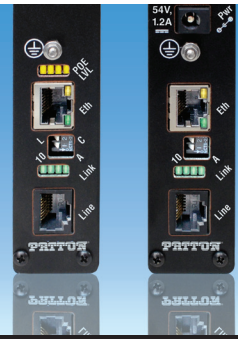


PoE Ethernet Extender

CopperLink Model 1101E

**INDUSTRIAL
GRADE**



Energize your cable—Extend Ethernet & Power over Ethernet (PoE) using existing twisted pair(s) or coax. Benefit instantly from the power and flexibility of IP without downtime or infrastructure and installation expenses!

Ethernet Extension

Extends 10/100Base-TX Ethernet over 3,000 feet using 2-wire, 24-AWG twisted-pair, Cat 3, Cat 5e/6/7, or coaxial cable.

Delivers PoE

PowerPlus technology powers up both the remote CopperLink extender and the PoE enabled device connected to it. No power is required at the remote location.

Transparent LAN Bridging

Will pass higher layer industrial Ethernet protocols such as BACnetIP, EtherCAT and Modbus TCP.

Plug and Play

Modems need no configuration to operate, Ethernet ports are auto-sensing 10/100, full or half-duplex.

Overvoltage Protection

Overvoltage protection on Line and Ethernet ports prevents damage from ESD (electrostatic discharge), CDE (cable discharge events), and lightning.

With global expansion of the Internet of Things (IoT), demand for IP/Ethernet-connected devices is soaring. Billions of devices are already capable of connecting to the Internet. Ethernet—and power-over-Ethernet (PoE) in particular—has grown in popularity because it strikes the perfect blend of speed, cost, and ease of use.

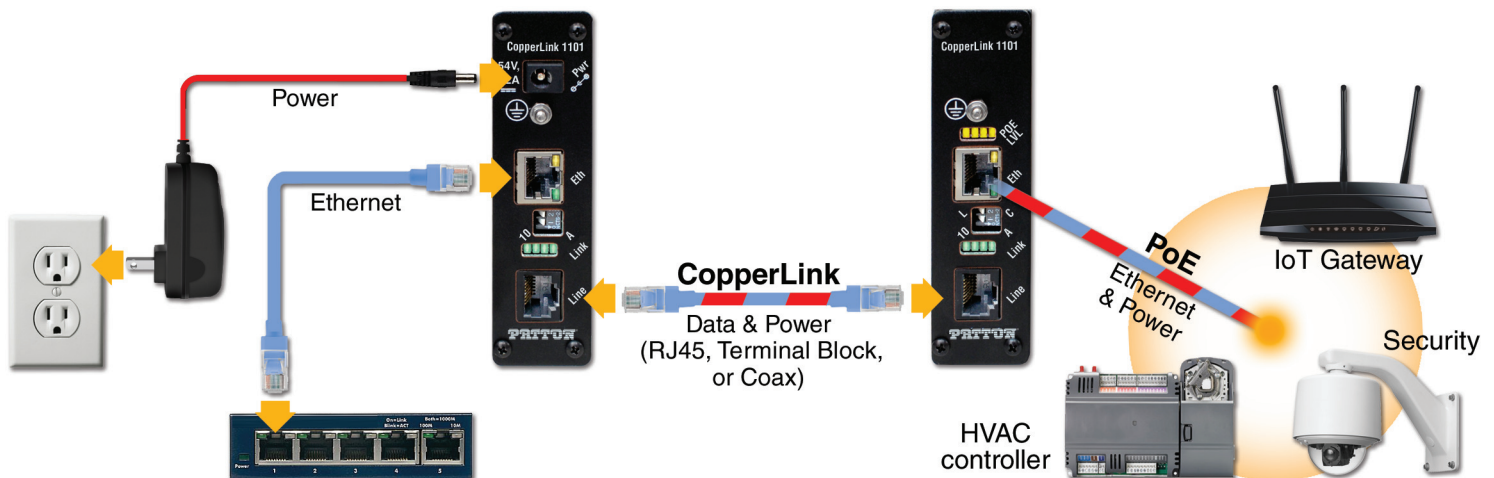
Ethernet, however, presents a few drawbacks that may overshadow the benefits by creating escalating infrastructure costs and system downtime. The Ethernet standard specifies a distance limitation of 328 ft (100 m), which restricts location options for device installation. Standard Ethernet also requires Cat 5 cabling or better, which often leads to installing new cabling infrastructure—involving tearing into walls, ceilings, pavement, and worse.

