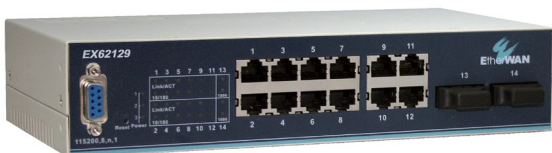


EX62000 Series

Industrial Managed 8 to 14 ports 10/100BASE and 2-port Gigabit Ethernet Switch with SFP options



Overview

EtherWAN's EX62000 Series provides an industrial Fully Managed 14-port switching platform combining high performance switching backbone with robust and secure management features required for mission critical and harsh environments where sustained connectivity is crucial.

The EX62000 Series is equipped with eight to fourteen 10/100BASE Fast Ethernet ports, or in combination with up to two Gigabit, Fixed Fiber, or SFP Combo port options. Panel mountable, the EX62000 Series is equipped with EtherWAN's Alpha-Ring self-healing technology, providing less than 15ms fault recovery time making it ideal for applications intolerant to interruption.

Users are able to access management features such as; port security, IGMP snooping, VLANs, GARP protocols, LACP, and via web browser, Telnet, SNMP, RMON, TFTP, and RS-232 console interfaces.

EtherWAN — "When Connectivity is Crucial."

Spotlight

• Versatile Connectivity

- Provides flexibility of 8-port to 14-port 10/100BASE-TX/FX/BX plus 2-port Gigabit-TX/SX/LX/BX/SFP combos

• Intelligent Data Management

- Optimize network performance with QoS, VLAN etc.

• Secure Remote Access

- IEEE 802.1x and RADIUS support

Software Features

Management

- Interface
 - CLI, Telnet and web browser
 - SNMP v1/v2c/v3
- Firmware and configuration upgrade and backup via TFTP
- Supports DHCP Server/Client
- RMON (Remote monitoring): group 1, 2, 3, 9
- Port mirroring: TX/RX and both
- NTP (Network Time Protocol) time synchronization
- IEEE 802.1ab LLDP (Link Layer Discovery Protocol)

Security

- MAC address filtering
- Enable/disable port
- Storm control (broadcast and multicast types)
- IEEE 802.1x LAN access control
- Remote authentication through RADIUS
- SSH for CLI and Telnet security
- SSL for web security
- Multi-level user account/password against unauthorized configuration
- System log (remote/local)

Quality of Service (QoS)

- Priority Queues: 4 queues per port
- Traffic classification based on IEEE 802.1p CoS, DSCP, WRR (Weighted round robin) and strict mode
- Rate Limiting (Ingress/Egress)

Layer 2 Features

- Auto-negotiation for port speed and duplex mode
- Flow Control
 - IEEE 802.3x full duplex mode
 - Back-Pressure half duplex mode
- Redundant Protocols
 - IEEE 802.1D Spanning Tree Protocol (STP)
 - IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
 - IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
 - EtherWAN's Alpha-Ring network fault recovery (<15ms)
- VLANs
 - Port-based VLANs
 - IEEE 802.1Q Tag VLANs (128 groups, 4096 VID)
 - GVRP (GARP VLAN Registration Protocol)
 - GMRP (GARP Multicast Registration Protocol)
- Link Aggregation
 - Static Trunk (2 groups, support MAC base)
 - IEEE 802.3ad Link Aggregation Control Protocol
- IGMP Snooping
 - IGMP snooping v1/v2/v3

Performance

- Switching Capability: 6.8Gbps
- Packet Buffer Size: 2M bits
- MAC Address Table: 8192

Hardware Specifications

Technology

Standards

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX/100BASE-FX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3z 1000BASE-SX/1000BASE-LX
- IEEE 802.3x Full duplex and flow control
- IEEE 802.1p QoS
- IEEE 802.1Q Tag VLANs
- IEEE 802.1w RSTP
- IEEE 802.1x Port-based Network Access Control

Forward and Filtering Rate

- 14,880pps for 10Mbps
- 148,810pps for 100Mbps
- 1,488,100pps for 1000Mbps

Packet Buffer Memory

- 2M 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

- 8192 MAC addresses

Power

Input

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

Power Consumption

- 15W Max. 1.25A@12VDC, 0.625A@24VDC

Protection

- Reverse polarity protection

Mechanical

Casing

- Metal Case
- IP30

Dimensions

- 235 x 125 x 50mm (W x D x H)
(9.25" x 4.92" x 1.97")

Weight

- 1.5Kg (3.3lbs.)

