

EX47000 Series

IEC61850-3/IEEE1613 Hardened Unmanaged 8-port
10/100BASE Ethernet Switch



Overview

EtherWAN's EX47000 Series is a hardened unmanaged Fast Ethernet switching platform, designed for easy deployment in harsh environments.

The EX47000 Series is equipped with eight Fast Ethernet ports, or a combination of Fast Ethernet copper ports and two 100FX ports for long distance connectivity. Although unmanaged, the EX47000 is feature rich with full wire speed Fast Ethernet throughput, making the EX47000 Series a powerful network switch. With its hardened-grade specifications and IEC61850 & IEEE1613 certifications, the EX47000 Series is capable of operating under high EMI environments at the temperatures ranging from -40°C to 75°C, making it an ideal choice for harsh applications.

EtherWAN – "When Connectivity is Crucial."

Spotlight

• Hardened Grade

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

• Versatile mounting Options

- DIN-Rail or panel mounting

• Fiber Connectivity

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

Hardware Specifications

Technology

Standards

- IEEE802.3, 10BASE-T
- IEEE802.3u 100BASE-TX/100BASE-FX
- IEEE802.3x Full duplex and flow control

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 IEEE802.3x full-duplex flow control
- Auto MDI/MDIX

Address Table Size

- 2048 MAC addresses

Power

Input

- Redundant power inputs:
12 to 48VDC (Terminal Block)
12VDC (DC Jack)

Power Consumption

- 6W Max. 12VDC @ 0.5A
24VDC @ 0.25A
48VDC @ 0.125A

Protection

- Reverse polarity protection

Mechanical

Casing

- Aluminum Case
- IP30

Dimensions

- 60mm (W) x 125mm (D) x 145mm (H)
(2.36" (W) x 4.92" (D) x 5.7" (H))

Weight

- 1Kg (2.2lbs.)

Installation

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

Interface

Ethernet Ports

- 10/100BASE-TX: 16, 15 or 14 ports
- 100BASE-FX: 0, 1 or 2 ports

LED Indicators

- Per Unit: Power 1 (Green)
Power 2 (Green)
Power 3 (Green)
Fault (Red)
- Per Port: Link/Act (Green)
100M (Green)

Alarm Contact

- One relay output with current 1A @ 24VDC

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

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 Compliance

IEC60068-2-6 Fc (Vibration)

IEC60068-2-27 Ea (Shock)