The CopperLink 1101E kit from Patton enables Ethernet connectivity over previously installed copper infrastructure. The solution breathes new life into circuits previously deployed for such traditional non-IP applications as RS232/485 HVAC and building automation controls, alarms, CCTV, analog phones, intercom speakers, and others.

Instantaneously install PoE-capable devices such as wireless access points (WAPs), IP cameras, IP telephones, IP door stations, HVAC controls, LED lighting and more—with no additional overhead cost. With the extended reach the CL1101E kit provides, you can install your IP terminal equipment exactly where you want it! Flexibility of device location is paramount in such applications as building security, where increased perimeter dimension and expanded spot coverage area are critical.

Check out more of Patton's award winning Ethernet Extension solutions at

www.patton.com/ethernet-extender



PATTON
Let's Connect!™

Extend **Power** and **Ethernet** to compliant or legacy PoE devices using already installed twisted-pair cable or coax

CopperLink™ Model 1101E PoE Ethernet Extender

CL1101E (REMOTE)
Device Side
PoE Ethernet Extender

PoE Level Meter (LED)

PoE Port (10/100Base-TX)

Individual Pair Link Status (LED)
Supports up to 4 pair

CopperLink port

- Coax
- RJ45
- Terminal Block

Industrial Grade Power over Ethernet Extenders

Power Input
(AC/DC Power Included)

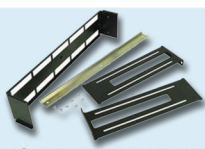
Ethernet (10/100BaseTX)

Switch Selectable

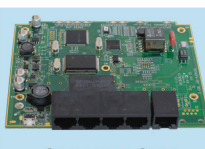
- Forced 10 or 100 Line Rate
- Legacy or 802.3af power mode
- # Pairs used

CL1101E (LOCAL)
Network Side
PoE Ethernet Extender

Industrial Grade Power over Ethernet Extenders



NS-1001R-19ADJ DIN
Adjustable DIN Rack



CL1101E-SKD
PCA/OEM Board



CL1101E
Outdoor (IP67)

CALL FOR DETAILS

Data Reach Estimates Chart (Feet/Meters)

Mode	Pairs	Cat 5	Cat 3	24 AWG
10 Mbps	1	2500/762	2400/731	2380/725
	2	3000/914	2900/884	2800/853
100 Mbps	1	500/152	470/143	420/128
	2	1000/305	960/293	910/277
	4	1500/457	1450/442	1400/427

Cat 3 Twisted Pair Power Delivery Estimates Chart (54V)

Distance (Feet/Meters)	Power Delivered (Watts)		
	1 Pair	2 Pair	4 Pair
500/152	15	15	15
1000/305	7.7	15	15
1500/457	5.7	11.4	15
2000/610	4.1	8.7	15

Cat 3 = 24 AWG; Solid copper

Coax Power Delivery Estimates Chart (54V)

Distance (Feet/Meters)	Power Delivered (Watts)		
	RG-11	RG-6	RG-59
500/152	15	15	13.2
1000/305	15	15	6.6
1500/457	15	14	4.4
2000/610	15	15	3.3

RG11/RG6 = Quad bare copper; RG59 - Copper clad steel

Specifications*

Line Interfaces (Data)

- 1 x RJ45 (Optional: Terminal Block, Coax)
- Supports 1-4 pairs

Ethernet Interfaces

- 1 x RJ45 Auto-Sensing 10/100Base-TX with full or half-duplex operation

LEDs

- Power, Line, (10 or 100 operation), Eth, and PoE

Protocol

- Transparent to high layer Industrial Ethernet protocols

such as EtherCAT, Modbus-TCP, PROFINET and more.

- Supports 802.1Q VLAN tagged frames
- Transparent to IP video schemes
- Fully transparent to compression schemes such as WMV, MPEG-4, and MJPEG

Overvoltage Protection (Line and Ethernet)

- IEC 61000-4-2 (ESD) 25kV (air), 15kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)

- IEC 61000-4-5 (lightning) 25A (8/20µs)

Power Injection (PSE only)

- DC voltage on Ethernet port
- 54 VDC

Power Consumption

- 1.5 W

Power Supply

- External AC Adapter 100-240 VAC to 54 VDC
- Input: 30-57 VDC (Recommended 54 VDC)

MTBF

- 83,043 hours

Environment

- Temperature: -10 to 70°C
- Humidity: 10 to 95% (non-condensing)

Physical

- 0.71 H x 1.1 W x 2.56 D in. (18 H x 28 W x 65 D mm)
- 0.78 oz (22 g)

Compliance

- FCC Part 15A, Class B
- CE Mark
- EMC Directive 89/336/EEC
- LVD Directive 73/23/EEC

Made in USA



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