

With Data rates up to 22.8 Mbps and reach up to 24,000 feet the Patton Model 2160 is the most versatile EFM Ethernet Extender offered today.

Overview

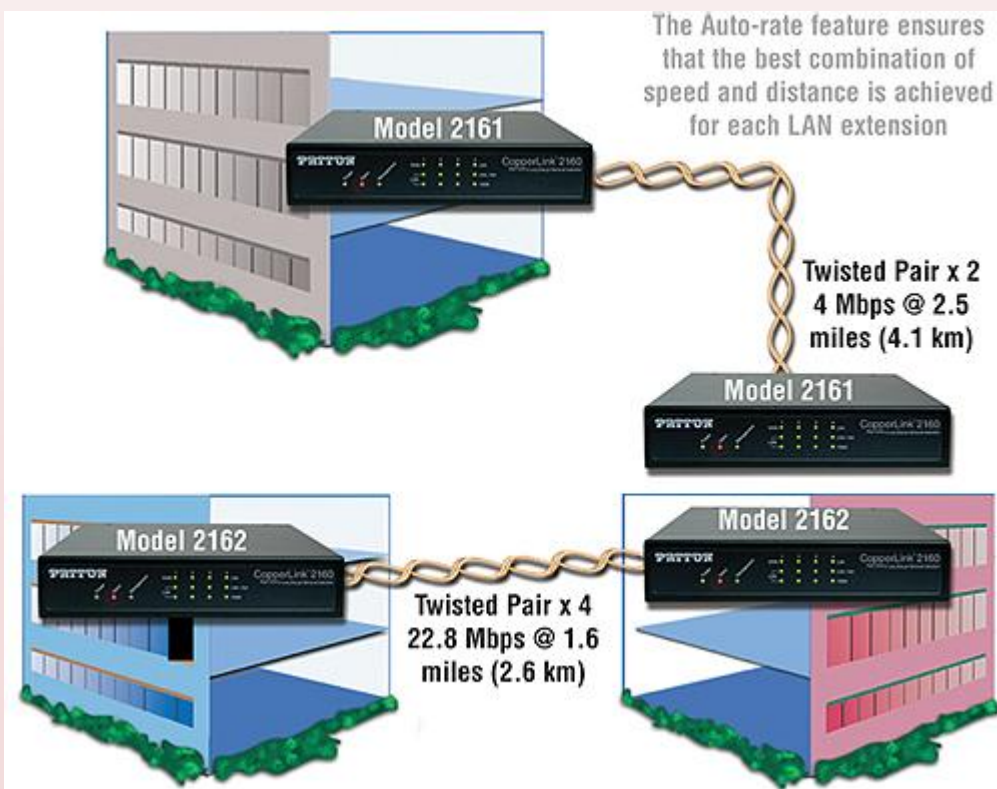
The Patton CopperLink Model 2160 Series simplifies and provides cost effective network extension by utilizing pre-existing twisted pair infrastructure. LAN extension doesn't have to be expensive or difficult. Patton's Model 2160 series of auto-rate Ethernet Extenders open the door to low-cost and easy 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, and then apply power!

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

Workgroup Ethernet extension application



Data Rates up to 22.8 Mbps

Get reliable broadband connectivity with full-duplex symmetric rates and distances exceeding 24,000 feet (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 set-up a snap, you can also use the embedded HTTP/SNMP agent to remote manage the unit from anywhere in the world.



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

Distance Chart 2160 (Per Wire Pair)

Line Rate	26 AWG/0.4mm		24 AWG/0.5mm		22 AWG/0.65mm	
	kft	km	kft	km	kft	km
192	21.5	6.6	27.2	8.3	34.8	10.6
256	19.5	5.9	24.7	7.5	31.5	9.6
512	17.5	5.3	22.1	6.7	28.3	8.6
768	16.5	5	20.9	6.4	26.7	8.1
1024	16	4.9	20.2	6.2	25.9	7.9
1280	15	4.6	19	5.8	24.3	7.4
1536	14.5	4.4	18.3	5.6	23.5	7.2
2048	13.5	4.1	17.1	5.2	21.8	6.6
2304	13	4	16.4	5	21	6.4
3840	10	3	12.6	3.8	16.2	4.9
4608	9.5	2.9	12	3.7	15.4	4.7
5696	8.5	2.6	10.8	3.3	13.8	4.2

Distance Chart 2161/4W (4 Wire/2 Pair)

Line Rate	26 AWG/0.4mm		24 AWG/0.5mm		22 AWG/0.65mm	
	kft	km	kft	km	kft	km
512	19.5	5.9	24.7	7.5	31.5	9.6
512	19.5	5.9	24.7	7.5	31.5	9.6
1024	17.5	5.3	22.1	6.7	28.3	8.6
1536	16.5	5	20.9	6.4	26.7	8.1
2048	16	4.9	20.2	6.2	25.9	7.9
2560	15	4.6	19	5.8	24.3	7.4
3072	14.5	4.4	18.3	5.6	23.5	7.2
4096	13.5	4.1	17.1	5.2	21.8	6.6
4608	13	4	16.4	5	21	6.4
7680	10	3	12.6	3.8	16.2	4.9
9216	9.5	2.9	12	3.7	15.4	4.7
11392	8.5	2.6	10.8	3.3	13.8	4.2

Distance Chart 2162/8W (8 Wire/4 Pair)

Line Rate	26 AWG/0.4mm		24 AWG/0.5mm		22 AWG/0.65mm	
	kft	km	kft	km	kft	km
768	21.5	6.6	27.2	8.3	34.8	10.6
1024	19.5	5.9	24.7	7.5	31.5	9.6
2048	17.5	5.3	22.1	6.7	28.3	8.6
3072	16.5	5	20.9	6.4	26.7	8.1
4096	16	4.9	20.2	6.2	25.9	7.9
5120	15	4.6	19	5.8	24.3	7.4
6144	14.5	4.4	18.3	5.6	23.5	7.2
8192	13.5	4.1	17.1	5.2	21.8	6.6
9216	13	4	16.4	5	21	6.4
15360	10	3	12.6	3.8	16.2	4.9
18432	9.5	2.9	12	3.7	15.4	4.7
22784	8.5	2.6	10.8	3.3	13.8	4.2

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 Queuing) 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 Information

Email: sales@saratota.co.uk Tel: 0845 500 1447

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