CopperLink™ Ethernet Extender

Model 1214

Achieving symmetrical line rates greater than 168 Mbps over single twisted-pair, Cat 5e/6/7 or coaxial cable, Patton's CopperLink™ 1214 Ethernet Extender is the fastest CopperLink™ ever.

Ethernet Extension

Extend 10/100Base-TX Ethernet well beyond its 328-foot (100-meter) limitation over a single unshielded twisted pair (UTP), Cat 5e/6/7, or even coaxial cable.

Operates Over Twisted Pair

Realize fiber-optic speeds without the expense—and hassle—of installing new cables or line-of-site wireless circuits.

Plug and Play

Set these units up straight out of the box. No configuration is required. Auto-sensing 10/100 Ethernet ports support full or half duplex operation.

Multiple Line Rates Supported

Switch-selectable rate mode options optimize rate and reach for the noise environment, wire gauge/type and length.

Transparent LAN Bridging

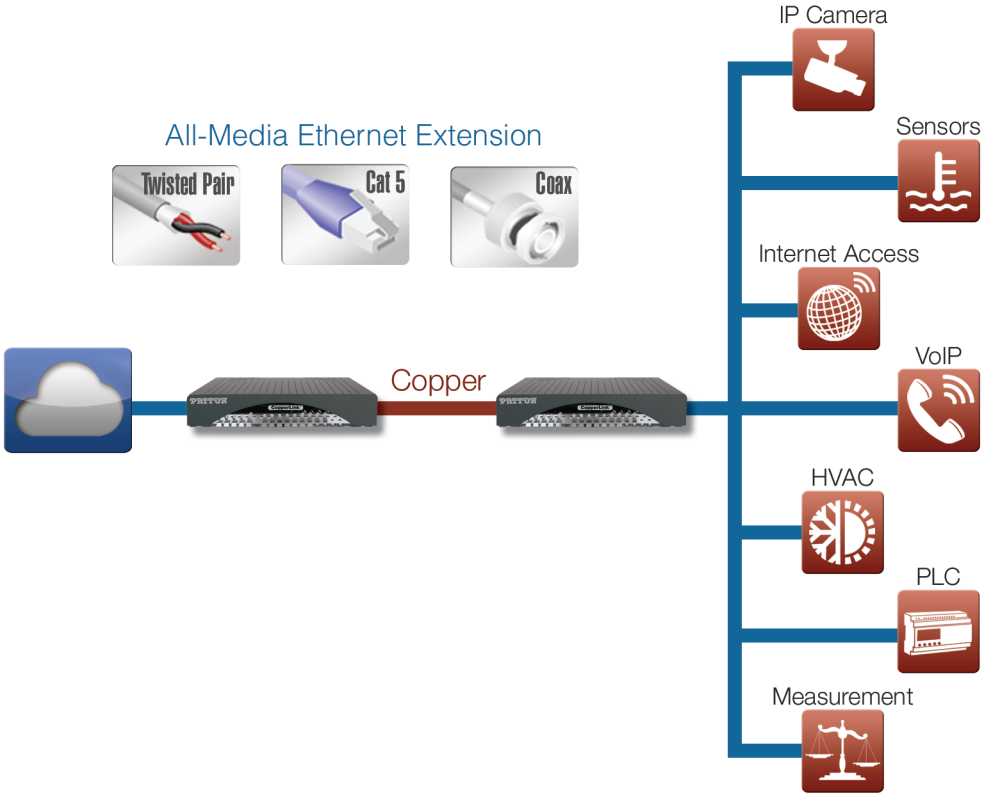
Bypass network configuration requirements by transparently passing all higher layer protocols—including 802.1Q VLAN frames (tagged and untagged).

Typical Application: Extending Ethernet over Cat 5+, Coax, or UTP

Combining data flows from up to four network-enabled devices onto a single twisted pair or coax cable, the Model 1214 can deliver IP traffic up to 1.8 miles (3 km) away—well beyond the standard 328-foot (100-meter) Ethernet distance limitation.

With achievable line rates up to 168 Mbps, the CopperLink 1214 eliminates the bandwidth constraints commonly experienced with other copper-based transmission technologies. The Model 1214 is engineered to re-use existing infrastructure previously employed in legacy applications including alarm circuits, E1/T1 circuits, RS-232, RS-422, RS-485, CCTV and CATV. Many newer cabling standards are also supported, including Cat 5e, Cat 6 and Cat 7.

A built-in 4-port Ethernet switch makes the CopperLink Model 1214 ideal for delivering multiple IP information streams over a single cable. For example, at a guardhouse or security kiosk, you could aggregate IP data from a laptop, a motion sensor, and two high resolution IP video cameras for simultaneous transmission over a single Ethernet connection.

