



RLH Industries, Inc.

fiberopticlink.com

PRODUCT
DATA SHEET

DS-092 2025-1001

4+2 Managed 10/100 Flex PoE+ Fixed Fiber Industrial Switch

ETH-42MP-XX-2

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

RLH industrial Ethernet switches are engineered to provide reliable network performance in harsh environments. The 4+2 Managed PoE+ Fiber Switch is an industrial switch with 4-ports 10/100BASE-T that support IEEE802.3af/at PoE+, and 2 fiber ports. The 100BASE-FX fiber ports support Single and Dual fiber configurations, Singlemode and multimode, and ST and SC connectors. This fully manageable Light Layer 3 switch, combines the functionality of a Layer 2 switch with basic Layer 3 routing capabilities.

RLH Switches are engineered with robust features and construction to meet the demands of a variety of industrial applications. The switch includes standard design features such as 12~48VDC dual redundant power inputs, fault alarm relay, DIN rail and wall mounting hardware, and -40°C to 75°C operating temperature range.

RLH Switches are an ideal solution for a wide range of utility and automation network environments.

Features

- 4 Fast Ethernet PoE+ ports
- 2 Fiber 100Base-FX ports, SC or ST
- Hardened to operate in -40°C to +75°C (-40°F to +167°F)
- 12~48VDC Dual redundant power inputs
- Built-in alarm relay
- Rugged IP30 housing, DIN rail & wall mountable
- UL, CE, and FCC certification
- TAA and NDAA compliant
- NEMA TS2 (ITS) compliant
- 5 Year Warranty

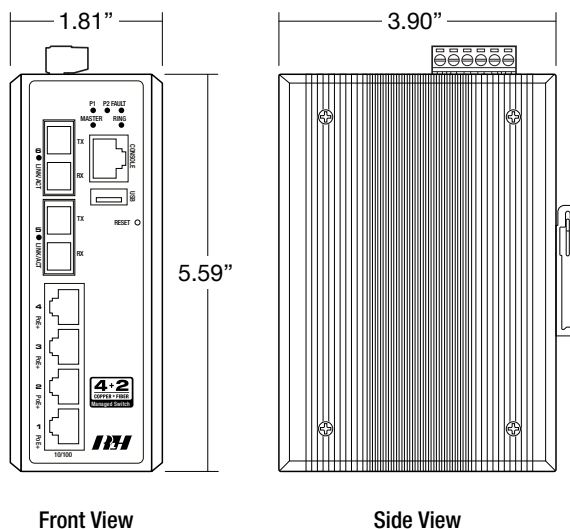
Managed Features

- Light Layer 3 Switch - Supports Static Routes, Inter-VLAN Routing, ACLs, Ipv4/Ipv6, and DHCP Option 66/67/82
- Configuration via Web, Serial, Telnet, & SSH
- Supports SNMPv3
- Supports IEEE 802.1q Vlans
- PoE Port Control & Monitoring



4+2 Managed 10/100 Flex PoE+ Fixed Fiber ST

Dimensions



Front View

Side View





General Specifications

Data Process:	Store and Forward, CSMA/CD				
Standards:	IEEE 802.3	10Base-T (Ethernet)	IEEE 802.1d	STP (Spanning Tree Protocol)	
	IEEE 802.3u	100Base-TX (Fast Ethernet)	IEEE 802.1w	RSTP (Rapid Spanning Tree Protocol)	
	IEEE 802.1p	Quality of Service (QoS)	IEEE 802.1s	MSTP (Multiple Spanning Tree Protocol)	
	IEEE 802.3af	Power over Ethernet (PoE)	IEEE 802.1Q	Virtual Local Area Network (VLAN)	
	IEEE 802.1X	Network Authentication	IEEE 802.1AB	Link Layer Discovery Protocol (LLDP)	
	IEEE 802.3ad	Link Aggregation (LACP)	ITU-T G.8032/Y.1344	ERPS (Ethernet Ring Protection Switching)	
	IEEE 802.3x	Flow Control	IEEE 802.3at	Power over Ethernet Plus (PoE+)	
Transfer Rates:	14,880pps for Ethernet port				
	148,800pps for 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
		Multimode	62.5/125 50/125 μm	ST/SC	2km / 1.2 miles
	Dual Fiber	Singlemode	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-Negotiation			
Ethernet Ports:	(4) 10/100 Mbps PoE+				
	(2) Fiber 100BaseFX				
PoE Power:	30 Watts (Mode A / End Span)				
Max. PoE Power Budget:	90W@12VDC, 120W@24-55VDC				
PoE Pin Assignment:	Positive (VCC+) – Pins 1, 2; Negative (VCC-) – Pins 3, 6; Data – Pins 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:	12~55VDC redundant power inputs (6 position pluggable terminal block)				
Max Power Consumption:	145 Watts (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)				



General Specifications (cont.)

Operating Humidity:	5% to 95% (Non-Condensing)
Construction:	Powder coated IP30 steel housing
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 Class A, CE EN61000-4-2/3/4/5/6/8/11/12, CE EN61000-6-2, CE EN61000-6-4
Stability Testing:	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Safety:	CE, FCC Class A, UL 61010-1 3rd Edition and UL 61010-2-201 1st Edition, File Number: E480850
Compliance:	NDAA, TAA, NEMA TS2 (ITS), RoHS and REACH compliant
MTBF:	438,555 hours - Telcordia SR-332, Issue 3, GB, 25°C
Warranty:	5 Years - Visit www.fiber opticlink.com for warranty details

Ordering Information

Description	Connector	Fibers	Wavelength	Distance	Part Number
Multimode	SC	Dual Fibers	1310nm	2km/1.2 miles	ETH-42MP-03-2
	ST	Dual Fibers	1310nm	2km/1.2 miles	ETH-42MP-04-2
Singlemode	SC	Single Fiber - Side A	T-1310/R-1550	20km/12.4 miles	ETH-42MP-10-2
		Single Fiber - Side B	R-1310/T-1550	20km/12.4 miles	ETH-42MP-11-2
Singlemode	SC	Single Fiber - Side A	T-1310/R-1550	60km/37 miles	ETH-42MP-14-2
		Single Fiber - Side B	R-1310/T-1550	60km/37 miles	ETH-42MP-15-2
Singlemode	SC	Dual Fibers	1310nm	20km/12.4 miles	ETH-42MP-40-2
				60km/37 miles	ETH-42MP-41-2
			1550nm	120km/74 miles	ETH-42MP-45-2
Singlemode	ST	Dual Fibers	1310nm	20km/12.4 miles	ETH-42MP-50-2
				60km/37 miles	ETH-42MP-51-2
			1550nm	120km/74 miles	ETH-42MP-55-2

- Single fiber (bi-directional) systems must always be paired, side A and side B

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