EX33000 Series

Industrial Unmanaged 16-port 10/100BASE Ethernet Switch

EtherWAN

Overview

EtherWAN's EX33000 Series is an industrial unmanaged Fast Ethernet switching platform, designed for easy deployment in harsh environments.

The EX33000 Series is equipped with sixteen Fast Ethernet ports, or a combination of Fast Ethernet copper ports and two 100FX ports for long distance connectivity. Although unmanaged, the EX33000 is feature rich with full wire speed Fast Ethernet throughput, making the EX33000 Series a powerful network switch.

EtherWAN – "When Connectivity is Crucial."

Spotlight

- **Industrial Grade**
  - Supports -10°C to 60°C (14°F to 140°F) operating temperature

- **Versatile mounting Options**
  - Supports DIN-Rail, panel and rack 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
- 1.625M 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
- 4096 MAC addresses

Latency
- Less than 10µs

Power

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

Power Consumption
- 7.4W Max. 0.6A @ 12VDC,
  0.3A @ 24VDC,
  0.15A @48VDC

Protection
- Overload current protection

Mechanical

Casing
- Aluminum Case
- IP30

Dimensions
- 69mm (W) x 110mm (D) x 135mm (H)
  (2.72" (W) x 4.33" (D) x 5.31" (H))

Weight
- 0.87Kg (1.92lbs.)

Installation
- DIN-Rail (Top hat type 35mm), Panel, or Rack 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)
- Per Port: Link/Act

Alarm Contact
- One relay output with current 1A @ 24VDC

Environment

Operating Temperature
- -10°C to 60°C (14°F to 140°F)
  Tested @ -20°C to 70°C (-4°F to 158°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

VCCI Class A

EN61000-6-4

EN55022

EN61000-3-2

EN61000-3-3

Safety

UL508

EMS

EN61000-6-2
- EN61000-4-2 (ESD Standards)
- EN61000-4-3 (Radiated RFI Standards)
- EN61000-4-4 (Burst Standards)
- EN61000-4-5 (Surge Standards)
- EN61000-4-6 (Induced RFI Standards)
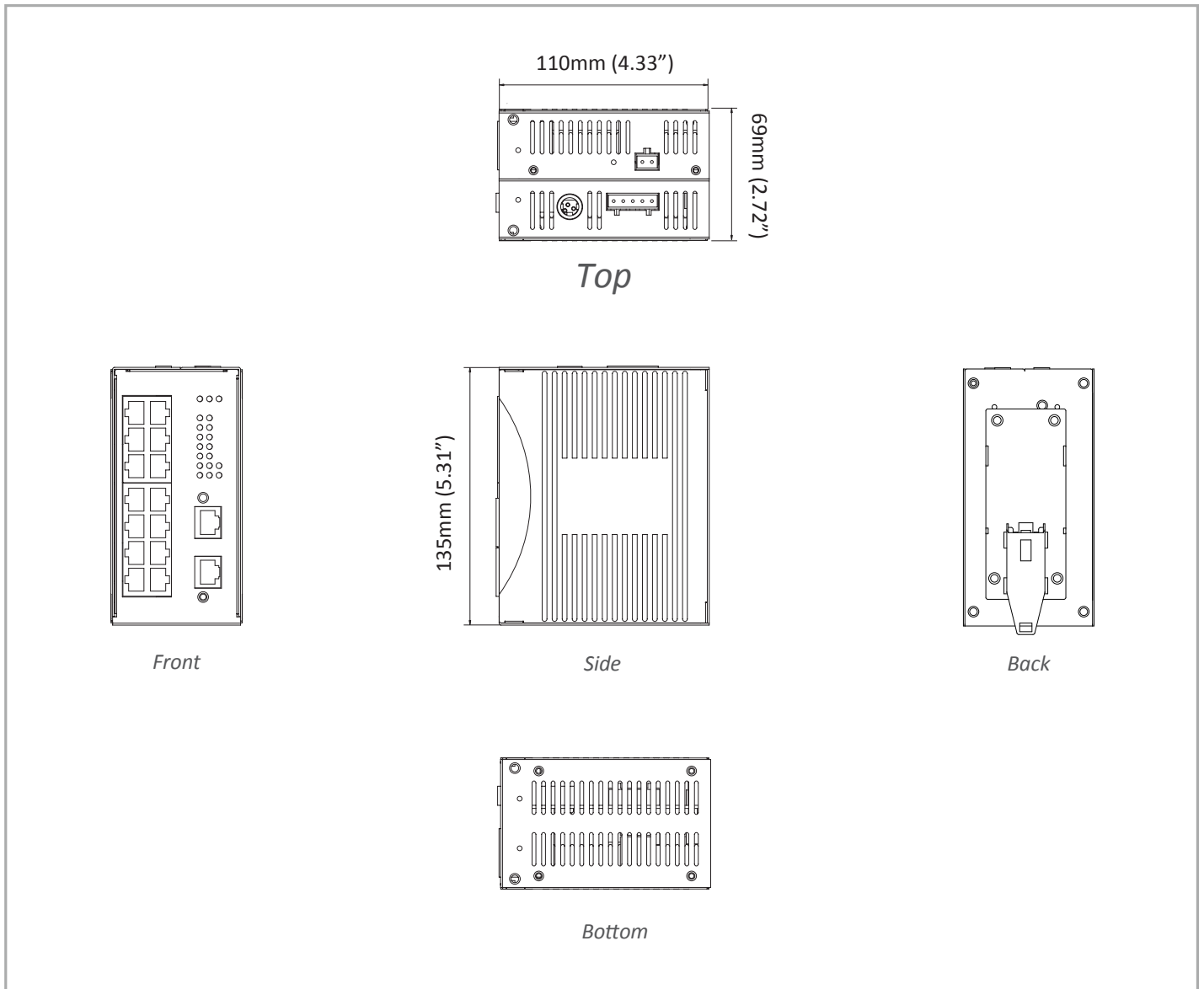- EN61000-4-8 (Magnetic Field Standards)

Environmental Test Compliances

IEC60068-2-6 Fc (Vibration)

IEC60068-2-27 Ea (Shock)

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

Dimensions

110mm (4.33")

69mm (2.72")

Top

135mm (5.31")

Front

Side

Back

Bottom

Ordering Information

Model

EX33160-00B	16-port 10/100BASE-TX Industrial Unmanaged Ethernet Switch
EX33151-X0B	15-port 10/100BASE-TX + 1-port 100BASE-FX Industrial Unmanaged Ethernet Switch
EX33142-X0B	14-port 10/100BASE-TX + 2-port 100BASE-FX Industrial 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

Optional Accessories

KP-AA96-480	Panel Mounting Kit
KR-BK-43-400	Rack 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 (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA