

# EX46100 Series

Hardened Web-smart 8-port 10/100BASE High Power PoE (4 x PoE) Ethernet Switch



## Overview

EtherWAN's EX46100 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 EX46100 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 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 such as outdoor PTZ dome cameras, wireless access points, and way-side communication devices.

Users are able to access management features such as QoS based on 802.1p, DSCP, and IP precedence. With the hardened specifications, the EX46100 Series is designed to operate at -40°C to 75°C in harsh environments where high ESD, shock and vibration may be present.

## 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

### • 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

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

### Protection

- Reverse polarity 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/Act (Green)
- Per PoE port: PoE Status (Amber)

### 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)

### Web-smart Function Operating Temperature

- -20°C to 75°C (-4°F to 167°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 Class A

### 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

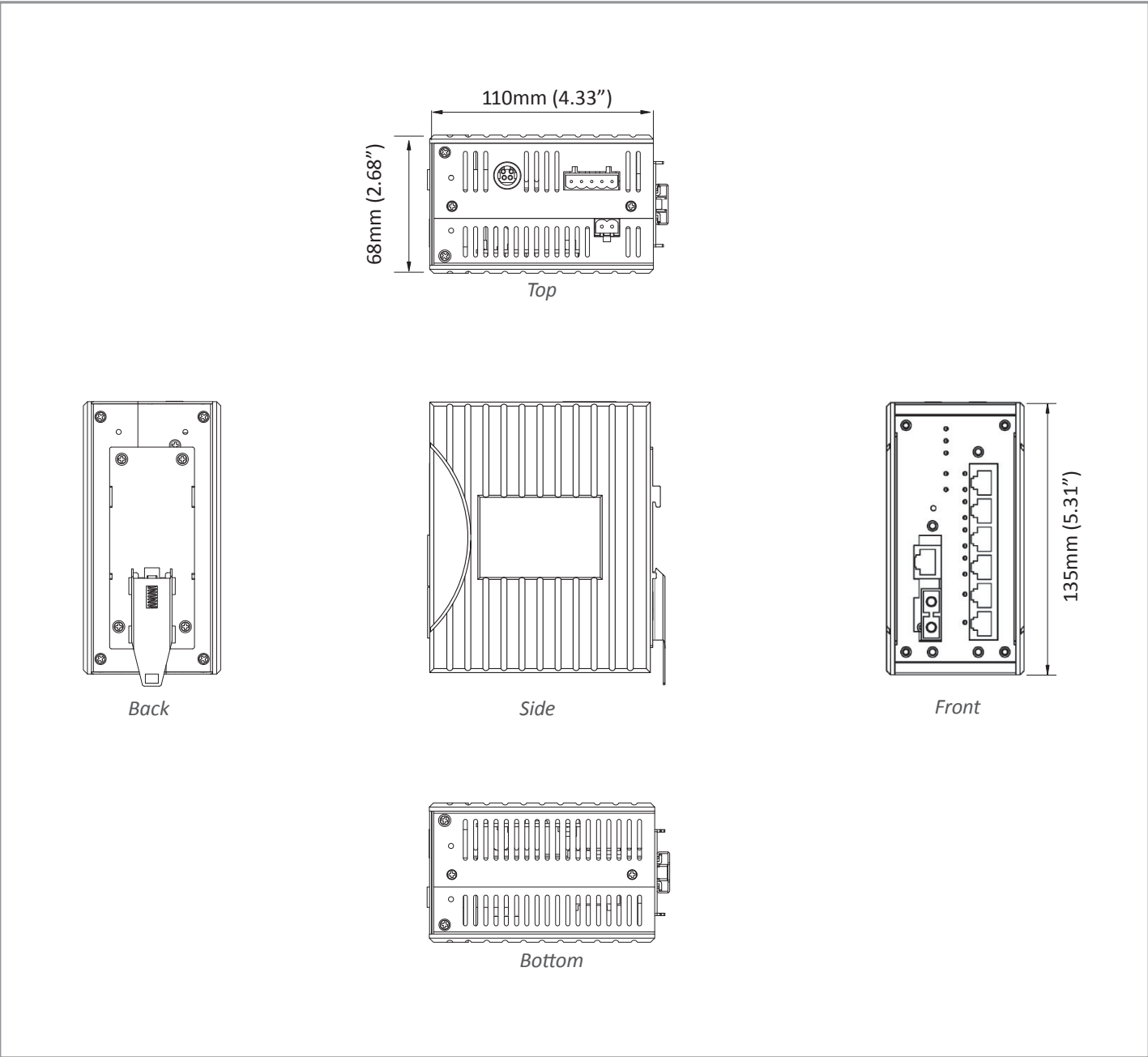
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#### IEC60068-2-6 Fc (Vibration)

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

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

# Dimensions



## Ordering Information

### Model

<b>EX46180-00B</b>	Hardened Web-smart 8-port 10/100BASE-TX PoE+ Ethernet Switch
<b>EX46171-X0B</b>	Hardened Web-smart 7-port 10/100BASE-TX + 1-port 100BASE-FX PoE+ Ethernet Switch
<b>EX46162-X0B</b>	Hardened Web-smart 6-port 10/100BASE-TX + 2-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>KP-AA96-480</b>	Panel Mounting Kit
<b>KR-BK-43-400</b>	Rack Mounting Kit
<b>DR-120-48</b>	120W/2.5A DIN-Rail 48VDC Industrial Power Supply
<b>SDR-240-48</b>	240W/5A DIN-Rail 48VDC Industrial Power Supply