CopperLink™ Ethernet Extender

Patton Model 2151

Overcome the distance limitations of Ethernet with the Patton Model 2151 CopperLink Ethernet Extender and provide up to 15 Mbps of Ethernet extension over a single twisted-pair of voice–grade wire.

Ethernet Extension
Extends 10/100 Base-TX Ethernet distances 1 mile using 2-wire 24 AWG unconditioned lines

Seamlessly Connect and Extend the LAN
802.3 10/100Base-TX LAN connection via built-in shielded RJ-45 port

CopperLink 2-Wire Connection
Easy 2-wire CopperLink connection via built-in RJ-45 port or terminal block

Switch Selectable
Asymmetrical or Symmetrical line rates up to 15 Mbps!

Dual Auto-sensing Full-Duplex Ethernet
Auto 10 or 100Base-T and full or half-duplex Ethernet operational

Transparent LAN Bridging
Passes higher layer protocols and supports 802.1Q VLAN tagging

Automatic Learning, Aging, and Filtering
Only allows packets with addresses outside the LAN to be forwarded

The Patton Model 2151 Multi-Rate CopperLink Ethernet Extender enables the utilization of existing copper infrastructure for high speed Ethernet extensions at data rates up to 15 Mbps. The 2151 includes asymmetrical and symmetrical settings for increasing the distance or speed of the Ethernet connections.

CopperLink applications include Ethernet extension, medical imaging, video-conferencing, and inter-connecting remote devices or remote networks to a central LAN. The multi-rate symmetrical line rates ensure the highest possible data rate is achieved over various lengths and types of copper wire and environments.

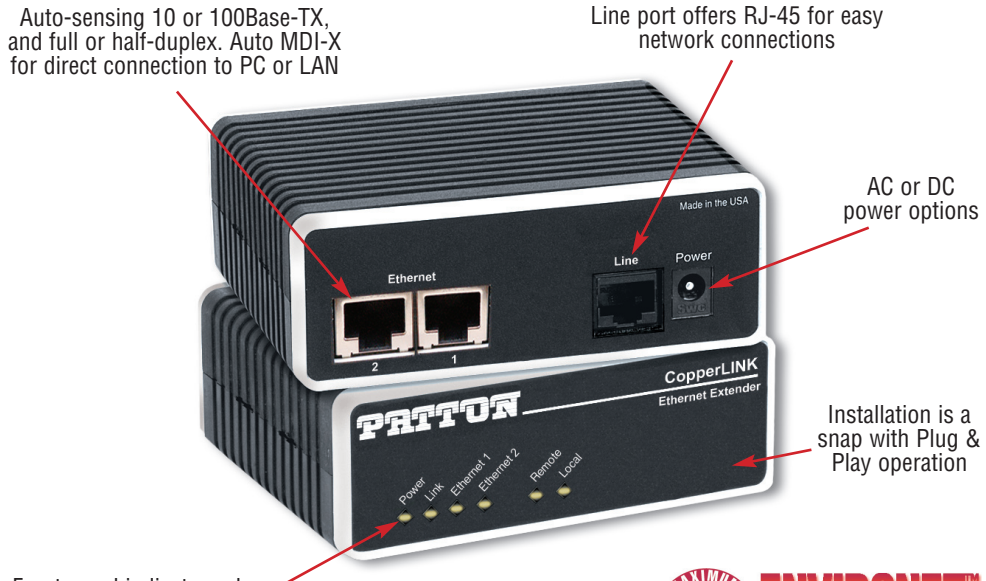
Multi-rate asymmetrical line rates make the Model 2151 the ideal solution for service providers who want to differentiate their services or extend the reach of their customer base. The Model 2151 allows service providers to offer unparalleled performance for such applications as always on Internet access, real-time bi-directional video streaming, and various multimedia applications.

If you want to take your network and voice connections farther and faster over existing copper and eliminate the expense of fiber, Patton's CopperLink Ethernet Extenders are the products for you! Just plug, power, and play!

Visit www.patton.com for more information.

CopperLink™ Copper Ethernet Extenders

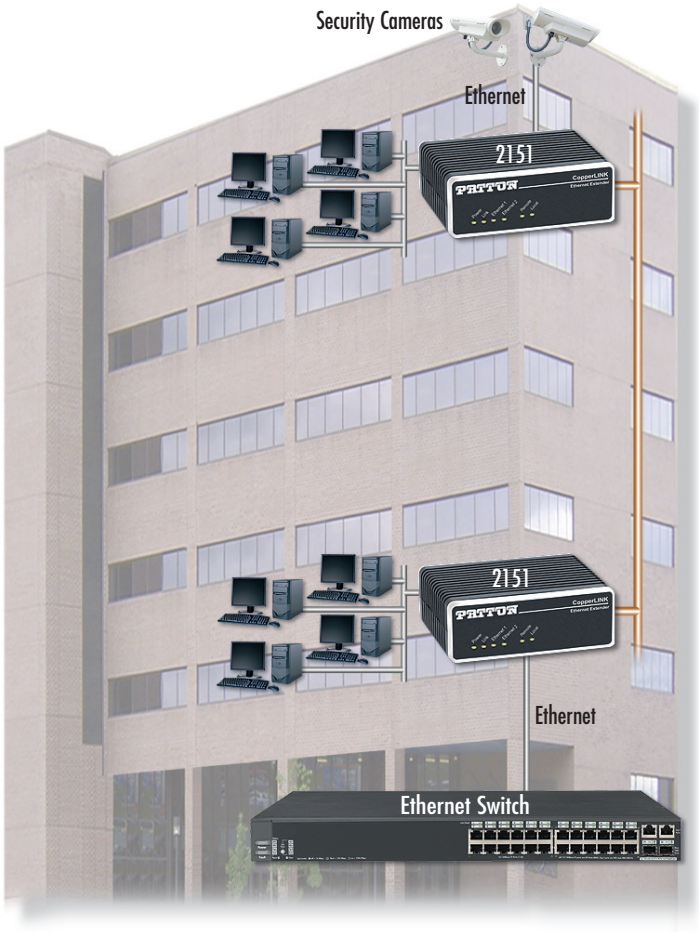
# of Ethernet Ports	# of wire pairs	Max. Speed (Mbps)	Distance at Max. Speed (feet)	CopperLink Model
2	1	N/A	2,625	2110
2	1	100	500	2173
4	4	45.6	4,600	2162
4	2	22.8	4,600	2161
4	2	15	2,953	2151
4	1	11.4	4,593	2160
2	1	10	4,265	2150
2	1	4.6	10,827	2157
1	1	2.3	16,404	2156



MAXIMUM +185°F -40°F MINIMUM ENVIRONET™ ALSO AVAILABLE

PATTON®

Workgroup Ethernet extension application



Ethernet Extender allows copper instead of fiber for vertical Ethernet spans!

These multi-rate Ethernet Extenders are ideal for bridging Ethernet spans inside buildings that are beyond the 328-foot (100-meter) distance limit of Ethernet.

For example, connecting remote LANs located on different floors in a building over already existing telephone-grade twisted pair.

Distance Chart, Based on 24 AWG (0.5 mm)

Data Rate	Distance in feet (km)	Throughput at Max Distance in Mbps
4/1	5,500 ft (1.6 km)	4.00 (DS)/1.00 (US)
9/1	5,750 ft (1.7 km)	8.98 (DS)/1.0 (US)
16/2	4,700 ft (1.4 km)	15.92 (DS)/2.0 (US)
6/6	5,500 ft (1.6 km)	5.98 (DS)/5.98 (US)
10/10	5,000 ft (1.5 km)	9.99 (DS)/9.99 (US)
15/15	4,250 ft (1.2 km)	14.96 (DS)/14.96 (US)

Note: Distance and link performance may vary depending on the environment and type/gauge of wire used.
Note: DS = downstream, US = upstream

Specifications

CopperLink Line Interface
RJ-45 (pin 4 = ring; pin 5 = tip) and two-position removable terminal block (supports 19-26 AWG or 0.9-0.4 mm wire)

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
Discrete multitone modulation (DMT)

Transmission
CopperLink line rate: Up to 15 Mbps

Front Panel Indicators
Power, CopperLink and QOL (quality of link), Ethernet Link and Activity Status

MTBF
193,766 hours

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: 32–104°F (0–40°C)
Humidity: Up to 90% non-condensing

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

07MD2151-DS3

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**