

# Hardened Unmanaged 2-port 10/100/1000BASE + 2-port 100/1000 SFP Ethernet Switch











### Overview

EtherWAN's EX41922 Series is a compact hardened unmanaged gigabit switch, designed as an easily deployed platform for peripheral devices in harsh environments. It is a cost-effective option for surveillance systems in extreme climates.

The EX41922 Series is equipped with two 10/100/1000Base RJ-45 copper ports, and two 100/1000Base SFP fiber optic slots for long distance connectivity. The two uplink SFP interfaces provide 100 or 1000SFP speed, selected by DIP switch. They can be used in a daisy chain formation, and are compatible with the proprietary Alpha-chain redundancy protocol when used with a compatible EtherWAN managed switch. Although unmanaged, the EX41922 is feature-rich with 10K Jumbo Frame support, full wire speed gigabit throughput, QoS support, and eco-friendly IEEE802.3az EEE (Energy Efficient Ethernet) compliance. With its hardened specifications, high performance, and energy efficiency, the EX41922 is a flexible and reliable solution for extended networks.

EtherWAN – When Connectivity is Crucial.

## **Spotlight**

#### Hardened Grade

- Supports -40 to 75°C (-40 to 167°F) operating temperature
- Redundant power inputs on terminal block connector
- · Supports DIN-Rail mounting

#### Fiber Connectivity

- Up to two 1000BASE SFP ports for daisy chain or Alpha-chain applications
- Provides 100BASE or 1000BASE SFP by DIP switch

#### Port Failure Alarm

• Provide relay alarm to notify users when power fails or link down occurs by DIP switch

#### Full Gigabit bandwidth and Jumbo frame

- Gigabit wire-speed transmission for bandwidth-demanding application
- Jumbo frame up to 10K bytes to increase throughput and transmission efficiency



## **Hardware Specifications**

#### **Technology**

#### **Standards**

- IEEE802.3 10BASE-T
- IEEE802.3u 100BASE-TX/100BASE-FX
- IEEE802.3ab 1000BASE-T
- IEEE802.3z 1000BASE-SX/1000BASE-LX
- IEEE802.1x, Full duplex flow control
- IEEE802.1az Energy Efficient Ethernet

#### **Forward and Filtering Rate**

- 14,880pps for 10Mbps
- 148,810pps for 100Mbps
- 1,488,100pps for 1000Mbps

#### **Packet Buffer Memory**

• 1MB

#### **Processing Type**

- Store-and-Forward
- Auto Negotiation
- Half-duplex back-pressure and IEEE802.3x full-duplex flow control
- Auto MDI/MDIX

#### **Jumbo Frame**

• 10K bytes

#### **Address Table Size**

• 8K MAC addresses

#### **Broadcast Storm Protection Threshold**

• Limit 15,000 packets per second.

#### Power

#### Input Voltage

• 12~48VDC

#### **Power Consumption**

• 3.2W Max. 0.26A @ 12VDC, 0.13A @ 24VDC, 0.06A @ 48VDC

#### Mechanical

#### Casing

- Metal case
- IP30

#### **Dimensions**

36 x 90 x 100mm(W x D x H)
(1.42" x 3.54" x 3.94")

#### Weight

• 0.25Kg (0.55lb)

#### Installation

DIN-Rail

#### **Interface**

#### **Ethernet Ports**

- 10/100/1000BASE-T: 2 ports
- 100/1000BASE SFP: 2 ports

#### **LED Indicators**

- Per Unit: Power1 (Green), Power2 (Green), Alarm (Red)
- Per Port: Link & Activity (Green)

#### **DIP Switches**

• Enable/Disable Port fault alarm, SFP port on 100BASE

#### **Alarm Contact**

- One relay output with current 1A @ 250VAC
- Supports normal close and normal open

#### **Environment**

#### **Operating Temperature**

• -40 to 75°C (-40 to 167°F)

#### **Storage Temperature**

• -40 to 85°C (-40 to 185°F)

#### **Ambient Relative Humidity**

• 5% to 95% (non-condensing)

#### **Regulatory Approvals**

#### ISO

· Manufactured in an ISO 9001 facility

#### EMI

#### FCC Part 15B Class A

**VCCI Class A** 

EN 61000-6-4

#### **EMS**

#### EN 61000-6-2

- EN 61000-4-2 (ESD Standards)
- EN 61000-4-3 (Radiated FRI Standards)
- EN 61000-4-4 (Burst Standards)
- EN 61000-4-5 (Surge Standards)
- EN 61000-4-6 (Induced RFI Standards)
- EN 61000-4-8 (Magnetic Field Standards)

