## EX48000A Series

## Hardened Unmanaged 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 four 10/100BASE-TX PoE ports, in combination with one 100FX Fiber option. The IEEE802.3af PoE ports provide up to $15.4 \mathrm{~W} /$ port with a total power budget of 61.6 W , 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 $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$ in harsh environments, where high ESD, shock, and vibration may be present.

EtherWAN - "When Connectivity is Crucial."

## Spotlight

## - Hardened Grade

- Supports $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $167^{\circ} \mathrm{F}$ ) 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

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

Packet Buffer Memory

- 512 K 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 $15.4 \mathrm{~W} /$ port, 47 - 55VDC, 350 mA Max.


## Protection

- Reverse polarity protection
- Overload current protection


## Mechanical

## Casing

- Metal case
- IP30

Dimensions

- 200 mm (W) x 134.3 mm (D) $\times 35 \mathrm{~mm}$ (H) (7.87" (W) x 5.29" (D) x 1.38" (H))

Weight

- 0.8 Kg (1.76lbs.)


## Installation

- Desktop, Wall, or DIN-Rail 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

- $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.167^{\circ} \mathrm{F}\right)$ Tested @ $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right)$


## Storage Temperature

- $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right)$


## Ambient Relative Humidity

- 5\% to 95\% (non-condensing)


## Regulatory Approvals

ISO

- Manufactured in an ISO9001 facility

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



## 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)

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

*More 100FX Fiber options also available upon request.
Optional Accessories

| KD-AA78000X | DIN-Rail Mounting Kit |
| :--- | :--- |
| 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) |
| GS-120A-48 | $120 \mathrm{~W} / 2.5 \mathrm{~A}$ 48VDC Power Adapter with Latched DC Jack in Plastic Housing |

