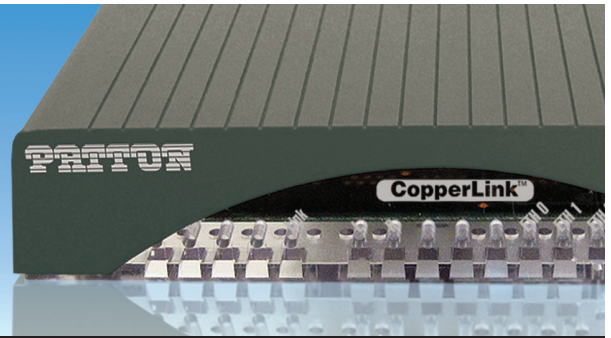


# CopperLink™ Ethernet Extender Model 1214



*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 cir-

cuits, 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.

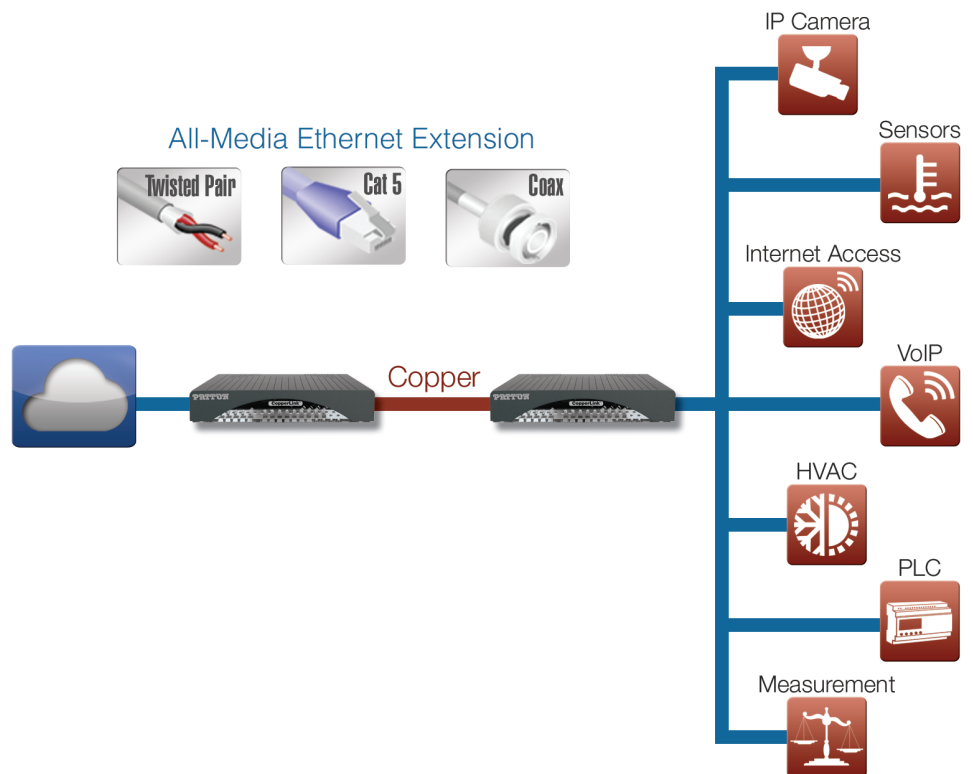
A built-in 4-port Ethernet switch makes the CopperLink Model 1214 ideal for delivering multiple IP information streams over a single cable. For example, at a guardhouse or security kiosk, you could aggregate IP data from a laptop, a motion sensor, and two high resolution IP video cameras for simultaneous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

### CopperLink 4224 Ethernet Extension Switch



**Coming Soon!**

- ✓ 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



# CopperLink™ Model 1214 Ethernet Extender



Now Available  
in Coax  
(CL1214/BNC)

## 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=501&tab=Ordering](http://www.patton.com/products/product_detail.asp?id=501&tab=Ordering)
- email: [sales@patton.com](mailto:sales@patton.com)
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