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

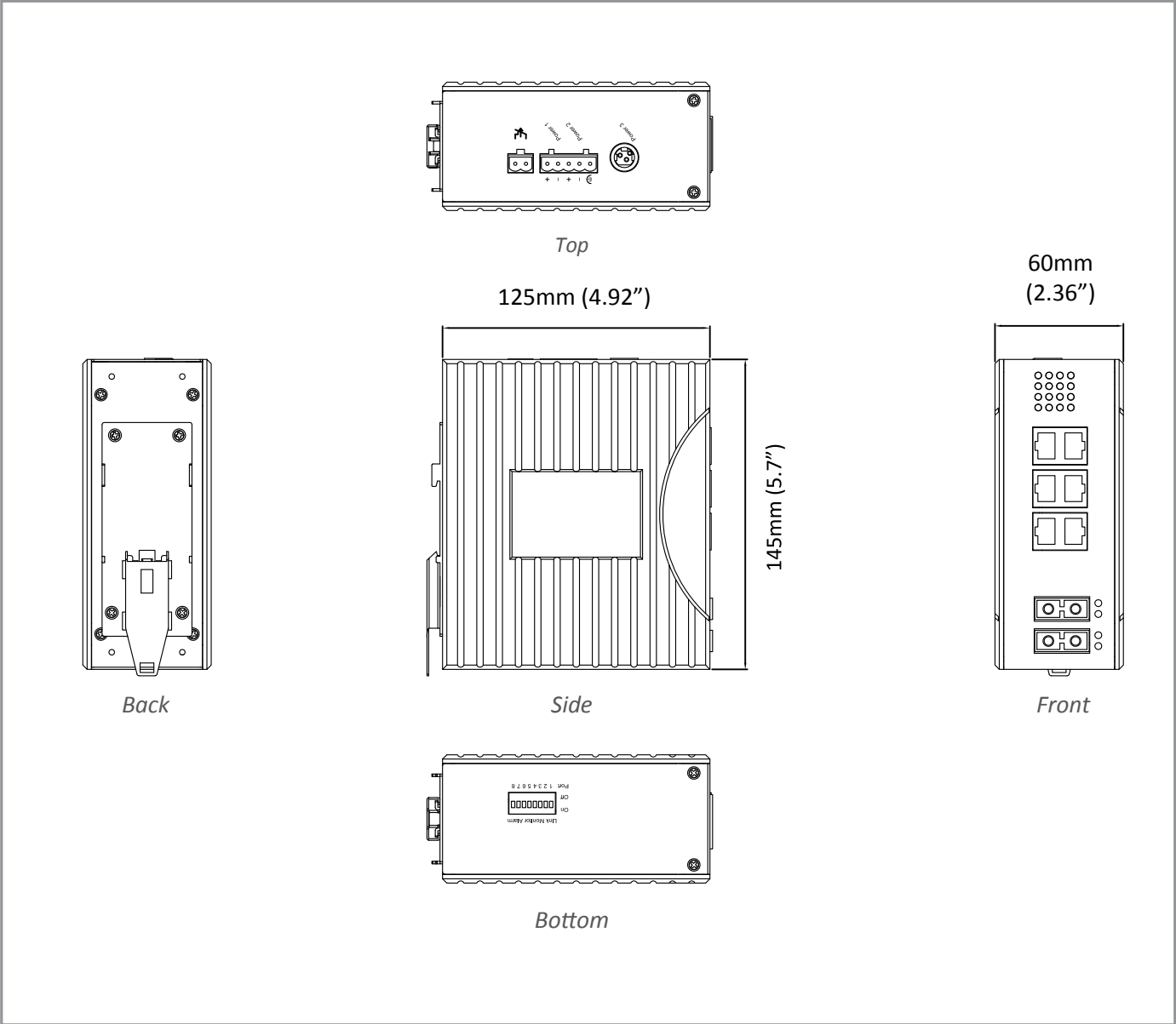
Industrial Compliance

IEC61850 / IEEE1613

EN50121-4

NEMA TS2

Dimensions



Ordering Information

Model

EX47080-00B	8-port 10/100BASE-TX Hardened Unmanaged Ethernet Switch
EX47062-X0B	6-port 10/100BASE-TX + 2-port 100BASE-FX Hardened Unmanaged Ethernet Switch
EX47061-X0B	6-port 10/100BASE-TX + 1-port 100BASE-FX Hardened Unmanaged Ethernet Switch
EX47042-X0B	4-port 10/100BASE-TX + 2-port 100BASE-FX Hardened Unmanaged Ethernet Switch
EX47041-X0B	4-port 10/100BASE-TX + 1-port 100BASE-FX Hardened Unmanaged Ethernet Switch
EX47026-X0B	2-port 10/100BASE-TX + 6-port 100BASE-FX Hardened Unmanaged Ethernet Switch

* DIN-Rail mounting kit included

Ordering Information - continued

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

KP-AA96-480	Panel mounting kit
DR-30-24	30W/1.5A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)
DR-60-24	60W/2.5A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)
DR-75-24	75W/3.2A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)
DR-120-24	120W/5A DIN-Rail 24VDC Industrial Power Supply (for Terminal Block)
41-136046-X	36W/3A 12VDC hardened power adapter with open wire in aluminum housing (for Terminal Block) (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA
41-136044-X	36W/3A 12VDC hardened power adapter with latched DC Jack in aluminum housing (for DC Jack) (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA