EX94000 Series

Hardened Unmanaged 4 to 8-port 10/100BASE-TX and 1 to 2-port 100BASE-FX Ethernet Switch

Overview

EtherWAN's EX94000 Series is a hardened unmanaged Fast Ethernet switching platform, designed for easy deployment in harsh environments. The EX94000 Series supports 12 to 48VDC redundant power input, and also provides relay alarm while power failure or port link down occur. The EX94000 provides 4kV surge protection, and is designed for hazardous locations (Class 1 Div.2).

The EX94000 is equipped with eight Fast Ethernet ports, or a combination of Fast Ethernet copper ports and two 100FX ports for long distance connectivity. This versatile switch features 10/100Mbps transfer speeds, full/half-duplex auto-negotiation and auto MDI/MDIX operation allowing you to connect your network devices without hassles.

The EX94000 is feature-rich with full wire speed Fast Ethernet throughput, QoS (Quality of Service), IEEE802.3az EEE (Energy Efficient Ethernet) and Broadcast storm protection. The EX94000 Series is built with relay alarm to notify users when power fails or link down occurs. It also supports Broadcast storm protection by enabling the DIP switch. The 94000 Series is housed with DIN rail mountable metal compact case which is an ideal solution for applications in harsh environments.

EtherWAN — "When Connectivity is Crucial."

Spotlight

Hardened Grade

» Supports -40 to 75°C (-40 to 167°F) operating temperature

Broadcast Storm Protection

» Enable/disable broadcast storm protection by DIP switch that provide another level of flexibility on industrial applications

Fiber Connectivity

» Up to two 100BASE-FX ports with SC, ST, WDM and SFP options

High Surge Protection and Hazardous Location Certification

» Provides 4kV surge protection
» Designed for hazardous locations (Class 1 Div.2)

High Reliability

» Fanless design
» No moving parts

Specifications

Technology

- **Standards**
- • IEEE 802.3u 100BASE-TX/FX
- • IEEE 802.3x full-duplex flow control
- • IEEE 802.3az Energy Efficient Ethernet
- • IEEE 802.1p Quality of Service (QoS)
-
- **Forward and Filtering Rate**

- • 14,880pps for 10Mbps
- • 148,810pps for 100Mbps
-
- **Packet Buffer Memory**
- • 448K bits
-
- **Processing Type**
- • Store-and-Forward
- • Auto Negotiation
- • Half-duplex back-pressure and IEEE 802.3x full-duplex flow control
- • Auto MDI/MDIX
-
- **Address Table Size**
- • 1K MAC addresses

Power

- **Input**
- • 12-48VDC (Terminal Block)
-
- **Power Consumption**
- • 12VDC@4.34W
  24VDC@4.57W
  48VDC@6.28W
-
- **Protection**
- • Reverse polarity protection

Mechanical

- **Casing**
- • Aluminum Case
- • IP30
-
- **Dimensions**
- • 50 x 110 x 135mm (W x D x H)
  (1.97" x 4.33" x 5.31")
-
- **Weight**
- • 0.62Kg (1.37lbs)
-
- **Installation**
- • DIN-Rail (Top hat type 35mm) or Panel mounting

Interface

- **Ethernet Ports**
- • 10/100BASE-TX: 8, 6 or 4 ports
- • 100BASE-FX: 0, 2 or 1 ports
-
- **LED Indicators**
- • Per Unit: Power 1 (Green), Power 2 (Green), Fault (Red)
- • Per Port: Link/Activity (Green)
-
- **DIP Switches**
- • Enable/Disable Port fault alarm
- • Enable/Disable Broadcast Storm Protection
-
- **Alarm Contact**

