

# 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 IEEE802.3af+ 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 4 10/100BASE-TX PoE ports, in combination with one 100FX Fiber option.

The IEEE802.3af+ PoE ports provide up to 15.4W/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°C 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°C to 75°C (-40°F to 167°F) operating temperature

### • PoE Connectivity

- Port 1 to 4 supports IEEE802.3af+ Power over Ethernet

### • Fiber Connectivity

- Up to one 100BASE-FX ports with SC and ST options

### • Web-Managed Interface

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

# Hardware Specifications

## Technology

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### Standards

- IEEE802.3 10BASE-T
- IEEE802.3u 100BASE-TX/100BASE-FX
- IEEE802.3x Full duplex and flow control
- IEEE802.3af 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 IEEE802.3x full-duplex flow control
- Auto MDI/MDIX

### Address Table Size

- 1024 MAC addresses

## Power

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### 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 Power Output

- Port 1 to 4
- IEEE802.3af+: up to 30W/port, 47 - 57VDC, 600mA Max.

### Protection

- Reverse polarity protection
- Overload current protection

## Mechanical

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### Casing

- Metal case
- IP30

### Dimensions

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

### Weight

- 0.8Kg (1.76lbs.)

### Installation

- Desktop, or Wall mounting

## Interface

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### Ethernet Ports

- 10/100BASE-TX: 5 or 4 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

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### Operating Temperature

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

### Storage Temperature

- -40°C to 85°C (-40°F to 185°F)

### Ambient Relative Humidity

- 5% to 95% (non-condensing)

## Regulatory Approvals

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### ISO

- Manufactured in an ISO9001 facility

### EMI

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#### FCC Part 15B, Class A

EN61000-6-4

EN55022

EN61000-3-2

EN61000-3-3

### EMS

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#### EN61000-6-2

- EN61000-4-2 (ESD Standards)
- EN61000-4-3 (Radiated FRI Standards)
- EN61000-4-4 (Burst Standards)
- EN61000-4-5 (Surge Standards)
- EN61000-4-6 (Induced RFI Standards)
- EN61000-4-8 (Magnetic Field Standards)

### Environmental Test Compliance

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#### IEC60068-2-6 Fc (Vibration)

#### IEC60068-2-27 Ea (Shock)

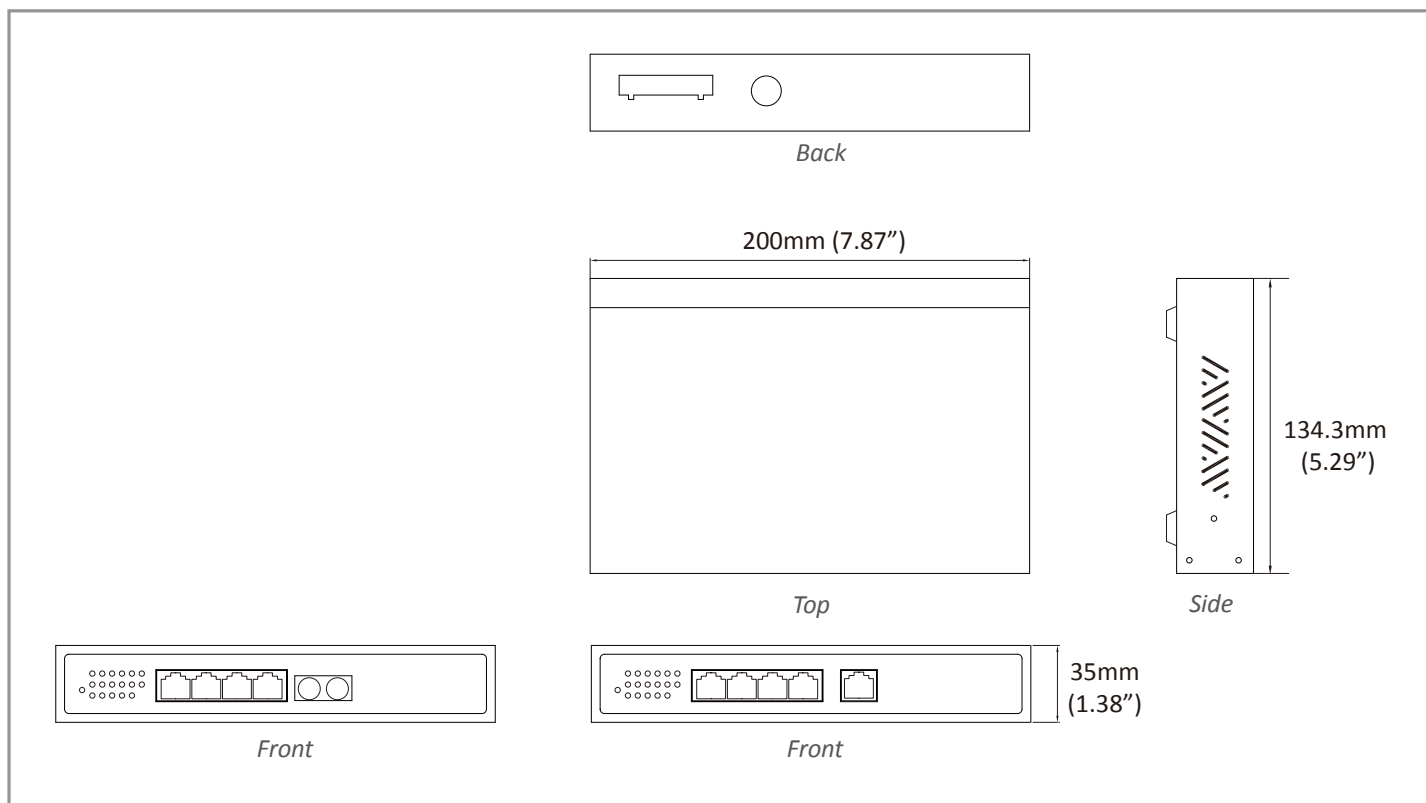
#### FED STD 101C Method 5007.1 (Free fall w/ package)

### Industrial Compliance

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#### NEMA TS2

## Dimensions



## Ordering Information

### Model

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

\* DIN-Rail mounting kit included

### 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>SDR-240-48</b>	240W/5A DIN-Rail 48VDC Industrial Power Supply
<b>SDR-480-48</b>	480W/10A DIN-Rail 48VDC Industrial Power Supply