EX48000A Series

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

Overview

EtherWAN's EX48000A Series provides a hardened 5-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 EX48000A 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 61.6W, making the switch truly versatile for connecting with PoE Powered Devices (PD) with different bandwidth and power consumption requirements.

The EX48000A 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

Hardware Specifications

Technology

Standards
- IEEE802.3 10BASE-T
- IEEE802.3u 100BASE-TX/100BASE-FX
- IEEE802.3af Power over Ethernet
- IEEE802.3x Full duplex and flow control

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

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): 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

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

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

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

ISO
- Manufactured in an ISO9001 facility

EMI

FCC Part 15B, Class A

EN61000-6-4

EN55022 Class A

EMS

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)
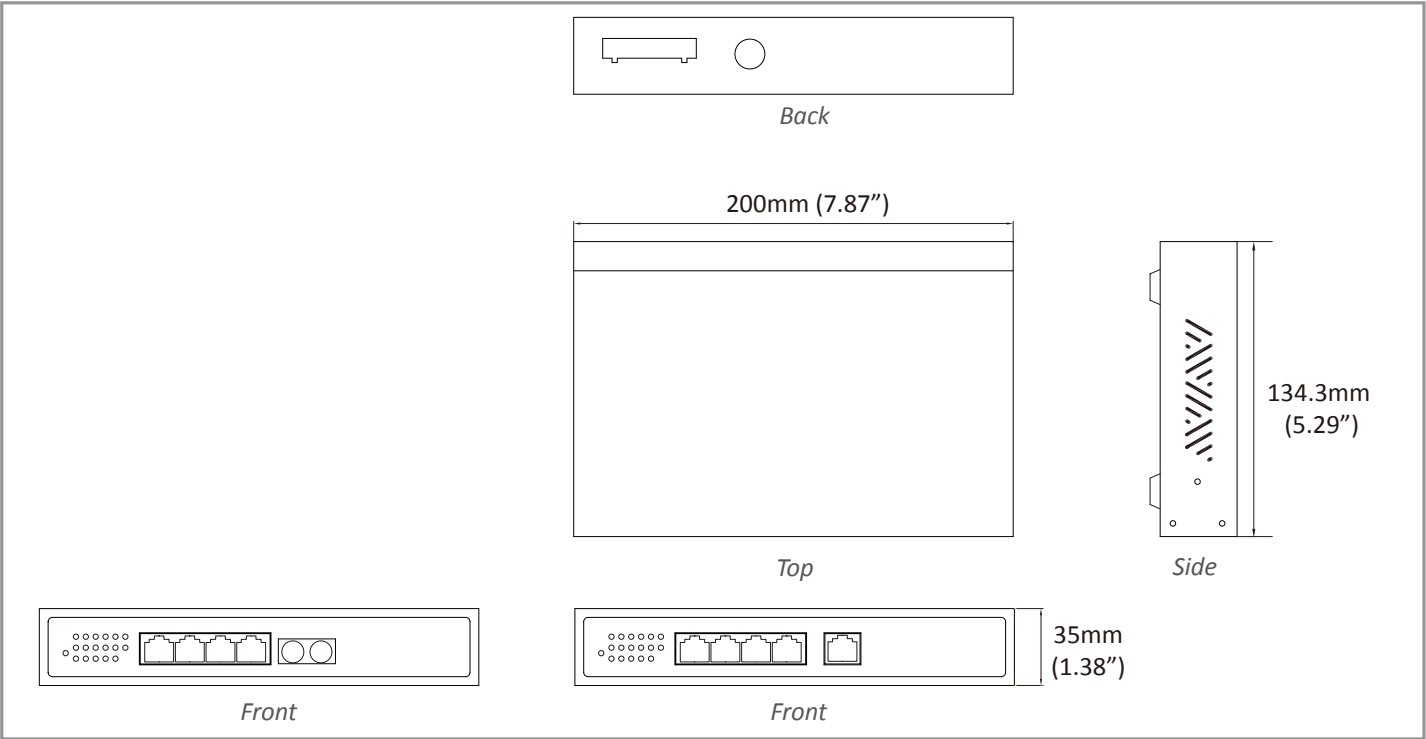- EN61000-4-8 (Magnetic Field Standards)

Environmental Test Compliances

IEC60068-2-6 Fc (Vibration)

IEC60068-2-27 Ea (Shock)

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

Dimensions

Back

200mm (7.87")

Top

134.3mm (5.29")

Side

35mm (1.38")

Front

Front

Ordering Information

Model

EX48050A-00B	Hardened Unmanaged 5-port 10/100BASE-TX PoE Ethernet Switch
EX48041A-X0B	Hardened Unmanaged 4-port 10/100BASE-TX + 1-port 100BASE-FX PoE Ethernet Switch

* DIN-Rail mounting kit included

100FX Fiber Options (X)

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

*More 100FX Fiber options also available upon request.

Optional Accessories

DR-120-48	120W/2.5A DIN-Rail 48VDC Industrial Power Supply (for terminal block)
SDR-240-48	240W/5A DIN-Rail 48VDC Industrial Power Supply (for terminal block)
GS120P-48	120W/2.5A 48VDC Power Adapter with latched DC Jack in plastic housing (for DC Jack)