# EX42000 Series

## Industrial Unmanaged 5-port 10/100BASE Ethernet Switch











## Overview

EtherWAN's EX42000 Series is a compact industrial unmanaged Fast Ethernet switch, designed for easy deployment in harsh environments.

The EX42000 Series is equipped with 5 Fast Ethernet copper ports, or a combination of 4 Fast Ethernet copper ports and 1 Fast Ethernet fiber port for long distance connectivity. This switch features 10/100Mbps transfer speeds, full/half-duplex auto-negotiation, and auto MDI/MDIX operation, allowing for fast and hassle-free connection and setup.

Although unmanaged, the EX42000 is feature-rich with full wire speed Fast Ethernet throughput, QoS (Quality of Service), Broadcast storm protection, IEEE802.3az EEE (Energy Efficient Ethernet), and 4 kV surge protection. The EX42000 can be DIN rail mounted, and its compact size makes it an ideal solution for factory floors, warehouses, and locations without climate control.

EtherWAN – "When Connectivity is Crucial."

# **Spotlight**

## Industrial Grade

- $^{\circ}$  Supports -10 to 60°C (14 to 140°F) operating temperature
- Supports DIN-Rail mounting

## Fiber Connectivity

 $\circ\,$  Up to one 100BASE-FX port with SC and ST options

## 4 kV Surge Protection on Data port

Augmented 4 kV surge protection in accordance with EN 61000-4-5

## Broadcast Storm Protection Threshold

- 30 Frames / 10ms for 100Mbps
- ∘ 30 Frames / 100ms for 10Mbps

# **Hardware Specifications**

## **Technology**

#### **Standards**

- IEEE802.3u 100BASE-TX/FX
- IEEE802.3x full-duplex flow control
- IEEE802.3az Energy Efficient Ethernet
- IEEE802.1p Quality of Service (QoS)

### **Forward and Filtering Rate**

- 14,880pps for 10Mbps
- 148,810pps for 100Mbps

#### **Packet Buffer Memory**

• 448K bits

#### **Processing Type**

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

#### **Address Table Size**

• 1K MAC addresses

#### **Power**

## **Input Voltage**

• Terminal block: 12 to 48VDC

#### **Power Consumption**

• 1.82W Max. 0.14A@12VDC, 0.07A@24VDC, 0.038A@48VDC

#### **Protection**

• Reverse polarity proetction

## Mechanical

#### Casing

- Plastic case
- IP30

### **Dimensions**

• 26 x 70 x 110mm (W x D x H) (1.02" x 2.76" x 4.33")

### Weight

• 0.2Kg (0.44lbs.)

## Installation

• DIN-Rail (Top hat type 35mm)

## **Interface**

## **Ethernet Ports**

- 10/100BASE-TX: 5 or 4 ports
- 100BASE-FX: 0 or 1 port

## **LED Indicators**

- Per Unit: Power (Green)
- Per Port: Link/Activity (Green),
  Speed (Yellow)

## **Environment**

## **Operating Temperature**

• 10 to 60°C (14 to 140°F) Tested @ -20 to 70°C (-4 to 158°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

#### Safety

#### **UL 62368**

#### **EMI**

FCC Part 15B, Class A

**VCCI Class A** 

EN 61000-6-4

EN 61000-3-2

EN 61000-3-3

#### **EMS**

## EN 61000-6-2

- EN 61000-4-2 (ESD Standards)
- EN 61000-4-3 (Radiated RFI Standards)
- EN 61000-4-4 (Burst Standards)
- EN 61000-4-5 (Surge Standards)
  Signal ports: ±4kV line-to-ground
- EN 61000-4-6 (Induced RFI Standards)
- EN 61000-4-8 (Magnetic Field Standards)

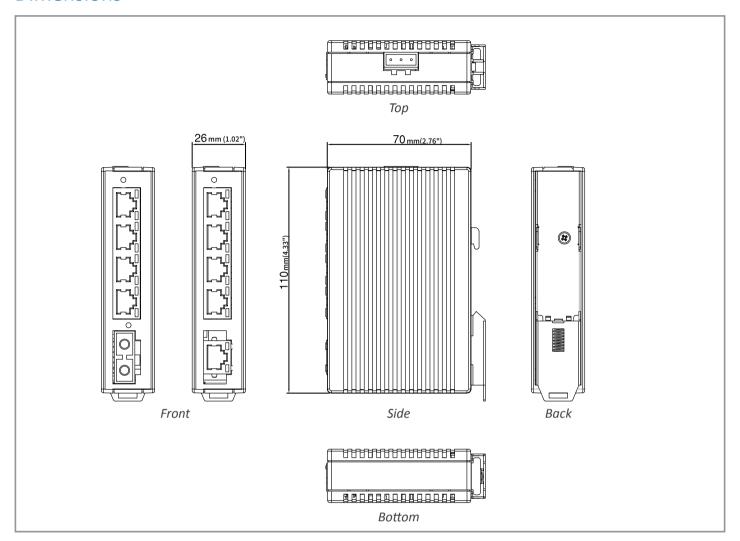
## **Environmental Test Compliances**

IEC 60068-2-6 Fc (Vibration)

IEC 60068-2-27 Ea (Shock)

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

# **Dimensions**



# **Ordering Information**

## Model

|  | EX42005-00-1-A | Industrial Unmanaged 5-port 10/100BASE-TX Ethernet Switch with 4 kV surge protection                     |
|--|----------------|--|
|  | EX42014-XY-1-A | Industrial Unmanaged 4-port 10/100BASE-TX + 1-port 100BASE-FX Ethernet Switch with 4 kV surge protection |

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

# 100FX Fiber Options (XY)

| 1A | Multi Mode (SC) - 2Km                            |
|----|--|
| 1B | Multi Mode (ST) - 2Km                            |
| 2A | Single Mode (SC) - 20Km                          |
| 2D | Single Mode (ST) - 20Km                          |
| 2E | Single Mode (SC) WDM-TX: 1310nm/RX:1550nm - 20Km |
| 2G | Single Mode (SC) WDM-TX: 1550nm/RX:1310nm - 20Km |

<sup>\*</sup> More 100FX fiber options also available upon request

# Ordering Information - continued

# **Optional Accessories**

| DR-30-24    | 30W/1.5A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)   |
|-------------|--|
| DR-60-24    | 60W/2.5A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)   |
| DR-75-24    | 75W/3.2A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)   |
| DR-120-24   | 120W/5A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)  |
| 41-136046-X | 36W/3A 12VDC hardened power adapter with open wire in aluminum housing (for Terminal Block) (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA |