CopperLink™ Ethernet Extender

Model CL1214E

Achieving symmetrical line rates greater than 168 Mbps over single twisted-pair or Cat 5e/6/7 cable. Patton's CopperLink™ 1214E 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) or Cat 5e/6/7 cable.

Ruggedized
Operating temperature of -40 to 85°C and optional conformal coating to protect against condensing humidity.

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.

Transparent LAN Bridging
Bypass network configuration requirements by transparently passing all higher layer protocols—including 802.1Q VLAN frames (tagged and untagged). Data-transmission mechanism is fully transparent to such IP video compression schemes as MPEG-4, H.264 and MJPEG.

Flexible Installation
Wall-mount ready and an optional DIN rail mounting kit is available.

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

Perfect for bandwidth-intensive applications the CopperLink™ 1214E delivers off-the-chart symmetrical line rates greater than 168 Mbps. Best of all—like all CopperLink™ products—the CL1214E leverages existing copper infrastructure to deliver high speed Ethernet connectivity over single twisted-pair or Cat 5e/6/7 cable.

Four user-selectable configuration profiles—combined with Patton's auto-rate adaptation feature—ensure maximum achievable symmetrical or asymmetrical rates for the installed noise environment, wire gauge/type and length.

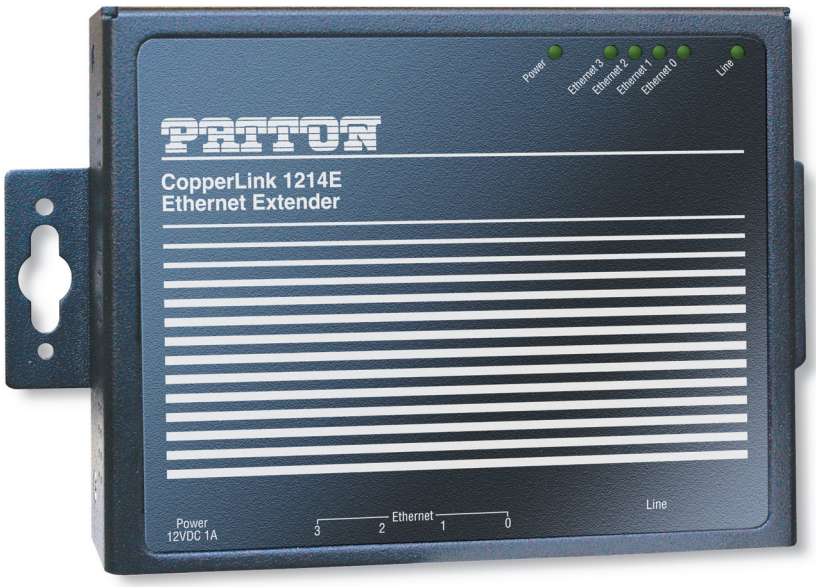
Symmetrical line-rate settings are ideal for such applications as remote LAN extension, video teleconferencing, and data backhaul.

Asymmetrical configurations are well-suited for applications requiring higher downstream speeds and/or longer distances between Ethernet devices. Typical asymmetrical scenarios include medical imaging, livestock monitoring, underwater video, internet gaming, and transporting high-resolution IP video from security cameras.

Realize fiber-like speed and distance without the expense of fiber with Patton's Ultra-High-Speed CopperLink™ Ethernet Extenders.

Visit www.patton.com to view our huge selection of network extension products.

Fully interoperable with Patton 2174 Ultra-High-Speed Ethernet Extender



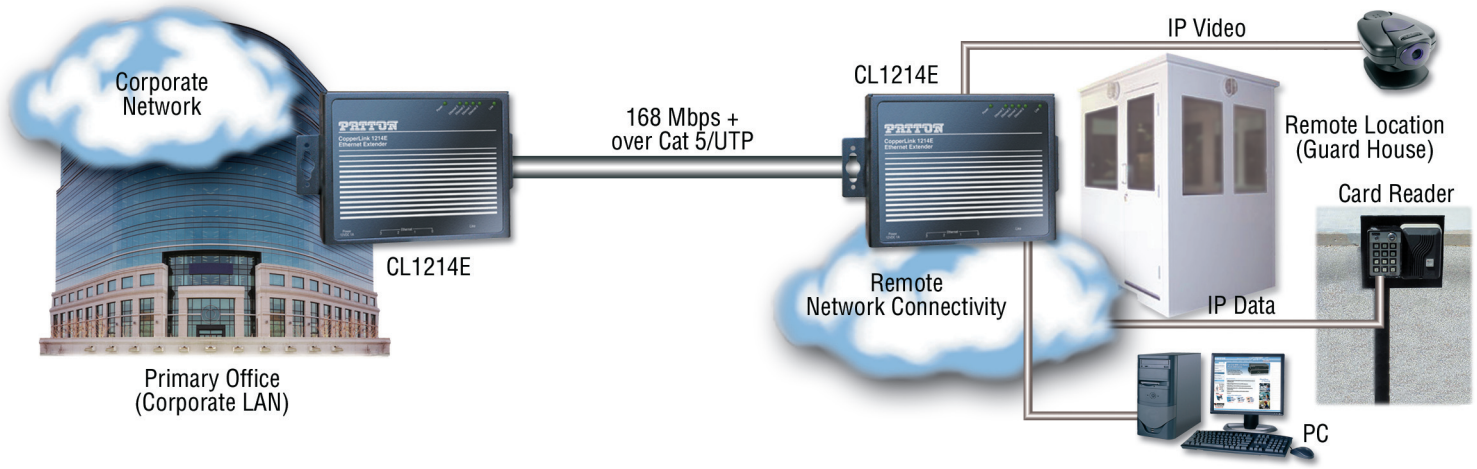
PATTON® let's Connect!™

Extend Ethernet over Cat 5+, Cat 6, Cat 7, or UTP

A built-in 4-port Ethernet switch makes the CopperLink 1214E 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.

Combining data flows from up to four network-enabled devices onto a single twisted pair, the Model 1214E 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 1214E eliminates the bandwidth constraints commonly experienced with other copper-based transmission technologies. The Model 1214E 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.



Specifications

Rate/Reach

- **Long Range Asymmetrical**:
  250 feet (73 m): Downstream (DS) 67 Mbps/Upstream (US) 16 Mbps
  10,000 feet (3 km): DS 4 Mbps/US 263 kbps
- **Long Range Symmetrical**:
  250 feet (73 m): DS 68 Mbps/ US 50 Mbps
  10,000 feet (3 km): DS 2.5 Mbps/US 1 Mbps
- **High Speed Asymmetrical:**
  250 feet (73 m): DS 168 Mbps/US 95 Mbps
  3,500 feet (1 km): DS 35 Mbps/US 1 Mbps
- **High Speed Symmetrical:**
  250 feet (73 m): DS 121 Mbps/US 144 Mbps
  3,500 feet (1 km): DS 30 Mbps/US 4 Mbps

CopperLink Line Interface

• RJ-45 (pin 4 = ring; pin 5 = tip)
• Terminal block, 2-position

CopperLink Line Modulation

DMT (Discrete Multi-Tone)

Enclosure

IP 40 rated • aluminum

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 & 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
Internal DC: -12 VDC

Compliance

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

Environment

Extended Temperature: -40 to 85°C
Standard Humidity: 5 to 95%, non-condensing
Conformal Coated Humidity: 85% condensing humidity from -10 to 35°C

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)

* Specifications subject to change without notice.

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