

# High Speed Ethernet Extenders

## CopperLink 2110 Ethernet Booster



**Patton's Model 2110 Ethernet Booster offers PoE Injector, Ethernet Extender, and PoE Ethernet repeater options. Doubles Ethernet and PoE distances over existing copper wire.**

### Overview

The CopperLink™ Model 2110 doubles Ethernet distance limitations of 328 feet (100 meters). Multiple Model 2110 Ethernet Boosters can be placed in-line to further extend both Ethernet and PoE up to 1,640 ft (500 m), eliminating the need for additional switches, hubs, wireless access points, and expensive fiber installations. The Model 2110 is completely transparent to protocol making them true plug-and-play devices, completely interoperable with any network enabled device. The Model 2110 will not cause latency or degradation on your network connections, ensuring the maximum 100-Mbps full-duplex line rate. The Model 2110P and 2110PSE not only transparently pass on Ethernet data, but also feed on and forward PoE power to devices such as wireless access points, IP cameras, and VoIP phones.

### 802.3af Power and Distance Chart

Model	Power Delivered Class of PoE Device PoE Source	13W	6.5W	3.84W	0W
		Class 3/0	Class 2	Class 1	No PoE Load
		Maximum Distance			
2110/P	PoE switch	N/A	300 m	400 m	500 m
			984 ft	1,310 ft	1,640 ft
2110/PSE + 2110/P	PoE Injector 2110/PSE/EUI	400 m	500 m	500 m	800 m
			1,312 ft	1,640 ft	2,625 ft
2110/EUI	No PoE	N/A	N/A	N/A	N/A

### Features

- **Ethernet & PoE Extension**—Doubles 10/100Base-TX Ethernet and PoE to 200 meters (656 feet). Multiple units can be used in series for even longer extensions.
- **Operates over CAT5**—Reduces the cost and hassles of adding switches, hubs, and wireless access points.
- **Plug and Play**—No configuration or cable hassles during installation with auto-sensing 10/100, full or half duplex, and automatic MDI-X.
- **Transparent LAN Operation**—Transparent operation ensures the highest rate possible for each extension distance.
- **No External Power Required**—Power over Ethernet (PoE) capability enables both extenders and peripheral devices to be powered over standard twisted-pair Ethernet cable.
- **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.

PoE Injector, Ethernet Extender & PoE Repeater | CopperLink 2110 Ethernet Booster

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## CopperLink™ Copper Ethernet Extenders

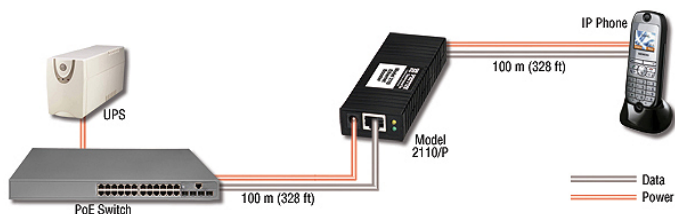
Take your network connections faster and farther over existing voice-grade wire with Patton CopperLink™ Ethernet Extenders!

# of Ethernet Ports	# of wire pairs	Max. Speed (Mbps)	Distance at Max. Speed	CopperLink™ Model
2	CAT5+ (4)	N/A	2,625 ft/0.8 km (328ft/100m per 2110)	2110 ( <a href="https://www.patton.com/products/pe_products.asp?category=398">https://www.patton.com/products/pe_products.asp?category=398</a> )
2	1	100	500 ft/0.15 km	2173 ( <a href="https://www.patton.com/products/pe_products.asp?category=424">https://www.patton.com/products/pe_products.asp?category=424</a> )
4	4	45.6	4,600 ft/1.4 km	2162 ( <a href="https://www.patton.com/products/pe_products.asp?category=416">https://www.patton.com/products/pe_products.asp?category=416</a> )
4	2	22.8	4,600 ft/1.4 km	2161 ( <a href="https://www.patton.com/products/pe_products.asp?category=416">https://www.patton.com/products/pe_products.asp?category=416</a> )
2	1	15	2,953 ft/0.9 km	2151 ( <a href="https://www.patton.com/products/pe_products.asp?category=426">https://www.patton.com/products/pe_products.asp?category=426</a> )
4	1	11.4	4,593 ft/1.4 km	2160 ( <a href="https://www.patton.com/products/pe_products.asp?category=416">https://www.patton.com/products/pe_products.asp?category=416</a> )
2	1	10	4,265 ft/1.3 km	2150 ( <a href="https://www.patton.com/products/pe_products.asp?category=425">https://www.patton.com/products/pe_products.asp?category=425</a> )
1	1	4.6	10,827 ft/3.3 km	2157 ( <a href="https://www.patton.com/products/pe_products.asp?category=160">https://www.patton.com/products/pe_products.asp?category=160</a> )
1	1	2.3	16,404 ft/5.0 km	2156 ( <a href="https://www.patton.com/products/pe_products.asp?category=159">https://www.patton.com/products/pe_products.asp?category=159</a> )

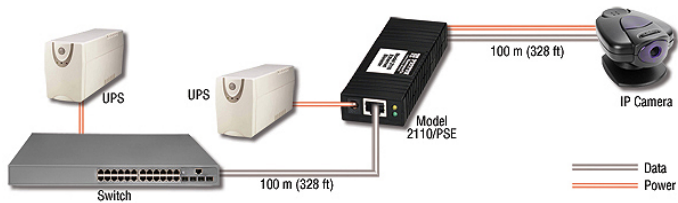
## Applications

The CopperLink Ethernet Booster is ideal for delivering Ethernet to remote network enabled devices located outside Ethernet's limited range of 328 feet (100 meters). Several configurations are possible based on individual requirements.

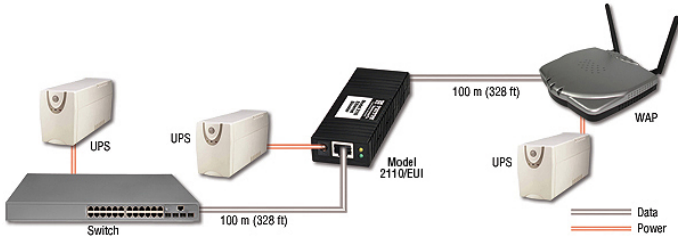
### Model 2110/P: PoE Pass Through & Ethernet Extension



### Model 2110/PSE: PoE Injection & Ethernet Extension







### Model 2110/EUI: Ethernet Extension



# Specifications

<b>Ethernet Connection</b>	Two Ethernet ports 10/100Base-TX; 802.3af •Auto-Negotiating 10/100 •Supports Flow Control (IEEE803.X) for full duplex operation •Supports back pressure for half-duplex operation •Store and forward •Auto MDI-X •802.3af pass through
<b>LED Status Indicators</b>	PoE/Power (Green): Glows solid when there is power to the unit •Ethernet (Green): Flashes when passing traffic
<b>Power</b>	Rated Voltage: 12 VDC (/EUI) or 57 VDC (/PSE or /P) •Rated Current: 700 mA
<b>Operating Temperature</b>	32-122°F (0-50°C)
<b>Operating Humidity</b>	Up to 90%, non-condensing
<b>Dimensions</b>	3.88L x 1.75W x 0.75H in. (9.8Lx 4.4W x 1.9H cm)
<b>Weight</b>	0.13 lbs (0.06 kg)

# Ordering

# Model #	Description	Availability
1 080511-07M	2110/PSE REPLACEMENT POWER SUPPLY AC/DC,UNIV IN,48VOUT,625MA,DSKTOP,2.5MM	
2 2110/EUI	CopperLink 10/100 Mbps Ethernet Booster; 100-240 VAC	General Availability
 Accessories		
3 2110/P	CopperLink 10/100 Mbps Ethernet Booster; 802.3af pass through	General Availability
 Accessories		
4 2110/PSE/EUI	CopperLink 10/100 Mbps Ethernet Booster; 802.3af; Injector 54VDC Source	General Availability
 Accessories		
5 2110/PSE/EUI-48	CopperLink 10/100 Mbps Ethernet Booster and 802.3af PoE Injector; 48VDC Source	Special Order
 Accessories		

Item Number	Item Description	Price
SVC-SmartCare-BH (/support/support.asp)	Premium Support for Business Hours	Contact us (/howtobuy/) for availability and pricing.
SVC-SmartCare-24/7 (/support/support.asp)	Premium Support, 24 x 7 Coverage	Contact us (/howtobuy/) for availability and pricing.
SVC-SmartAssist-BH (/support/support-professional.asp)	Business Hour Support Services	Contact us (/howtobuy/) for availability and pricing.
SVC-SmartAssist-AH (/support/support-professional.asp)	After Hours Support Services	Contact us (/howtobuy/) for availability and pricing.

SVC-ENHWAR1 (/support/support-warranty.asp)	1 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR2 (/support/support-warranty.asp)	2 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR3 (/support/support-warranty.asp)	3 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR4 (/support/support-warranty.asp)	4 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR5 (/support/support-warranty.asp)	5 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR2 (/support/support-warranty.asp)	2 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR3 (/support/support-warranty.asp)	3 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR4 (/support/support-warranty.asp)	4 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR5 (/support/support-warranty.asp)	5 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-NETENG-HOUR (/support/support-professional.asp)	Network technician hour rate for pre-config services, after hours support, etc.	Contact us (/howtobuy/) for availability and pricing.

## Related Products

CopperLink 1212 (/products/product_detail.asp?id=516)	Ultra-High-Speed Copper Dual-Port Ethernet Extender   168 Mbps Downstream
CopperLink 1214 (/products/product_detail.asp?id=501)	Ultra-High-Speed Copper Ethernet Extender   168 Mbps Downstream
Model 1001MP16 (/products/product_detail.asp?id=29)	16-Slot Universal Mounting Panel

## Backgrounders

FiberPlex Capabilities Guide (/backgrounders/FiberPlex\_Capabilities\_Statement.pdf)

October 6, 2017

## Certifications

Patton Devices Not Vulnerable to Meltdown and Spectre Side-Channels Attacks (/certifications/Patton-Meltdown-Spectre-Statement.pdf)	January 4, 2018
Declaration of Conformity - Model 2110 Ethernet Extender (/certifications/03337D1-001C.pdf)	December 11, 2012

## Data Sheets

Patton Product Life Cycle Color Codes (/datasheet/Life-Cycle-Availability-Codes.pdf)	April 24, 2015
Model 2110 Datasheet (/datasheet/2110_datasheet.pdf)	July 27, 2009
Model 2110 Datasheet (A4 page size) (/datasheet/2110-A4_datasheet.pdf)	July 27, 2009

## Product & Solution Guides

Ethernet Extenders Product Guide (/guides/07METHEXT-PG.pdf)	September 28, 2016
CopperLink EMV-Compliant Dispensers Solutions Guide (/guides/07MCL1200-GS-SOL.pdf)	February 24, 2016

## User Manuals & Configuration Guides

Model 2110 User Manual (/manuals/2110-UM.pdf)	March 5, 2010
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## White Papers & Success Stories

Outdoor Time-Lapsed IP Photography with Patton's Rugged EnviroNET™ Power-over-Ethernet Extender (/whitepapers/reality_check_enbridge.pdf)	June 15, 2012
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