

CopperLink™ Managed Ethernet Extenders

Model CL2300



The CL2300 offers the best bandwidth and distance combination in the CopperLink product line. Speeds in excess of 22.8 Mbps symmetrical at distances of 2 miles are possible due to Patton's pair bonding which supports up to 4 individual twisted-pairs (8-wire) or just a single Cat 5 or higher rated cable.

Bandwidth Rich

Bond up to 4 twisted pairs to achieve the desired rate and reach.

- 1 Pair: **5.7 to 15.3 Mbps**
- 2 Pair: **11.4 to 30.6 Mbps**
- 3 Pair: **17.1 to 45.9 Mbps**
- 4 Pair: **22.8 to 61.2 Mbps**

Operates Over Twisted Pair or Cat 5+

Near fiber speeds without the cost of new cable or fiber installations or the hassles of wireless line of site.

Connects Point-to-Point or to CL4324

The CL2300 can be used back-to-back or with the Patton CopperLink Extended Reach Ethernet Switch.

Auto-Rate Adaptation Supported

Automatically selects the best rate vs. reach combination available on a per-wire basis.

VLAN Tagging

VLAN tagging and processing is configurable per Ethernet port.

Chart based on 24 AWG (.5mm) one cable pair

Line Rate	K Feet	Miles	km
192K	33972	6.4	10.4
512K	33188	6.3	10.1
1024K	29453	5.6	9.0
2048K	23332	4.4	7.1
4096K	16093	3.0	4.9
5696K	12098	2.3	3.7
8192K	9710	1.8	3.0
15296K	3844	0.7	1.2

As a rule of thumb, when using the CL2302 (2 pair/4 wire) extender a user can expect 30.6 Mbps at 3,844 feet. The CL2304 (4 pair/8 wire) extender can reach 61.2 Mbps at 3,844 feet.

Patton's CopperLink™ Model 2300 is a cost-effective Ethernet Extender capable of achieving bandwidth rates of over 60 Mbps. The CL2300 is the ideal choice for providing internet access to bandwidth hungry small to medium size offices, wire-less backhaul, Metro Ethernet, even LAN-to-LAN extensions.

The Model CL2300 is cable of bonding from 1 to 4 pairs to increase overall bandwidth. Each pair is capable of up to 5.7 Mbps to 15.3 Mbps pending your distance requirements. The ability to configure pair bonding and various line rate modes allows service providers, integrators and businesses to choose the best available rate vs. reach combination for the application.

The CL2300 supports defaults to plug and play mode which will allow the CopperLink Extenders to pair up automatically at the best rate achievable. Should a pair be faulty the CL2300 will automatically adjust the line rate to ensure the network connection remains stable.

In addition to offering all Patton's highly regarded CopperLink plug and play features, the managed CopperLink series adds a higher level of

network control for the more demanding applications.

QoS configurations ease the bandwidth management of ports and applications through the creation of QoS classes and profiles. Traffic can be shaped and policed to provide full QoS control over both the egress and ingress directions.

Stateful Firewall inspection of traffic is accomplished through the creation of Access Control Lists (ACLs) that enable the filtering of traffic based on numerous criteria including source and destination IP address, port, connection state and protocol.

Logical and physical ports are selectable for bridging. Features such VLANs are configurable on a per port basis. Bridged traffic can be tagged and prioritized according to user defined parameters.

The CL2300 offers easy installation. The variety of configuration options include CLI via Console (RS232), Telnet, or SSH. Also included is HTTP web based management, and SNMP.

Patton's managed CopperLink series offer the versatility and reliability demanded for the most critical network applications at an affordable price.

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



Compatible Patton CopperLink™ Models



Ruggedized CL1314R & MDE



Desktop 2-Wire CL1314



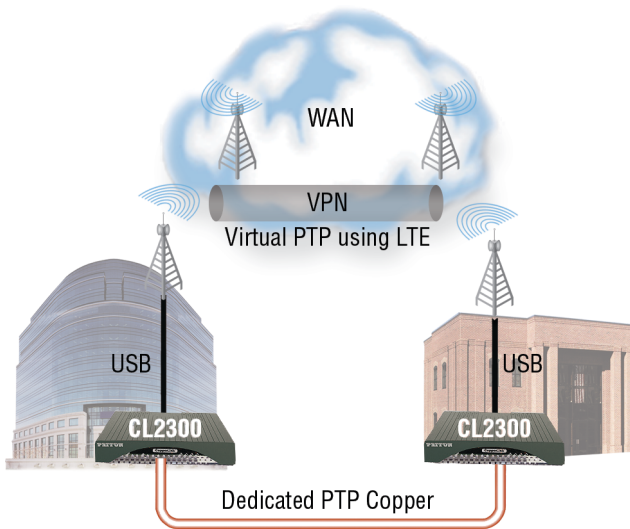
Desktop 2-8 Wire 2160

CopperLink™ Model 2300 Managed Ethernet Extenders

CopperLink—Now With Fallback!

When interconnecting sites on a corporate campus, buildings and network devices often lie beyond reach of a standard Ethernet segment. Now you can use existing copper network infrastructure to connect remote LANs or devices across longer distances, and at higher speeds, than previously thought possible.

Patton's CopperLink long range Ethernet Extender is the ideal solution for simple, cost-effective, high speed campus LAN extension. Plug n' play operation gets your network up and running in seconds. Providing four auto-sensing full/half duplex 10/100Base-T Ethernet ports—plus an integrated crossover switch for hassle-free system setup—the value of this Ethernet extender is unsurpassed.



Specifications*

CopperLink

Line Interface: RJ45

TC-PAM line modulation 16/32 and 64/128

Configurable as remote or local

Rate negotiating/manually rate adaptation configuration

2 to 8-wire mode auto-detect

Data rate selections: Up to N x 239 (5.7 Mbps) per pair

Ethernet Interface (x4)

4x Auto-sensing 10/100 with half or full-duplex operation.

Ethernet Interface (x3) + PoE + Optional

3x Auto-sensing 10/100 with half or full-duplex operation

1 port 802.3af, PoE 13 Watts

USB 2.0 Interface (x2) Optional

2 x USB 2.0 (Optional)

Ethernet Protocols

Transparent bridging (IEEE 802.1D)

VLAN-based QOS (802.1P/Q)

ARP

DHCP Client/Server

DNS Server/Relay

Management

HTTP

NTP

SNMP v1, v2, v3

SYSLOG Client

CLI (Telnet, SSH, Console Port)

TFTP-Firmware upgrade, import/export config

Monitoring

8 LEDs: Power, Link, Ethernet 1-4, Remote, Local

Power Supply

External AC: 100 to 240 VAC or

DC: -48, -24, or -12 VDC

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 available

Dimensions

7.3 x 6.6 x 1.62 in.

(185 x 168 x 41 mm)

Weight

0.4 lb (181 g)

Specifications subject to change without notice



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