



RLH Industries, Inc.

fiberopticlink.com

PRODUCT
DATA SHEET

DS-086 2025-1001

4+1 Unmanaged 10/100 Fixed Fiber PoE+ Industrial Switch

ETH-41P-XX-1

Flex Power, 12-55VDC Powered PoE+ (802.3af 30 Watts)

RLH industrial switches are engineered to provide reliable network performance in demanding environments. The 4+1 Fiber PoE+ switch provides four Ethernet ports providing PoE+ power to networked equipment and one fiber port. It is environmentally hardened to operate in a wide temperature range, which is the standard for RLH equipment.

The PoE+ ports provide up to 30 Watts of power to end devices following the IEEE 802.3af/at standard. The unique Flex Power feature allows the device to maintain a consistent PoE+ voltage to end devices regardless of the DC powering voltage provided.

Our industrial switches robust construction and features meet the demands of a variety of applications, and are an ideal solution for a wide range of utility and automation environments.

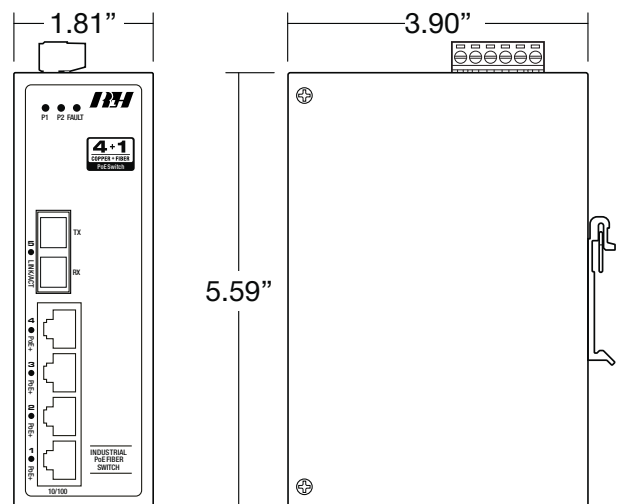


4+1 Unmanaged 10/100 Fixed Fiber PoE+ SC

Features

- Hardened to operate in -40°C to +75°C (-40°F to +167°F)
- 1 Fiber 100BaseFX port
- Multimode and single-mode fiber, ST or SC connectors
- Extend Ethernet over fiber, up to 74 miles (120km)
- 4 PoE+ ports with up to 30 watts per port
- IEEE 802.3af/at Power Over Ethernet
- PoE Mode A (End Span)
- Auto MDI/MDI-X
- 12-55VDC redundant power inputs with built-in alarm
- 2kV surge protection
- DIN rail & wall mountable
- UL Listed

Dimensions



Front View

Side View





General Specifications

Data Process:	Store & Forward, CSMA/CD, IEEE 802.3x flow control, back pressure flow control				
Standards:	IEEE 802.3 10BaseT Ethernet IEEE 802.3u 100BaseTX Fast Ethernet IEEE 802.3af Power over Ethernet (PoE) IEEE 802.3af Power over Ethernet Plus (PoE+) IEEE 100BaseFX 100Mbps Fiber				
Transfer Rates:	14,880pps - Ethernet port 148,800pps - Fast Ethernet port,				
Transmission Distance:	Up to 100 Meters over twisted pair				
Transmission Speed:	Up to 100Mbps				
MAC Address:	8k table size				
Fiber Specifications:	Fiber Type	Mode	Fiber Diameter	Connector Type	Distance
	Single Fiber Bi-Directional	Singlemode	9/125 μm	SC	20km / 12.4miles 60km / 36 miles
	Dual Fiber	Multimode	62.5/125 μm 50/125 μm	ST/SC	2km / 1.2 miles
		Single Mode	9/125 μm	ST/SC	20km / 12.4 miles 60km / 36 miles 120km / 74 miles
		Note: Distances equated using industry standard fiber and connector attenuation of 3dB/Km. Fiber condition, splices and connectors may affect actual range.			
	Ethernet Interface:	Auto MDI/MDI-X, Auto Speed & Duplex Negotiation			
Ethernet Ports:	(4) 10/100 Mbps PoE+				
	(2) Fiber 100BaseFX				
PoE Power:	30 Watts (Mode A / End Span)				
PoE Pin Assignment:	Positive (VCC+) – RJ-45 Pins 1, 2				
	Negative (VCC-) – RJ-45 Pins 3, 6				
	Data: Pin 1, 2, 3, 6				
LED Status Indicators:	Power 1 (P1), Power 2 (P2), Fault				
	Ethernet Ports (Link and Activity), PoE+ (On and Off)				
Power Protection:	Over Current, Power Reversal, Polarity Protection				
Power Input:	48~55VDC redundant power inputs (pluggable terminal block)				
Power Consumption:	130 Watts Max. (assuming full PoE load)				
Fault Output:	1 Relay output rated for 24VDC @ 1 Amp				
Operating Temperature:	-40°C to 75°C (-40°F to 167°F)				
Storage Temperature:	-40°C to 85°C (-40°F to 185°F)				
Operating Humidity:	5% to 95% (Non-Condensing)				
Construction:	Powder coated IP30 steel housing				



General Specifications (cont.)

Case Dimensions:	1.81" (W) x 3.90" (D) x 5.59" (H), (46mm x 99mm x 142mm) *Not including connectors or DIN bracket
Installation:	Standard DIN rail (TS-35) or wall mount *Wall mount brackets included
EMI:	FCC Part 15 Subpart B Class A, CE EN55022 Class A, IEC61000-4-2 (ESD), IEC61000-4-3 (RS), IEC61000-4-4 (EFT), IEC61000-4-5 (Surge), IEC61000-4-6 (CS), IEC61000-4-8 (Magnetic Field)
Stability Testing:	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Safety:	CE, FCC Class A, UL508 File Number: E480850, UL Class 1/Div.2, ISA 12.12.01
Compliance:	NDAA, TAA, NEMA TS2 (ITS), RoHS and REACH compliant
Warranty:	5 Years - Visit www.fiberopticlink.com for warranty details

Ordering Information

Description	Connector	Fibers	Wavelength	Distance	Part Number
Multimode	SC	Dual Fibers	1310nm	2km/1.2 miles	ETH-41P-03-1
	ST	Dual Fibers	1310nm	2km/1.2 miles	ETH-41P-04-1
Singlemode	SC	Single Fiber - Side A	T-1310/R-1550	20km/12.4 miles	ETH-41P-10-1
		Single Fiber - Side B	R-1310/T-1550	20km/12.4 miles	ETH-41P-11-1
Singlemode	SC	Single Fiber - Side A	T-1310/R-1550	60km/37 miles	ETH-41P-14-1
		Single Fiber - Side B	R-1310/T-1550	60km/37 miles	ETH-41P-15-1
Singlemode	SC	Dual Fibers	1310nm	20km/12.4 miles	ETH-41P-40-1
				60km/37 miles	ETH-41P-41-1
			1550nm	120km/74 miles	ETH-41P-45-1
Singlemode	ST	Dual Fibers	1310nm	20km/12.4 miles	ETH-41P-50-1
				60km/37 miles	ETH-41P-51-1
			1550nm	120km/74 miles	ETH-41P-55-1

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