CopperLink™ Model 2160 Series

45-Mbps Long Range Ethernet Extender

With rates up to 45 Mbps and reach up to 24,000 feet (7,315 meters), the Patton Model 2160 is the most versatile Ethernet Extender offered today.

Data Rates up to 45 Mbps
Get reliable broadband connectivity with full-duplex symmetric rates and distances exceeding 4.5 miles (7,300m)

4 x 10/100 Ethernet Switch
Make up to 4 network connections easily. Built in MDI-X auto cross over switches eliminates messy and confusing cable configurations.

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.

QoS, CoS, and VLAN Support
Ensure mission critical network connections are of top quality with advanced traffic management features.

WWW/SNMP Manageable
Built-in console port makes setup a snap, you can also use the embedded HTTP/SNMP agent to remote manage the unit from anywhere in the world.

The Patton CopperLink Model 2160 Series simplifies and provides cost effective network extension by utilizing pre-existing twisted pair infrastructure. LAN extension doesn't have to be expensive or difficult. Patton's Model 2160 series of auto-rate Ethernet Extenders open the door to low-cost and easy set-up LAN extension. The LAN Extenders are easy to use and take advantage of existing copper twisted-pair infrastructure to connect LANs at high speed and over long distances.

There are three models available in the 2160 series, including the flagship Model 2162 that utilizes 1 to 4 pair of voice grade wires enabling maximum transmission speeds of 22.8 Mbps at a distance of 1.6 miles (2.6km). Also available is the Model 2161 (4 wire)—11.4 at 1.6 miles (2.6 km), and the Model 2160—5.7 Mbps at 1.6 miles (2.6 km). Maximum distance achieved with all CopperLink 2160 models is 4.1 miles (6.6 km).

Whether connecting corporate LANs or remote offices, Patton Ethernet Extenders offer the best combination of speed and distance in the industry. Other LAN extenders operate at a single rate or are difficult to configure for LANs located at different distances, but the CopperLink Ethernet Extenders' auto-rate adaptation feature ensures that users get the highest speed possible for the distances they are trying to reach. Patton Ethernet Extenders come with a built-in MDI-X switch, which simplifies connection to LANs or PCs since it works correctly with a straight-through cable or a cross-over cable. Set-up is easy, just connect the Ethernet port cable and the copper twisted-pair to the Extenders, then apply power!

Patton CopperLink Auto-rate Ethernet Extenders are the perfect fit for cost effective simple and efficient LAN extension!

Visit www.patton.com for more information.

15 front panel LEDs show operational Status at a glance

Proven Patton reliability

Configure with Console, Web, Telnet, or DIP-switches
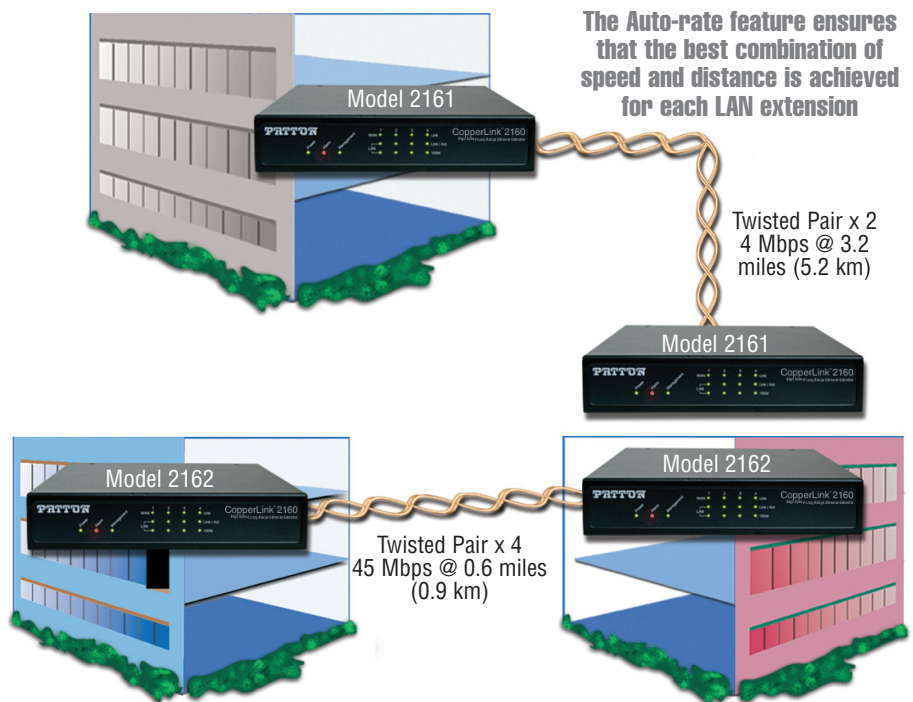
4-port Fast Ethernet Switch

