



## 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 new EX41922-T is equipped with two 10/100/1000Base RJ-45 copper ports supporting Power over Ethernet (PoE), 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. Moreover, EX41922-T provides up to 30 Watts PoE per port with a total power budget of 60 Watts. Although unmanaged, the EX41922-T 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-T 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

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### 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
- IEEE802.3af/at Power over Ethernet (PoE)

### 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

## Power

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### Input Voltage

- Redundant power inputs;  
Terminal Block: 52–57VDC for PoE

### Power Consumption

- 63.6W@52VDC, 63.8W@57VDC
- PoE Power budget: 60W

### PoE Technology

- Alternative A  
Pins 1/2(+), 3/6(-)

## Mechanical

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### Casing

- Metal case
- IP30

### Dimensions

- 42 x 90 x 100mm(W x D x H)  
(1.65" x 3.54" x 3.93")

### Weight

- 0.37Kg (0.82lb)

### Installation

- DIN-Rail

## Interface

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### 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)
- Per PoE Port: PoE (Amber)

### DIP Switches

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

### Alarm Contact

- One relay output with current 0.5A/48VDC
- Supports normal close and normal open

## Environment

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### 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

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### ISO

- Manufactured in an ISO 9001 facility

### Safety

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#### UL 61010

### EMI

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#### FCC Part 15B Class A

#### VCCI Class A

#### EN 61000-6-4

### EMS

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#### 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

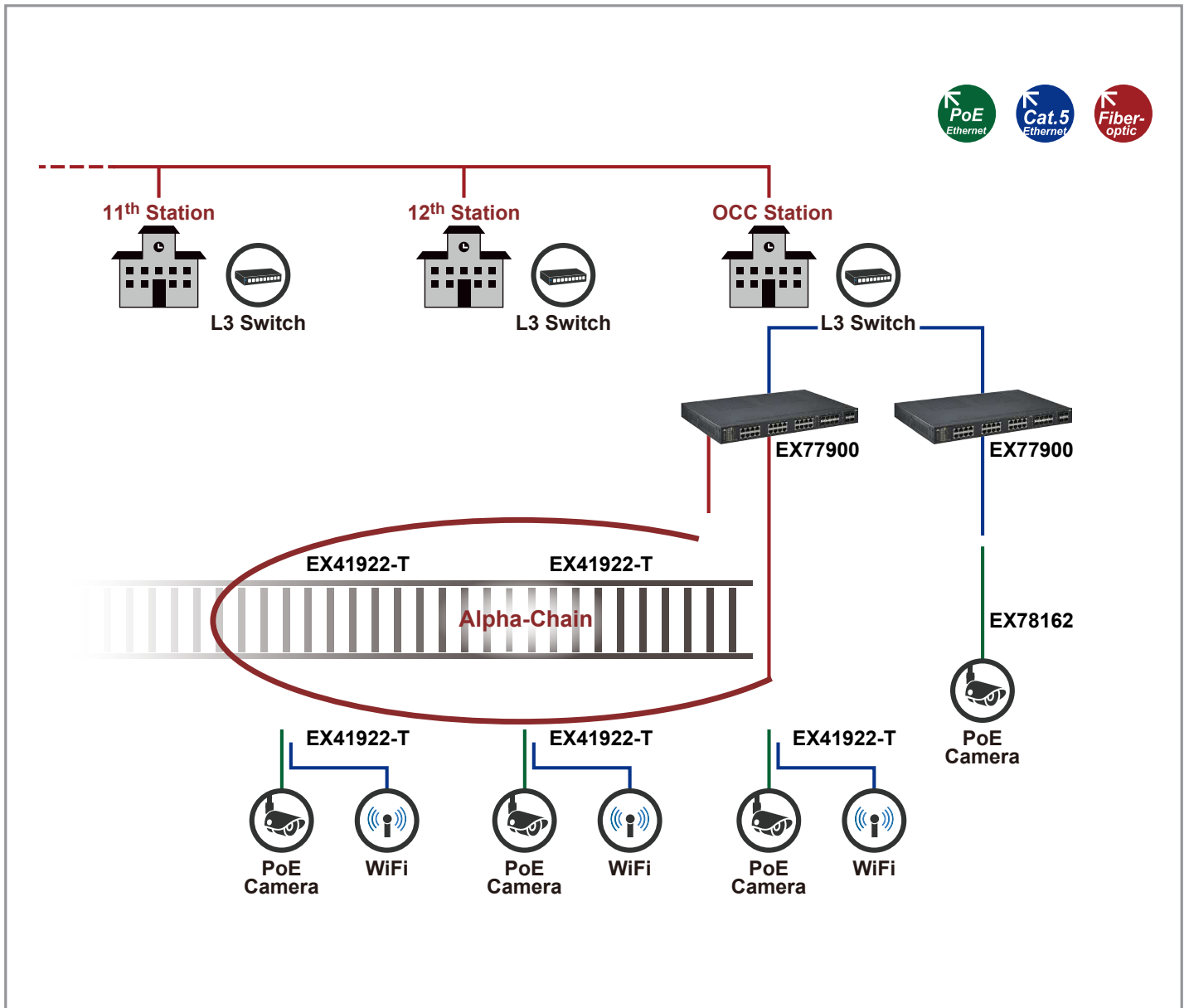
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#### IEC 60068-2-6 Fc (Vibration)

#### IEC 60068-2-27 Ea (Shock)

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

# Application Diagram



## Dimensions

