with Patton's Ultra High-Speed CopperLink™ Ethernet Extender!

Visit www.patton.com for more information.

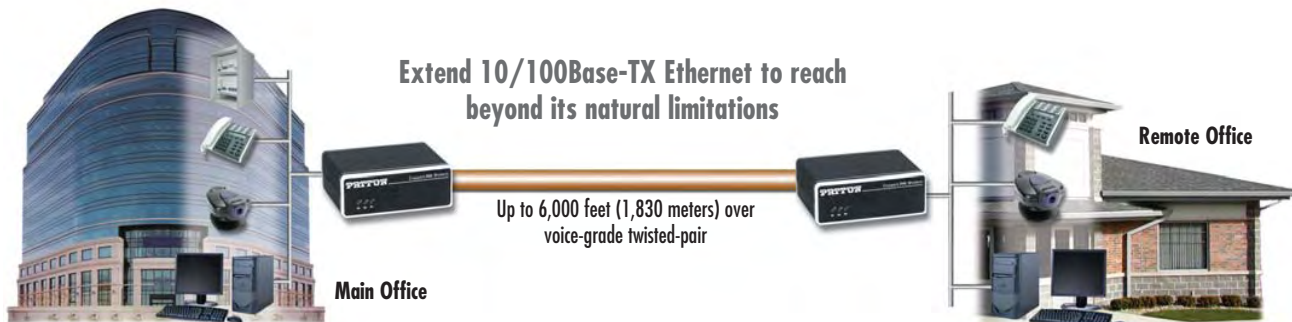
CopperLink™ Ethernet Extenders			
Take your network connections faster and farther over existing voice-grade wire with Patton CopperLink™ Ethernet Extenders!			
Max. Distance	Max. Speed	Distance at Max. Speed	CopperLink™ Model
1 mile	50 Mbps	800 feet	Model 2172
1.1 miles	16.6 Mbps	3,125 feet	Model 2168
0.75 mile	12 Mbps	4,000 feet	Model 2158
5.7 miles	4.6 Mbps	2.0 miles	Model 2157
5.7 miles	2.3 Mbps	3.1 miles	Model 2156
5 miles	144 kbps	5 miles	Model 2155



Workgroup Ethernet Extension Application

The Model 2172 multi-rate Ethernet Extenders are ideal for delivering Ethernet links to remote buildings that are beyond the 328-foot (100-meter) distance limit of Ethernet. The 100 Mbps throughput eliminates bandwidth concerns previous-

ly experienced with other copper wired transmission technologies. By utilizing existing voice grade copper pairs the expense and hassle of installing low capacitance or fiber cable is no longer required.



Asymmetrical Line Rates		
Line Rates (AWG 24/0.5 mm)		Distance in ft (m)
Upstream in Mbps	Downstream in Mbps	
1	4	6,000 (1,830)
1	16	4,000 (1,200)
2	50	2,000 (610)

Symmetrical Line Rates		
Line Rates (AWG 24/0.5 mm)		Distance in ft (m)
Upstream in Mbps	Downstream in Mbps	
10	10	4,000 (1,200)
25	25	2,000 (610)
50	50	800 (245)

EnviroNET™ models also available

Temperature ranges shown:
 -122°F to +185°F
 -40°F to +185°F
 +32°F to +185°F

Specifications

CopperLink Line Interface

RJ-45 (pin 4 = ring; pin 5 = tip)

Ethernet Interface

8-position shielded RJ-45. Auto-sensing 10/100Base-T with half or full-duplex operation. DIP switch capable of disabling 100-Mbps full-duplex for equipment that does not support 802.3X (Pause Packets)

Protocol

Transparent to high layer protocol. Supports 802.1Q VLAN tagging

Modulation

(Quadrature Amplitude Modulation) QAM 4-band

Duplexing Method

FDD (Frequency Division Duplexing)

Frequency Range

CopperLink: 0–12 MHz

Transmission

CopperLink line rate: Up to 50 Mbps

Surge Suppression

CopperLink line maximum current surge: 20kA (8/20μs) gas tube

Front Panel Indicators

Power, Link, Ethernet

Dimensions

1.5H x 4.13W x 3.75D in. (3.81H x 10.5W x 9.53D cm)

Weight

0.4 lbs (0.18 kg) without power supply

Power

External AC and DC options: 120VAC, and universal input (UI)—100–240 VAC, or optional -48 VDC, -24 VDC, or -12 VDC

Environment

Temperature: 32–122°F (0–50°C)
 Humidity: Up to 90% non-condensing

Compliance

FCC Part 15A, CE Mark, EMC Directive 89/336/EEC, Low-Voltage Directive 73/23/EEC