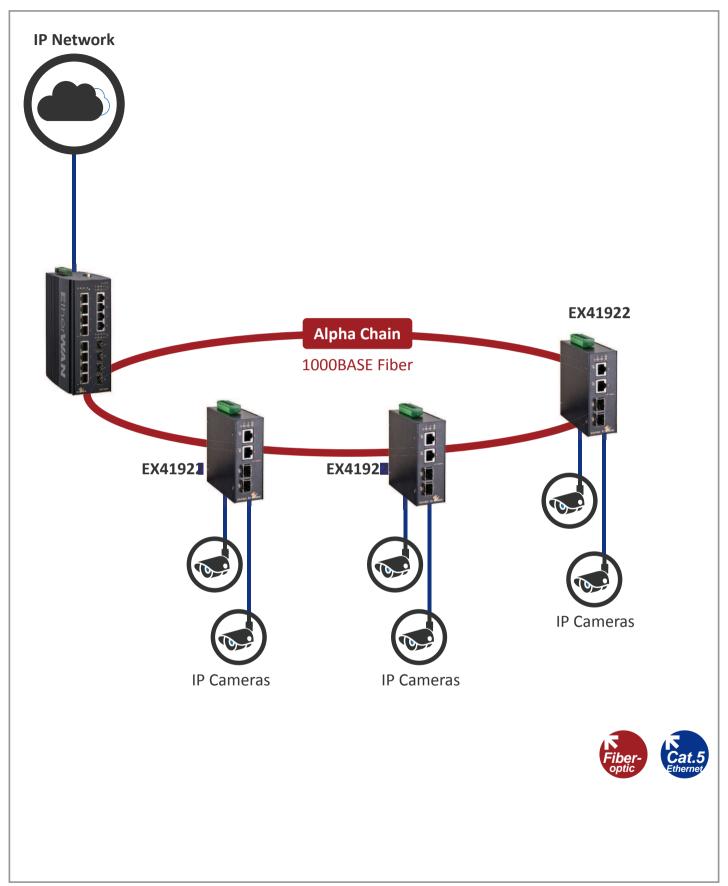
#### **Environmental Test Compliance**

#### IEC 60068-2-6 Fc (Vibration)

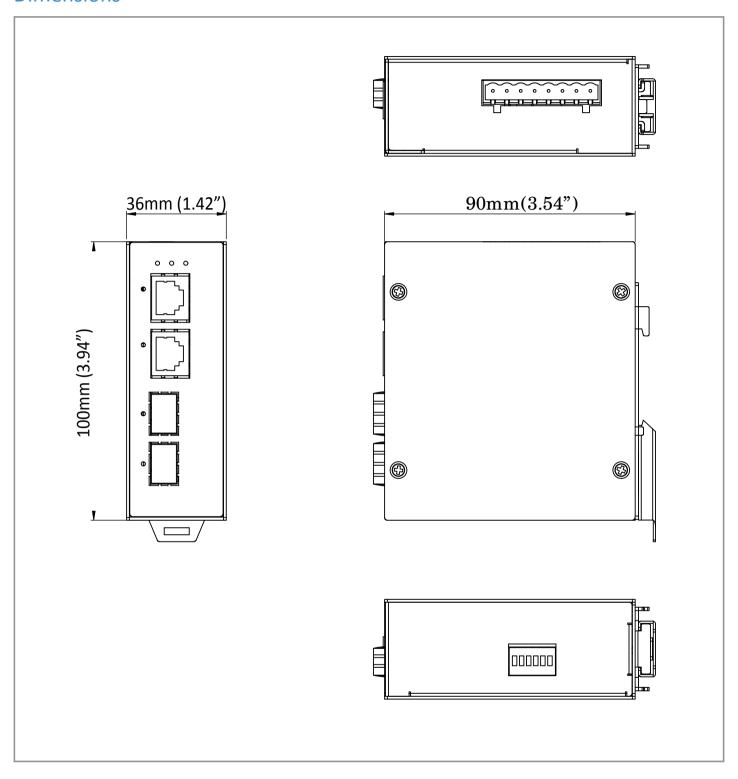
IEC 60068-2-27 Ea (Shock)

FED STD 101C Method 5007.1 (Free fall w/ package)

## **Application Diagram**



## **Dimensions**



## **Ordering Information**

#### Model

EX41922 Hardened Unmanaged 2-port 10/100/1000Base-T + 2-port 100/1000 SFP Ethernet Switch

<sup>\*</sup> DIN-Rail mounting kit included