- • One relay output with current 1A@250VAC
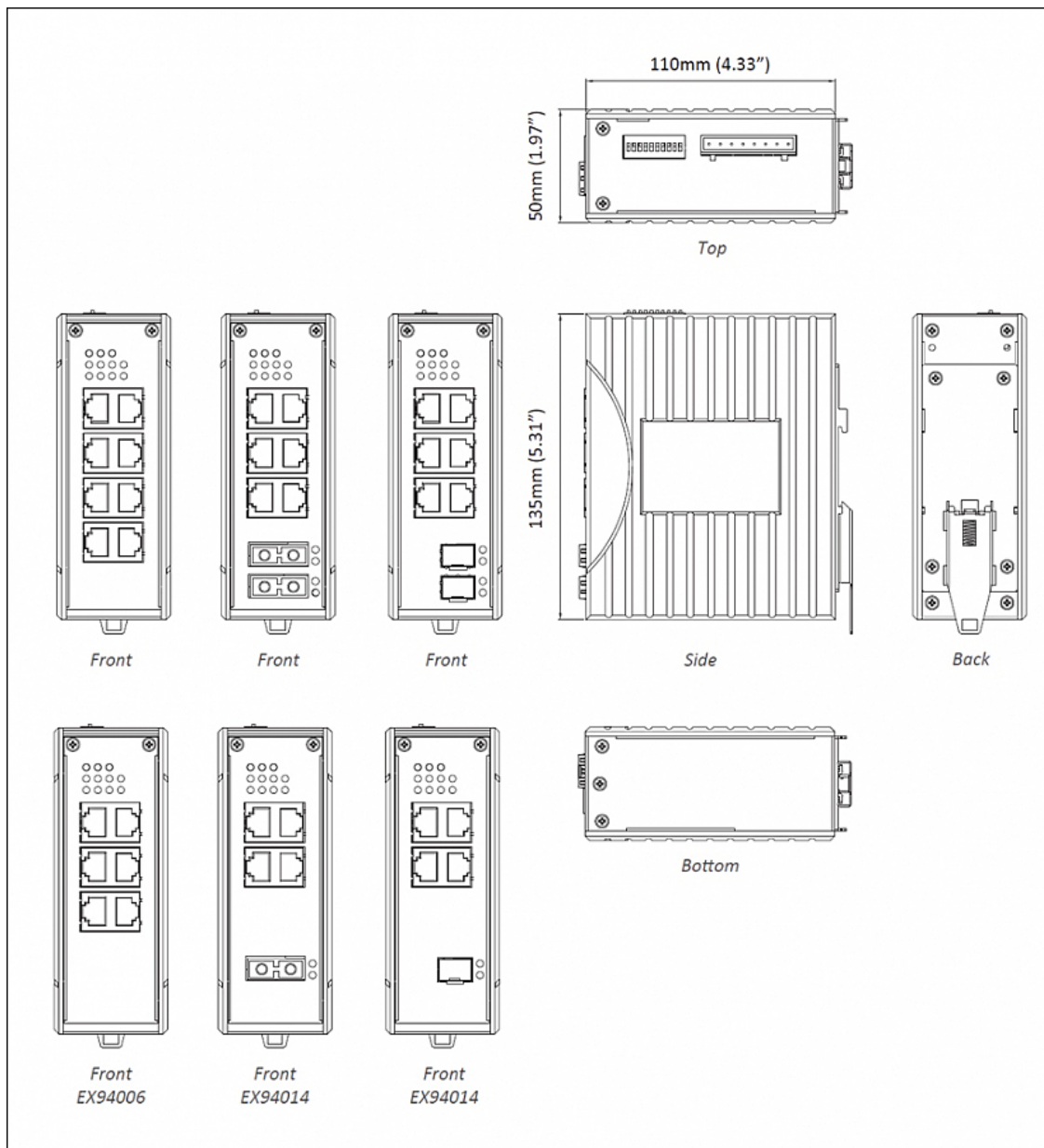- • Supports normal close and normal open

Environment

- **Operating Temperature**
- • -40 to 75°C (-40 to 167°F)
  Tested @ -40 to 85°C (-40 to 185°F)
-
- **Storage Temperature**
- • -40 to 85°C (-40 to 185°F)
-
- **Ambient Relative Humidity**
- • 5% to 95% (non-condensing)

Regulatory Approvals

- **ISO**
- • Manufactured in an ISO 9001 facility
-
- **Safety**
- UL 60950
- UL 62368
- ISA 12.12.01 Class I Div. 2
-
- **EMI**
- FCC Part 15B Class A
- VCCI Class A
- EN 61000-6-4
- EN 61000-3-2
- EN 61000-3-3
- EN 55022 Class A
-
- **EMS**
- EN 61000-6-2
  - • EN 61000-4-2 (ESD Standards)
  - • EN 61000-4-3 (Radiated FRI Standards)
  - • EN 61000-4-4 (Burst Standards)
  - • EN 61000-4-5 (Surge Standards)
- Signal ports: ±4kV line-to-earth
- DC power ports: ±4kV line-to-earth ±2kV line-to-line
  - • EN 61000-4-6 (Induced RFI Standards)
  - • EN 61000-4-8 (Magnetic Field Standards)
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- **Environmental Test Compliance**
- IEC 60068-2-6 Fc (Vibration)
- IEC 60068-2-27 Ea (Shock)
- FED STD 101C Method 5007.1 (Free fall w/package)
  - • Tested with Cross Weight and Drop High standard table

Dimensions

Top

Front

Front

Front

Side

Back

Front
EX94006

Front
EX94014

Front
EX94014

Bottom

110mm (4.33")

50mm (1.97")

135mm (5.31")

Ordering Info

Model

EX94008-00-1-AA   8-port 10/100BASE-TX Hardened Unmanaged Ethernet Switch

EX94006-00-1-AA   6-port 10/100BASE-TX Hardened Unmanaged Ethernet Switch

EX94026-XY-1-AA 6-port 10/100BASE-TX +2-port 100BASE-FX Hardened Unmanaged Ethernet Switch

EX94014-XY-1-AA 4-port 10/100BASE-TX +1-port 100BASE-FX Hardened Unmanaged Ethernet Switch

* DIN-Rail mounting kit included.

100FX Fiber Options (XY)

1A Multi Mode (SC) - 2Km

1B Multi Mode (ST) - 2Km

2A Single Mode (SC) - 20Km

2D Single Mode (ST) - 20Km

2E Single Mode (SC) WDM-TX: 1310nm/RX: 1550nm-20Km

2G Single Mode (SC) WDM-TX: 1550nm/RX: 1310nm-20Km

V 100BASE SFP

* More 100FX Fiber options also available upon request.

Optional Accessories

KP-AA96-480 Panel Mounting Kit
KR-BKEL900 Rack Mounting Kit
HDR-30-24   30W/1.5A DIN-Rail 24VDC Industrial Power Supply
HDR-60-24   60W/2.5A DIN-Rail 24VDC Industrial Power Supply
EDR-75-24   75W/3.2A DIN-Rail 24VDC Industrial Power Supply

EtherWAN is constantly developing and improving products. Specifications are subject to change without notice and without incurring any obligation.