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ELECTRONIC GMBH

DATENBLATT

CL2300E-Serie

HABEN SIE FRAGEN ODER
WÜNSCHEN SIE EIN INDIVIDUELLES ANGEBOT?
Unser Team berät Sie gerne persönlich.

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ADRESSE

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CopperLink™ Light Industrial Long Range Ethernet Extender
Model 2300E

The CL2300E offers sturdy industrial design with superior Ethernet performance over existing copper infrastructure. Pair bonding technology extends connections up to 2 miles (3.2 km)—without repeaters—at symmetrical rates surpassing 22 Mbps.

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**

Robust Network Connectivity
When a micro disruption would otherwise force link renegotiation with mission-critical data loss, Patton's emergency freeze feature maintains the link.

In the event of a faulty or damaged wire pair, the CL2300E automatically adjusts the line rate to ensure stable network connectivity.

Rugged
Wall-mountable IP40 aluminum enclosure; operating temperature of -40 to 85°C; conformal coated PCB assembly protects against humidity, condensation, and corrosion.

Operates Over Twisted Pair or Cat 5+
Near-fiber speeds without costly installation of new fiber or copper cable, or the hassles of wireless line-of-sight.

Flexible and Secure Management
Configuration options include CLI via RS232 Console, Telnet, SSH, HTTP web management, and SNMPv1/v2c/v3. Stateful Firewalll and ACL filters securely protect the management port.

Auto-Rate Adaptation Supported
Automatically selects the best possible speed/distance combination for each wire pair.

VLAN Options
Logical and physical ports are selectable for bridging, while VLANs are configurable per port. Bridged traffic can be tagged and prioritized according to user-defined parameters.

Patton's robust and reliable CopperLink 2300E Light Industrial Ethernet Extender delivers bandwidth greater than 60 Mbps in point to-point topologies. Extend Ethernet segments to IP-enabled devices or remote LANs using existing copper infrastructure. Often used for LRE (Long Range Ethernet), the CL2300 is also an excellent solution for point-to-point connectivity for noisy environments or questionable cable quality.
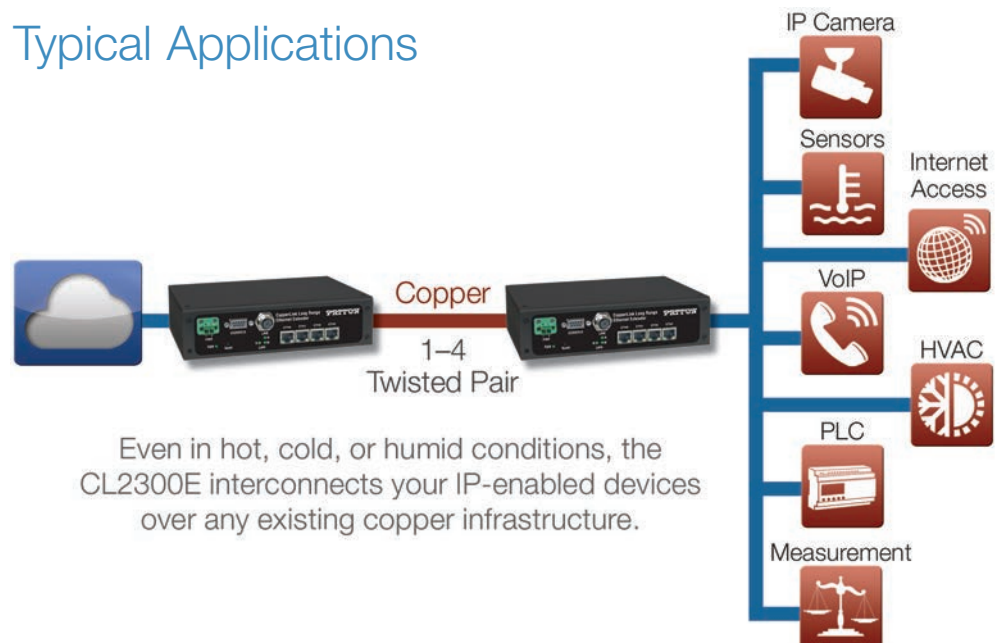
The CL2300E employs wire-bonding technology to combine up to 4 wire pairs into a single Ethernet connection with superior speed and distance performance. Each pair provides bandwidth ranging from 5.7 Mbps to 15.3 Mbps depending on segment length. CopperLink devices are engineered for reliability and ease of use. In the default plug-and-play mode, installers need only connect the cables and power up. Patton's auto-rate adaptation feature negotiates the best-possible rate and reach for each wire pair.

The six user-selectable line-rate modes and all pair-bonding settings are configurable, so users can control the rate/reach combination for specialized applications. Should one wire-pair fail, the CL2300E will automatically adjust the line rate to ensure a stable connection.

For business-critical networking, Patton's managed CopperLink series offers optimum versatility and reliability at an affordable price.

Typical Applications

Even in hot, cold, or humid conditions, the CL2300E interconnects your IP-enabled devices over any existing copper infrastructure.

CopperLink™ Model 2300E Ethernet Extender

Rack Mounting Ears

DIN Rail Clips

Specifications*

CopperLink
- Line Interface (M12 Female): TC-PAM line modulation 16/32 and 64/128 • Configurable as either 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
4 x RJ45 Auto-sensing 10/100 with half or full-duplex operation

Ethernet Protocols
- Transparent bridging (IEEE 802.1D) • VLAN based QOS

(802.1P/Q) • ARP • DHCP Client/Server • DNS Server/Relay • Spanning Tree

Management
HTTP • NTP • SNMPv1, v2, v3 • SYSLOG Client • CLI (Telnet, SSH, Console Port) • TFTP-Firmware upgrade, import/export config

Monitoring
8 LEDs: Power, Link, Ethernet (4), Remote/Local

Power Input
- External AC: 100–240 VAC
- Internal DC: 12–48 VDC

Compliance
- FCC Part 15A

- CE Mark
- EMC Directive 89/336/EEC
- Low Voltage Directive 73/23/EEC

Temperature
- Operating: -40 to +85°C
- Relative Humidity: 85% condensing (conformal coat protection)

Physical
Standard Unit
- 8.0 x 6.72 x 2.09 inch (203.2 x 170.76 x 53.09 mm)
- 4.5 lbs (2,041 g)

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.

Ordering Info

CL2301E/CC/4ETH/EUI-2PK: CopperLink 2 Wire Extended Temperature Ethernet Extender Kit; 4 Eth; 100-240VAC; -40 to 85°C; Corrosion Protected (Special Order)

CL2302E/CC/4ETH/EUI-2PK: CopperLink 4 Wire Extended Temperature Ethernet Extender Kit; 4 Eth; 100-240VAC; -40 to 85°C; Corrosion Protected

CL2304E/CC/4ETH/EUI-2PK: CopperLink 8 Wire Extended Temperature Ethernet Extender Kit; 4 Eth; 100-240VAC; -40 to 85°C; Corrosion Protected

Compatible Patton CopperLink™ Models

Ruggedized CL1314R & MDE — Desktop 2 Wire CL1314 — Desktop 2–8 Wire CL2300 — Multi-Port Switch (24 Ports) CL4324

let's Connect!

07MCL2300E-DS2