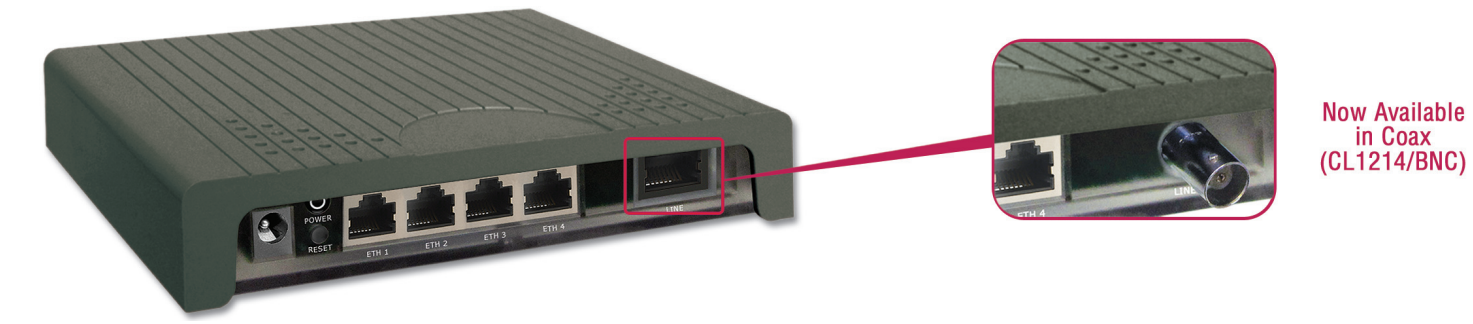


CopperLink 4224 Ethernet Extension Switch

- ✓ Connect up to 24 Model CL1214s and aggregate them to a 100/1000Base-TX Ethernet link
- ✓ Rackmount or desktop installations (1U high; fits into any 19-inch rack)
- ✓ Supports Plug and Play operation or fine-tuned individual connections

PATTON® let's Connect!™

CopperLink™ Model 1214 Ethernet Extender



Rate and Reach

Long Range Asymmetrical		
Length feet (m/km)	Mbps	
	Downstream	Upstream
250 (76 m)	67	16
1,000 (305 m)	59	16
2,000 (610 m)	45	11
3,000 (914 m)	31	5
5,000 (1.5 km)	17	682 kbps
10,000 (3 km)	4	263 kbps

High Speed Asymmetrical		
Length feet (m/km)	Mbps	
	Downstream	Upstream
250 (76 m)	168	95
1,000 (305 m)	126	54
2,000 (610 m)	60	21
3,000 (914 m)	42	6
3,500 (1 km)	35	1

Long Range Symmetrical		
Length feet (m/km)	Mbps	
	Downstream	Upstream
250 (76 m)	68	50
1,000 (305 m)	62	44
2,000 (610 m)	50	16
3,000 (914 m)	33	4
5,000 (1.5 km)	16	2
10,000 (3 km)	2.5	1

High Speed Symmetrical		
Length feet (m/km)	Mbps	
	Downstream	Upstream
250 (76 m)	121	144
1,000 (305 m)	73	103
2,000 (610 m)	45	37
3,000 (914 m)	30	10
3,500 (1 km)	16	4

Specifications*

CopperLink Line Interface
- RJ-45 (pin 4 = ring; pin 5 = tip)
- BNC 75 Ω coax
- Terminal block, 2 position

CopperLink Line Modulation
DMT (Discrete Multi-Tone)

Ethernet Interface (x4)
8-position, shielded RJ-45. Auto-sensing 10/100Base-TX with half or full duplex operation.

Protocol
Transparent to high layer protocols: supports 802.1Q VLAN tagged or untagged frames.

Transparent to IP Video schemes: fully transparent to such compression schemes as MPEG-4, H.264, and MJPEG.

Ethernet Interface (x4)
8-position shielded RJ-45. Auto-sensing 10/100Base-TX with half or full duplex operation.

Impulse Noise Protection Modes
Selectable fast and interleave modes

Target SNR Modes
6 dB and 9 dB

Management
8-position DIP switch

Monitoring
8 LEDs display Power, Link, Ethernet 1–4, Remote, and Local status.

Power Supply
External AC: 100–240 VAC

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

Environment
Temperature: 0 to 50°C
Humidity: 5 to 95%, non-condensing

Extended Temperature: -40 to 85°C (CL1214E/CC)
Extended Humidity: 5 to 85%, condensing (CL1214E/CC)

Dimensions
6.22 W x 1.25 H x 4.75 L in. (15.74 W x 3.18 H x 12.07 L cm)

Weight
0.4 lbs (181 g)

Ordering Info

Obtain ordering info for this product by using the QR code at right or by contacting:

- web: **http://www.patton.com/products/product_detail.asp?id=458&tab=Ordering**
- email: **sales@patton.com**
- tel: **+1 301.975.1000**

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* Specifications subject to change without notice.