Installation

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

Interface

Ethernet Port

- 10/100BASE-TX: 14, 13, 12 or 8 port
- 100BASE-FX: 0, 1 or 2 ports
- Gigabit: 0, 1 or 2 ports

Console Port

- Port: One DB9 RS-232 port

LED Indicators

- Per Unit: Power 1, Power 2, Power 3
- Per Port: Link/Activity, Speed

Environment

Operating Temperature

- -10 to 60°C (-40 to 167°F)
Tested @ -20 to 70°C (-40 to 158°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

EMI

FCC Part 15B Class A

EN 61000-6-4

EN 55022

EN 61000-3-2

EN 61000-3-3

EMS

EN 61000-6-2

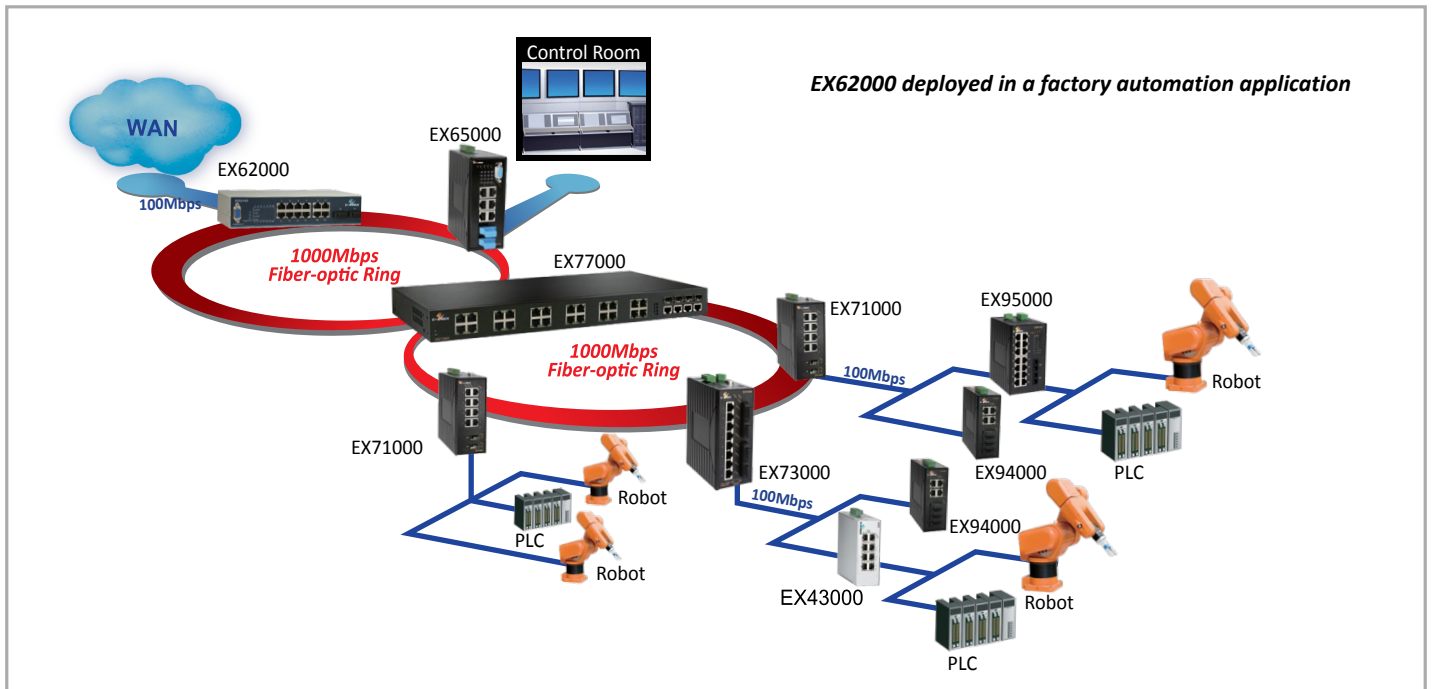
- EN 61000-4-2 (ESD Standards)
- EN 61000-4-3 (Radiated RFI Standards)
- EN 61000-4-4 (Burst Standards)
- EN 61000-4-5 (Surge Standards)
- EN 61000-4-6 (Induced RFI Standards)
- EN 61000-4-8 (Magnetic Field Standards)

