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

CopperLink™ Ethernet Extenders

Take your network connections faster and farther over existing voice-grade wire with Patton CopperLink™ Ethernet Extenders!

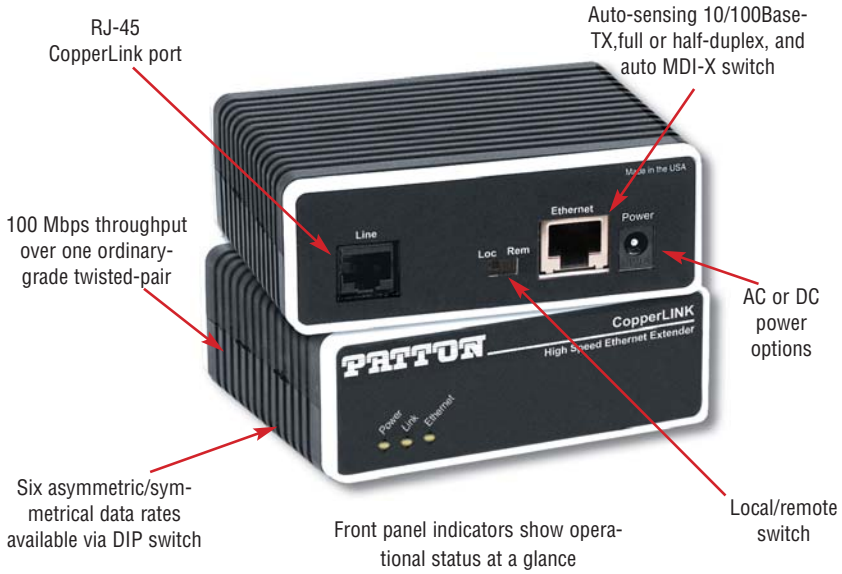
Max. Distance	Max. Speed	Distance at Max. Speed	CopperLink™ Model
1 mile	50 Mbps	800 feet	Model 2172
1.1 miles	16.6 Mbps	3,125 feet	Model 2168
0.75 mile	12 Mbps	4,000 feet	Model 2158
5.7 miles	4.6 Mbps	2.0 miles	Model 2157
5.7 miles	2.3 Mbps	3.1 miles	Model 2156
5 miles	144 kbps	5 miles	Model 2155

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.



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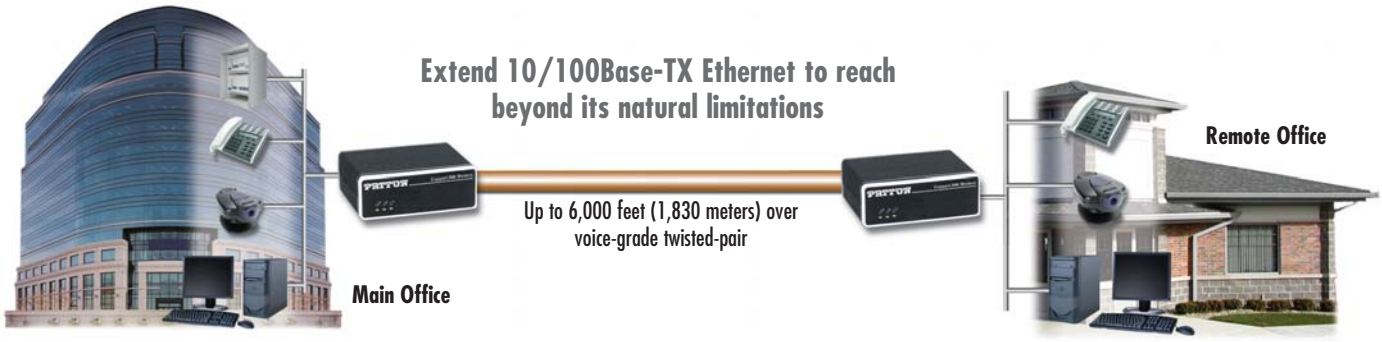
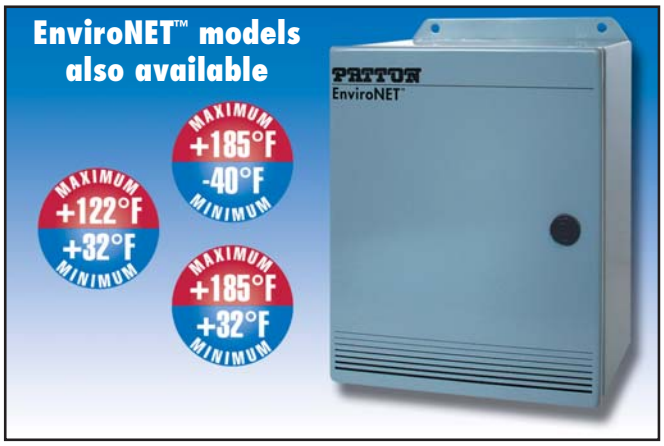
Workgroup Ethernet Extension Application

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 previously 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)		
Upstream in Mbps	Downstream in Mbps	Distance in ft (m)
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)		
Upstream in Mbps	Downstream in Mbps	Distance in ft (m)
10	10	4,000 (1,200)
25	25	2,000 (610)
50	50	800 (245)



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

07M2172-DS6

PE-Inalp Networks Private Ltd
An Associate of PATTON® Electronics Co., USA
Old No. 14 and New No.6,
Brahadambal Road,
Nungambakkam High Road
Chennai: 600 034, India
Phone **+91 44 45490395/6/7**
Fax **+91 44 4549.0394**
Email **sales@patton.co.in**
Web **www.patton.co.in**

Patton-Inalp Networks AG
Meriedweg 7
CH-3172 Niederwangen
Switzerland
Phone **+41 (31) 985 25 25**
Fax **+41 (31) 985 25 26**
E-mail **sales@inalp.com**
Web **www.inalp.com**

Patton Electronics Co.
7622 Rickenbacker Drive
Gaithersburg, Maryland 20879
USA
Phone **+1 301 975 1000**
Fax **+1 301 869 9293**
E-mail **sales@patton.com**
Web **www.patton.com**