

Extends Ethernet connections up to 5,500 feet (1,676 meters) over existing infrastructure cabling. (CAT-5 or Internal Telephone cables)



Overview

The Patton Model 2172R utilizes pre-existing twisted pair infrastructure enabling twisted pair previously used for legacy systems such as TTL, RS232 and 422/485 to be used for extending or connect Ethernet devices together. With a pair of 2172R's or combined with a 2172, twisted pair can carry an extraordinary bandwidth of 100 Mbps full-duplex (50Mbps up and downstream). Reusing the already existing infrastructure for Ethernet networking eliminates the cost of purchasing expensive fibre and Cat5E or greater cabling. Most importantly, it completely eliminates the hassle and sometimes overwhelming expense and downtime of the cable installations.

The 2172R was designed to operate in a rugged environment, with temperatures ranging from -10 to 70°C, and the option for conformal coating to protect the device from condensing humidity. The 2172R's aluminium case design allows for users to conveniently mount them on a wall or DIN rail (with optional DIN rail kit).

Operates Over Twisted Pair

Utilizes existing Internal Telephone twisted pairs, to eliminate the expense of fibre or Cat5e cabling. To reduces the cost and hassle of new installations.

Plug and Play

No configuration or cable hassles during installation with auto-sensing 10/100, full or half duplex, and auto MDI-X

Full-duplex data rate of 100 Mbps

Provides near fibre performance for bandwidth intensive applications.

Ruggedized

Operating temperature of -10 to 70°C or -10 to 80°C for 2172/CC

Flexible installation

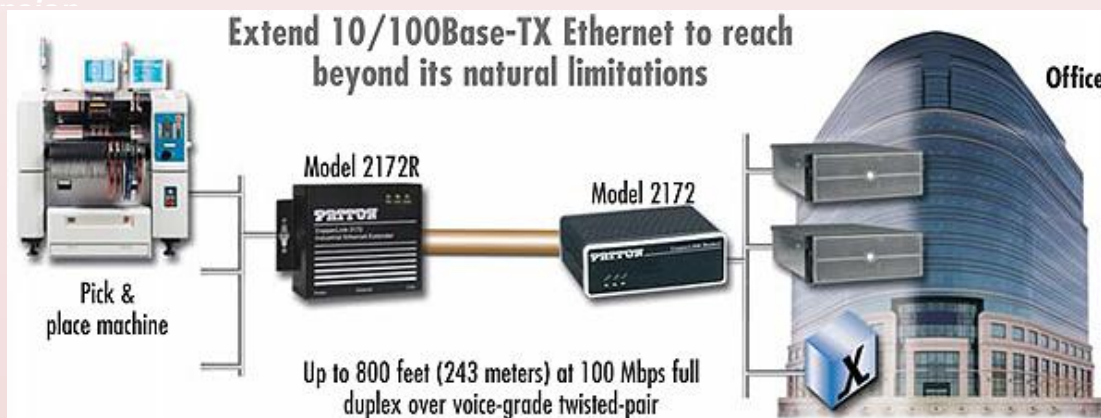
Wall mount ready and optional DIN rail kit

Performance

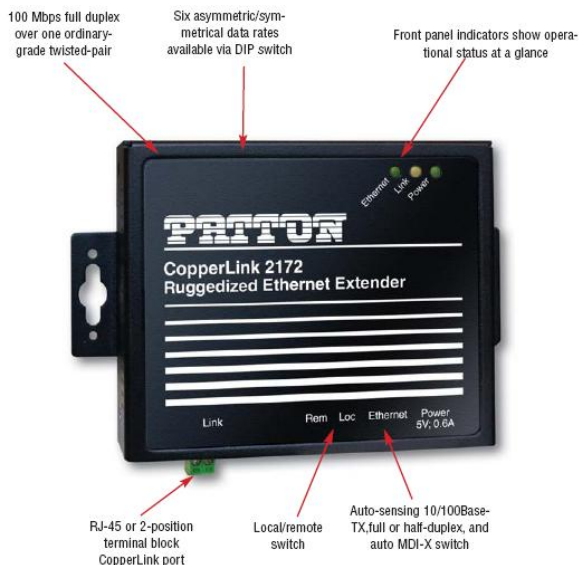
Asymmetrical Line Rates		
Line Rates (AWG 24/0.5 mm)		Distance in ft (m)
Upstream in Mbps	Downstream in Mbps	
1	4	6,000 (1,830)
1	16	4,000 (1,200)
2	50	2,000 (610)

Symmetrical Line Rates		
Line Rates (AWG 24/0.5 mm)		Distance in ft (m)
Upstream in Mbps	Downstream in Mbps	
10	10	4,000 (1,200)
25	25	2,000 (610)
50	50	800 (245)

Workgroup Ethernet Extension Application



The Model 2172R multi-rate Ethernet Extenders are ideal for delivering Ethernet links to remote buildings that are beyond the 328-foot (100-meter) distance limit of Ethernet. The 100 Mbps throughput eliminates bandwidth concerns previously experienced with other copper wired transmission technologies, by utilizing existing voice grade copper pairs the expense and hassle of installing low capacitance or fibre cable is no longer required.



Specifications 2172R

CopperLink line interface	RJ-45 (pin 4 = ring; pin 5 = tip); two position terminal block
Ethernet interface	8-position shielded RJ-45. Auto-sensing 10/100Base-T with half or full-duplex operation. DIP switch capable of disabling 100-Mbps full-duplex for equipment that does not support 802.3X (Pause Packets)
Protocol	Transparent to high layer protocol. Supports 802.1Q VLAN tagging
Modulation	Quadrature Amplitude Modulation (QAM) 4-band
Duplexing Method	Frequency Division Duplexing (FDD)
Frequency Range	CopperLink: 0–12 MHz
Transmission	CopperLink line rate: Up to 100 Mbps full duplex
Surge suppression	CopperLink line transient peak surge maximum: 200A (8/20µs)
Front Panel Indicators	Power, Link, Ethernet
Power Supply	External AC and DC options: 120VAC, and universal input (UI) 100–240 VAC, or optional -48 VDC, -24 VDC, or -12 VDC
Compliance	FCC Part 15A, CE Mark, EMC Directive 89/336/EEC, Low-Voltage Directive 73/23/EEC
Environment	<p>Temperature: Standard: -10 to 70°C Conformal Coated: -10 to 80°C</p> <p>Humidity: Standard: Up to 90% non-condensing Conformal Coated: 85% condensing humidity from -10 to 35°C</p>
Dimensions	1.5H x 4.13W x 3.75D in. (3.81H x 10.5W x 9.53D cm)
Weight	0.4 lbs (0.18 kg) without power supply

The Product Range

CopperLink™ Ethernet Extenders			
Take your network connections faster and farther over existing voice-grade wire with Patton CopperLink™ Ethernet Extenders!			
Max. Distance	Max. Speed	Distance at Max. Speed	CopperLink™ Model
1 mile	50 Mbps	800 feet	Model 2172R
1 mile	50 Mbps	800 feet	Model 2172
1.1 miles	16.6 Mbps	3,125 feet	Model 2168
0.75 mile	12 Mbps	4,000 feet	Model 2158
5.7 miles	4.6 Mbps	2.0 miles	Model 2157R
5.7 miles	4.6 Mbps	2.0 miles	Model 2157
5.7 miles	2.3 Mbps	3.1 miles	Model 2156
5 miles	144 kbps	5 miles	Model 2155



Ordering Information

Email: sales@saratota.co.uk Tel: 0845 500 1447

Model #	Description
2172R/CC/EUI	Ruggedized 50 Mbps CopperLink Ethernet Extender; -40° to 85°C; RJ45 line, Conformal Coated; External 100-240VAC Adapter
2172R/CC/TB/EUI	Ruggedized 50 Mbps CopperLink Ethernet Extender; -40° to 85°C; 2-Position Terminal Block line, Conformal Coated; Terminal Block only External 100-240VAC Adapter
2172R/E	Ruggedized 50 Mbps CopperLink Ethernet Extender; -10° to 70°C; RJ45; No power supply
2172R/E48	Ruggedized 50 Mbps CopperLink Ethernet Extender; -10° to 70°C; -48VDC
2172R/EUI	Ruggedized 50 Mbps CopperLink Ethernet Extender; -10° to 70°C; UI
2172R/EUI-2PK	Ruggedized 50 Mbps CopperLink Ethernet Extender Kit; -10° to 70°C; RJ45 line; External 100-240VAC Adapter
2172R/TB/E	Ruggedized 50 Mbps CopperLink Ethernet Extender; -10° to 70°C; No Power Supply
2172R/TB/EUI	Ruggedized 50 Mbps CopperLink Ethernet Extender; Terminal block only; -10° to 70°C; UI
2172R/TB/EUI-2PK	CopperLink High Speed 50 Mbps Ruggedized Ethernet Extender Kit Terminal Block (2 units preset to local and remote); 110-240VAC