Environmental Test Compliance

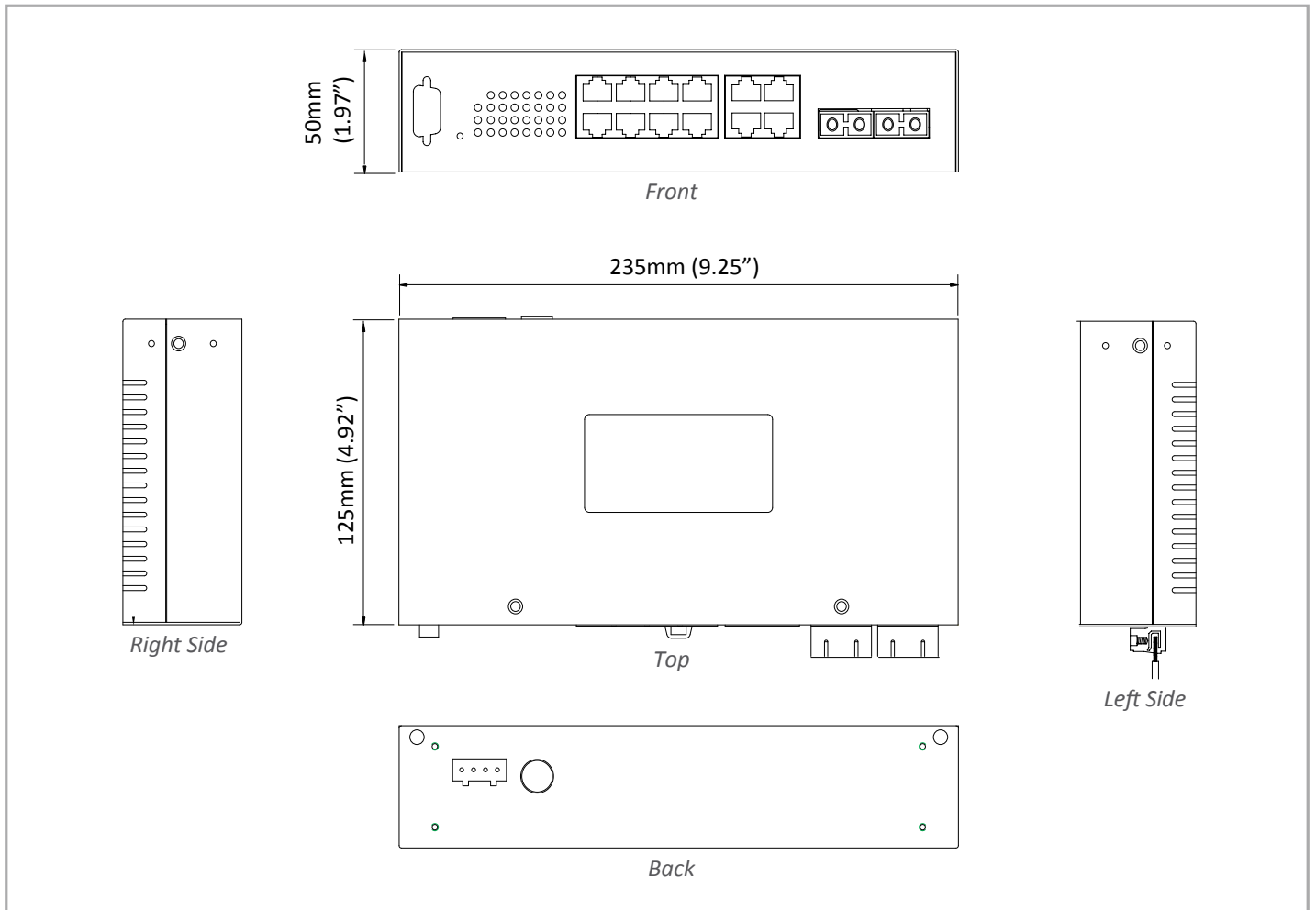
IEC 60068-2-6 Fc (Vibration Resistance)

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

Application Diagram



Dimensions



Ordering Information

Model

| | |
|--------------------|---|
| EX62140-00B | 14-port 10/100BASE-TX Industrial Managed Ethernet Switch |
| EX62141-X0B | 13-port 10/100BASE-TX +1-port 100BASE-FX Industrial Managed Ethernet Switch |
| EX62142-X0B | 12-port 10/100BASE-TX +2-port 100BASE-FX Industrial Managed Ethernet Switch |
| EX62102-X0B | 8-port 10/100BASE-TX +2-port 100BASE-FX Industrial Managed Ethernet Switch |
| EX62128-0YB | 12-port 10/100BASE-TX +1-port Gigabit Industrial Managed Ethernet Switch |
| EX62129-0YB | 12-port 10/100BASE-TX +2-port Gigabit Industrial Managed Ethernet Switch |
| EX62088-0YB | 8-port 10/100BASE-TX +1-port Gigabit Industrial Managed Ethernet Switch |
| EX62089-0YB | 8-port 10/100BASE-TX +2-port Gigabit Industrial Managed Ethernet Switch |

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 |

Gigabit Port Options (Y)

| | |
|----------|---|
| 1 | 10/100/1000BASE-TX |
| 3 | 1000BASE-SX (SC) - 550m |
| 4 | 1000BASE-SX (SC) - 2Km |
| 5 | 1000BASE-SX (ST) - 550m |
| A | 1000BASE-LX (SC) - 10Km |
| B | 1000BASE-LX (SC) - 20Km |
| R | 1000BASE-BX (SC) WDM-TX: 1310nm/RX: 1550nm-20Km |
| S | 1000BASE-BX (SC) WDM-TX: 1550nm/RX: 1310nm-20Km |
| V | 2-port 1000BASE SFP combo 10/100/1000BASE-TX |

Optional Accessories

| | |
|----------------------|---|
| KD-AA96000 | DIN-Rail mounting kit |
| KP-BK6212 | Panel mounting kit |
| KR-BK72-400 | 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) |
| EX41-136046-X | Power Supply 36W 12VDC with Open Wire (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA |
| EX41-136044-X | Power Supply 36W 12VDC with Latch (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA |