

# EX48000 Series

Hardened Web-Smart 5-port 10/100BASE PoE (4 x PoE) Ethernet Switch



## Overview

EtherWAN's EX48000 Series provides a hardened 5-port switching platform supporting IEEE 802.3af+ Power over Ethernet, high performance switching with robust management features required for mission-critical and harsh environments where sustained connectivity is crucial.

The EX48000 Series is equipped with four 10/100BASE-TX PoE ports, in combination with one 100FX Fiber option. The IEEE 802.3af+ PoE ports provide up to 30W/port with a total power budget of 120W, making the switch truly versatile for connecting with PoE Powered Devices (PD) with different bandwidth and power consumption requirements.

Users are able to access management features such as QoS based on 802.1p, DSCP, and IP precedence. With the hardened specifications, the EX48000 Series is designed to operate at -40 to 75°C in harsh environments where high ESD, shock and vibration may be present.

EtherWAN — "When Connectivity is Crucial."

## Spotlight

### Hardened Grade

- » Supports -40 to 75°C (-40 to 167°F) operating temperature

### PoE Connectivity

- » Port 1 to 4 supports IEEE 802.3af+ Power over Ethernet

### Fiber Connectivity

- » Up to one 100BASE-FX port with SC or ST option

### Web-Managed Interface

- » Comprehensive QoS based on 802.1p, DSCP, and IP precedence

# Specifications

## Technology

### Standards

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX/100BASE-FX
- IEEE 802.3x Full duplex and flow control
- IEEE 802.3af+ Power over Ethernet (PoE)

### Forward and Filtering Rate

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

### Packet Buffer Memory

- 512K bits

### Processing Type

- Store-and-Forward
- Auto Negotiation
- Half-duplex back-pressure and IEEE 802.3x full-duplex flow control
- Auto MDI/MDIX

### Address Table Size

- 1024 MAC addresses
- 

## Power

### Input

- Redundant power inputs:  
Terminal Block: 47-57VDC  
DC Jack: 47-57VDC

### Power Consumption

- Device: Max. 10W (without PoE)
- PoE Power Budget (depends on power input): 120W Max.

### PoE Technology

- Alternative B  
Pins 7/8(-), 4/5(+)

### PoE Power Output

- Port 1 to 4
- IEEE 802.3af+: up to 30W/port, 47-57VDC, 600mA Max.

### Protection

- Reverse polarity protection
  - Overload current protection
- 

## Mechanical

### Casing

- Metal Case
- IP30

### Dimensions

- 200 x 134.3 x 35mm (W x D x H)  
(7.87" x 5.29" x 1.38")

### Weight

- 0.8Kg (1.76lbs.)

### Installation

- Desktop, Wall, or DIN-Rail mounting
- 

## Interface

### Ethernet Ports

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

### LED Indicators

- Per Unit: Power 1 (Green), Power 2 (Green), Power 3 (Green), Fault (Red)
- Per Port: Link/Activity (Green)

### Alarm Contact

- One relay output with current 1A/250VAC
- 

## Environment

### Operating Temperature

- -40 to 75°C (-40 to 167°F)  
Tested @ -40 to 85°C (-40 to 185°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 55022

EN 61000-3-2

EN 61000-3-3

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**

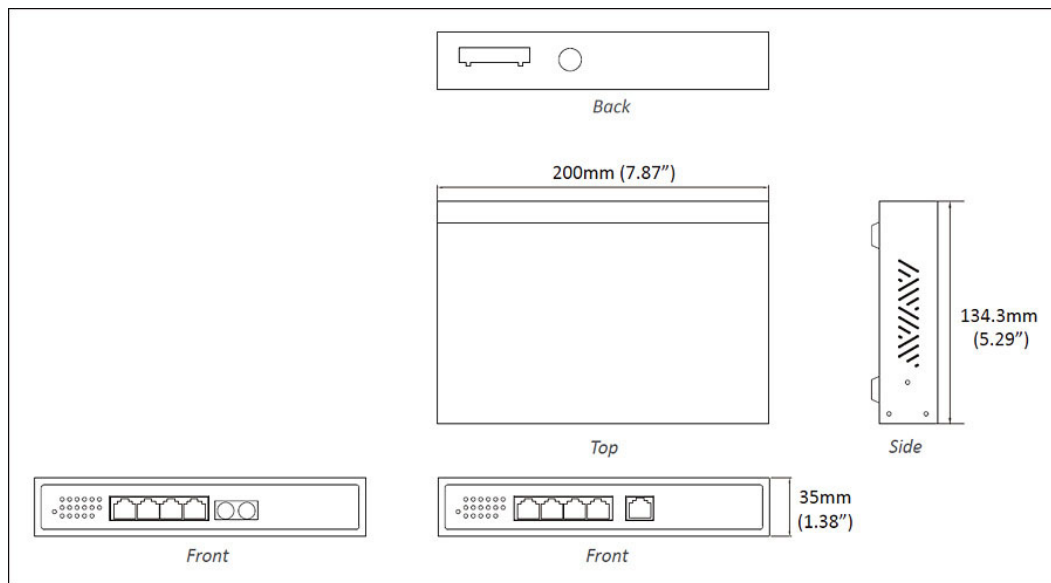
IEC 60068-2-6 Fc (Vibration)

IEC 60068-2-27 Ea (Shock)

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

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## Dimensions



## Ordering Info

### Model

|                    |                                                                                |
|--------------------|--------------------------------------------------------------------------------|
| <b>EX48050-00B</b> | 5-port 10/100BASE-TX PoE Hardened Web-smart Ethernet Switch                    |
| <b>EX48041-X0B</b> | 4-port 10/100BASE-TX +1-port 100BASE-FX PoE Hardened Web-smart Ethernet Switch |

### 100FX Fiber Options (X)

|          |                                                 |
|----------|-------------------------------------------------|
| <b>1</b> | Multi Mode (SC) - 2Km                           |
| <b>2</b> | Multi Mode (ST) - 2Km                           |
| <b>6</b> | Multi Mode (SC) WDM-TX: 1310nm/RX: 1550nm-2Km   |
| <b>7</b> | Multi Mode (SC) WDM-TX: 1550nm/RX: 1310nm-2Km   |
| <b>8</b> | Multi Mode (SC) WDM-TX: 1310nm/RX: 1550nm-5Km   |
| <b>9</b> | Multi Mode (SC) WDM-TX: 1550nm/RX: 1310nm-5Km   |
| <b>A</b> | Single Mode (SC) - 20Km                         |
| <b>B</b> | Single Mode (SC) - 40Km                         |
| <b>H</b> | Single Mode (ST) - 20Km                         |
| <b>P</b> | Single Mode (SC) WDM-TX: 1310nm/RX: 1550nm-20Km |
| <b>Q</b> | Single Mode (SC) WDM-TX: 1550nm/RX: 1310nm-20Km |
| <b>R</b> | Single Mode (SC) WDM-TX: 1310nm/RX: 1550nm-40Km |
| <b>S</b> | Single Mode (SC) WDM-TX: 1550nm/RX: 1310nm-40Km |

\* More 100FX Fiber options also available upon request.

### Optional Accessories

|                    |                                                 |
|--------------------|-------------------------------------------------|
| <b>KD-AA78000X</b> | DIN-Rail Mounting Kit                           |
| <b>NDR-240-48</b>  | 240W/5A DIN-Rail 48VDC Industrial Power Supply  |
| <b>SDR-480-48</b>  | 480W/10A DIN-Rail 48VDC Industrial Power Supply |



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