CopperLink™ Dante over Copper 10/100 Extender

Model CL1151E

Extend your Dante Ethernet devices reach to 3,300 feet (1,006 meters), 10 times further than its 328-foot (100-meter) distance limitation, using existing copper twisted pair(s) or coaxial cables.

Dante Ethernet Extension

Extends 10/100Base-TX Ethernet over 3,300 feet (1005 meters) using 2-wire, 18-26-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 Dante PoE enabled device connected to it. No power is required at the remote location.

Transparent LAN Bridging

Will pass higher layer AES67/TSN/AVB protocols and all audio/video compression schemes.

Plug and Play

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

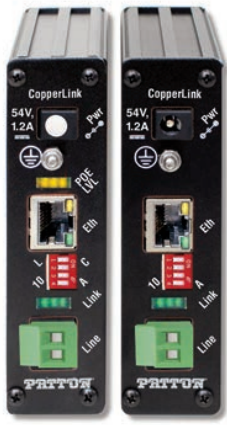
Overvoltage Protection

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

Made in the USA

This Patton equipment is designed by Patton engineers and built in our Gaithersburg, Maryland facility. Patton's American-made manufacturing process delivers high-quality networking solutions with reliability you can trust.

Demand for IP/Ethernet-connected devices in the Audio/Video space is growing rapidly. Power-over-Ethernet (PoE) in particular—has grown in popularity because it strikes the perfect blend of speed, cost, and ease of use.



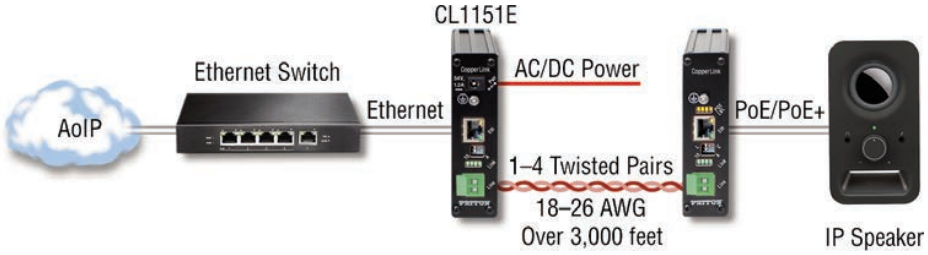
Ethernet, however, presents a few drawbacks that may overshadow the benefits by creating escalating infrastructure costs and system downtime. The Ethernet standard specifies a distance limitation of 328 ft (100 m), which restricts location options for device installation. Standard Ethernet also requires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

The CopperLink 1151E kit from Patton enables Ethernet connectivity of your Dante enabled devices over previously installed copper infrastructure, such as existing speaker, alarm cables even CCTV coaxial cable.

Instantaneously install your 10/100BaseTX Dante enabled speakers, I/O converters and more—with no additional overhead cost. With the extended reach the CL1151E kit provides, you can install your IP Audio Video and teleconferencing equipment exactly where you want it!

Applications

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



PATTON® Let's Connect!™

PLUG-IN Electronic GmbH • Am Sonnenlicht 5 • 82239 Alling • Tel.: +49 (0) 8141 3697-0 • info@plug-in.de • www.plug-in.de

CL1151E Dante over Copper 10/100 Extender

Specifications

Line Interfaces (Data)
- 1 x RJ45 or BNC (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 AES67/AVB/TSN Ethernet protocols.
- 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: -14 to 158°F (-10 to 70°C)
Humidity: 10 to 95% (non-condensing)

Physical
- 1.19 W x 4.28 H x 3.36 D in. (30.2 W x 108.7 H x 85.3 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

RG-59 Coax Data Reach Estimates

Description	10 Mbps	100 Mbps
Min. distance	6 ft/1.83 m	6 ft/1.83 m
Max. distance	4925 ft/1501 m	1225 ft/373 m
Min. distance link time	5 sec	5 sec
Max. distance link time	5–10 sec	5 sec
Max. distance PoE class	Class 2/3	Class 4

RG-59 Coax Power Delivery Estimates

PoE Class	RG-59
1 (3.84 W)	4975 ft/1516 m
2 (6.49 W)	4975 ft/1515 m
3 (12.95 W)	3925 ft/1196 m
4 (25.50 W)	1675 ft/511 m

Twisted-Pair Data Reach Estimates

	10 Mbps		100 Mbps		
Description	**2 wire**	**4 wire**	**2 wire**	**4 wire**	**8 wire**
Min. distance	6 ft/1.83 m	131 ft/39.9 m	6 ft/1.83 m	6 ft/1.83 m	6 ft/1.83 m
Max. distance	2500 ft/762 m	3300 ft/1005 m	915 ft/278.9 m	1065 ft/324.6 m	1849 ft/563.6 m
Min. distance link time	5 sec	157 sec	5 sec	5 sec	5 sec
Max. distance link time	5–10 sec	8–265 sec	5 sec	6 sec	6 sec
Max. distance PoE class	Class 1	Class 2	Class 2/3	Class 4	Class 3/4

Twisted-Pair Power Delivery Estimates

PoE Class	2 wire	4 wire	6 wire	8 wire
1 (3.84 W)	2648 ft/807 m	5453 ft/1662 m	8363 ft/2549 m	11555 ft/3521 m
2 (6.49 W)	1587 ft/484 m	3322 ft/1012 m	5041 ft/1536 m	6905 ft/2104 m
3 (12.95 W)	794 ft/239 m	1587 ft/484 m	2519 ft/768 m	3453 ft/1052 m
4 (25.50 W)	262 ft/80 m	653 ft/199 m	1196 ft/365 m	1587 ft/484 m
Class 2/3	Class 2/3	Class 4	Class 4	Class 4

Specifications subject to change without notice

PATTON let's Connect!

50000054, Rev. 1