

# EX45000 Series

Hardened Unmanaged 8-port 10/100BASE PoE (4 x PoE)  
Ethernet Switch



## Overview

EtherWAN's EX45000 Series provides a hardened 8-port switching platform supporting IEEE802.3af Power over Ethernet, high performance switching with robust features required for mission-critical and harsh environments where sustained connectivity is crucial.

The EX45000 Series is equipped with 4 10/100BASE-TX PoE ports, in combination with two 100FX Fiber options.

The IEEE802.3af PoE ports provide up to 15.4W/port with a total power budget of 61.6W, making the switch truly versatile for connecting with PoE Powered Devices (PD) with different bandwidth and power consumption requirements.

The EX45000 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 two 100BASE-FX ports with SC and ST options

# 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

### Forward and Filtering Rate

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

### Packet Buffer Memory

- 1M 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 - 55VDC  
DC Jack: 47 - 55VDC

### Power Consumption

- Device: Max. 10W (without PoE)
- PoE power budget (depends on power input):  
61.6W Max.

### PoE Power Output

- Port 1 to 4
- IEEE802.3af: up to 15.4W/port, 47 - 55VDC, 350mA Max.

### Protection

- Reverse polarity protection
- Overload current protection

## Mechanical

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### Casing

- Aluminum case
- IP30

### Dimensions

- 68mm (W) x 110mm (D) x 135mm (H)  
(2.68" (W) x 4.33" (D) x 5.31" (H))

### Weight

- 1Kg (2.2lbs.)

### Installation

- DIN-Rail (Top hat type 35mm), Panel, or Rack mounting

## Interface

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### Ethernet Ports

- 10/100BASE-TX: 8, 7 or 6 ports
- 100BASE-FX: 0, 1 or 2 ports

### LED Indicators

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

### Alarm Contact

- One relay output with current 1A @ 24VDC

## 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

#### VCCI Class A

#### EN61000-6-4

#### EN55022 Class A

### EMS

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#### EN61000-6-2

- EN61000-4-2 (ESD Standards)
- EN61000-4-3 (Radiated RFI 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 Compliances

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

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

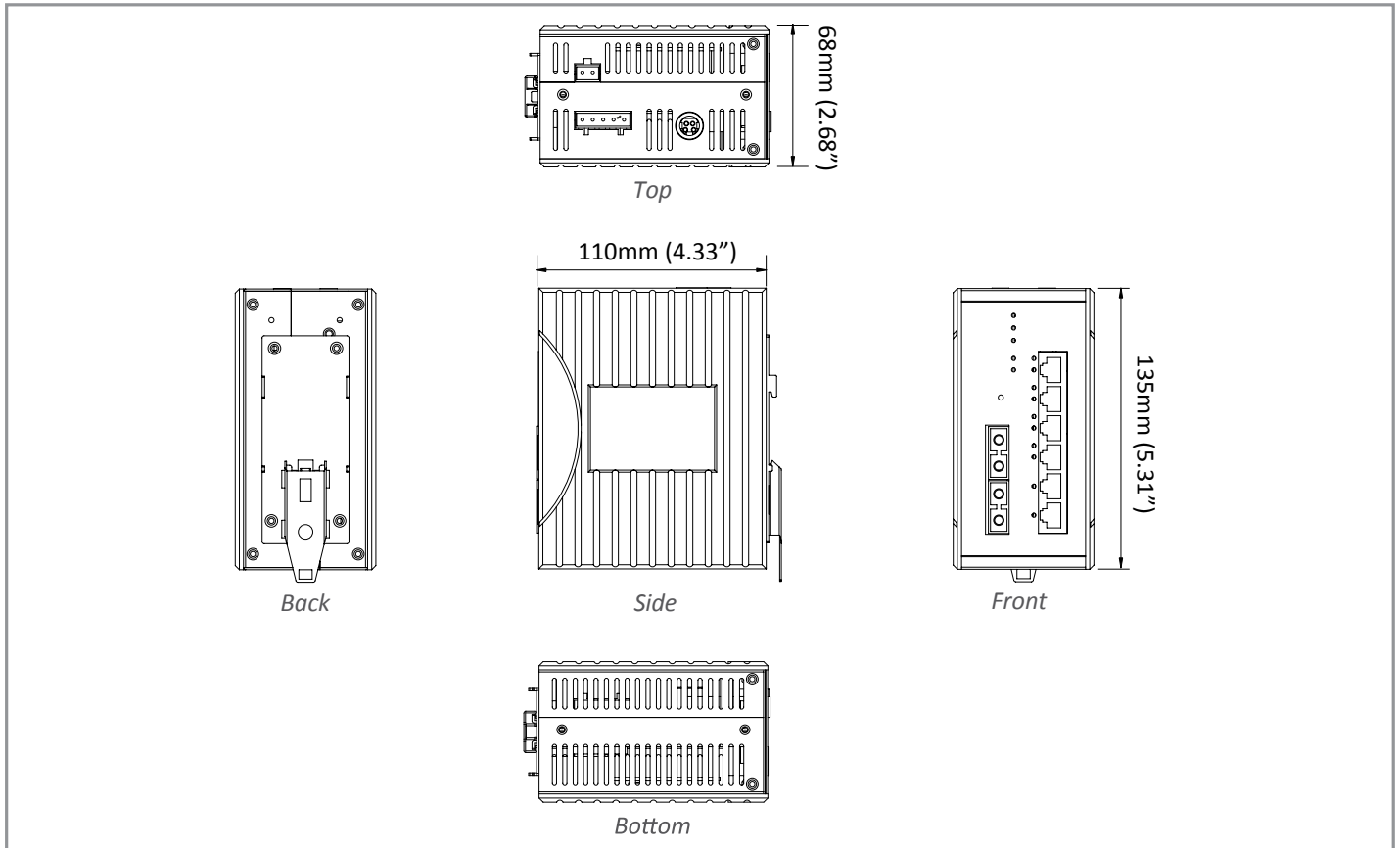
#### FED STD 101C Method 5007.1 (Free fall w/ package)

### Industrial Compliances

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#### NEMA TS2

## Dimensions



## Ordering Information

### Model

<b>EX45080-00B</b>	8-port 10/100BASE-TX Hardened Unmanaged PoE Ethernet Switch
<b>EX45071-X0B</b>	7-port 10/100BASE-TX + 1-port 100BASE-FX Hardened Unmanaged PoE Ethernet Switch
<b>EX45062-X0B</b>	6-port 10/100BASE-TX + 2-port 100BASE-FX Hardened Unmanaged 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.

## Ordering Information - continued

### Optional Accessories

<b>KP-AA96-480</b>	Panel mounting Kit
<b>KR-BK43-400</b>	Rack mounting Kit
<b>DR-120-48</b>	120W/2.5A DIN-Rail 48VDC Industrial Power Supply (for terminal block)