2Base-TL (EFM) RJ-45 Line Port

Patton's CopperLink Auto-Rate Ethernet Extenders are the perfect fit for simple, cost-effective high speed Ethernet Extension. They allow customers to take advantage of the existing copper infrastructure to connect remote LAN's across distances and at speeds previously unthought-of. The auto-rate feature ensures the highest speed is achieved on each connection, and the plug-n-play operation ensures they are up and running in seconds. Add in the 4 x auto-sensing full/half duplex 10/100Base-TX Ethernet ports with the integrated crossover switch to make setup even easier. The value of these Ethernet Extenders can't be beat!

- **Auto-Rate Feature**—The advanced auto-rate algorithm automatically determines the best possible rate for each connection and sets up each extender without any need for user interface.

- **Plug-and-Play**—Just unpack the extenders, plug them into each end of the extension, power them up, and they are up and running. It doesn't get any easier!

- **High Speed/Long Reach**—These Ethernet Extenders provide the best combination of speed and distance seen anywhere in the industry!

The Auto-rate feature ensures that the best combination of speed and distance is achieved for each LAN extension

Model 2161

Model 2161

Twisted Pair x 2
4 Mbps @ 3.2 miles (5.2 km)

Model 2162

Model 2162

Twisted Pair x 4
45 Mbps @ 0.6 miles (0.9 km)

Specifications*

CopperLink Connector
Shielded RJ-45

Modulation
TC-PAM 32; 16

Ethernet Connectors
4 x 8-position shielded RJ-45 • Auto-sensing 10/100Base-TX with half or full-duplex operation

LAN Protocols
802.1d Transparent Bridging, 2K MAC address learning bridge

VLAN Support
IEEE 802.1q VLAN Tagging • Port Based VLAN, up to 4K VLANs • VLAN Stacking (Q-in-Q)

QoS Support
Rate limiting rule-based/port-based • Traffic classification based on port/802.1p/DSCP (Differentiated Services Code Point) • WRR (Weighted Round Robin)/SPQ (Strict Priority Queing) scheduling algorithm

Management Connector
Web: Shielded RJ-45 • Console: Shielded RJ-45

Management Interface
Web based GUI • CLI for local and console access; password protected • SNMP v1/v2 (RFC 1157/1901/1905) agent and MIB (RFC 1213/1493) • Software upgradeable via web-browser/TFTP

Front Panel Indicators
Power, Alarm, Diagnostic, WAN Link (x4), Ethernet Link (x4), Ethernet 100M (x4)

Power Supply
AC : Universal Input (UI)—90–240 VAC (50~60 Hz)

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

Environment
Operating Temperature: 0 to 50° C
Storage Temperature: -40 to 85° C

Dimensions
7.67L x 1.89W x 6.61D in.
(195L x 48H x 168D mm)

Weight
2.86 lbs (1.29 kg) without power supply

Ordering Info

2160/EUI-2PK: High Speed, Long Range Ethernet Extender Kit (1 pair), 5.7 Mbps

2161/EUI-2PK: High Speed, Long Range Ethernet Extender Kit (2 pair), 11.4 Mbps

2162/EUI-2PK: High Speed, Long Range Ethernet Extender Kit (4 pair), 22.8 Mbps

* Specifications are subject to change without notice.

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