

## EX63000 Series

Industrial Managed 16-port 10/100BASE with 2-port Gigabit combo Ethernet Switch



## Overview

EtherWAN's EX63000 Series provides an industrial Fully Managed 18-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 EX63000 Series is equipped with sixteen 10/100BASE Fast Ethernet ports, in combination with up to two Gigabit combo ports with Fixed Fiber options. Mountable on a DIN-rail, the EX63000 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.

With support for both IPv4 and IPv6, management features include port security, IGMP snooping, VLANs, GARP protocols, and LACP. Management is via web browser, Telnet, SNMP, RMON, TFTP, and RS-232 console interfaces.

EtherWAN — "When Connectivity is Crucial."

## Highlights

### + Versatile Connectivity

Provides 16-port 10/100BASE-TX plus 2-port Gigabit-SX/LX/BX combo

### + Secure Remote Access

IEEE 802.1x, and RADIUS support

### + Hardened Grade

Wide operating temperature range from -10 to 60°C (-14 to 140°F) for extreme environments

Fanless and ruggedized housing

## 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)

IPv4/IPv6

### + 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 Protocol

IEEE 802.1D Spanning Tree Protocol (STP)

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

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: 7.2Gbps

# 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

12M 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

16K MAC addresses

## + Interface

### Ethernet Port

10/100BASE-TX: 16 ports  
Gigabit: 0, 1 or 2 ports

### Console Port

Port: One DB9 RS-232 port

### LED Indicators

Per Unit: Power 1, Power 2  
Per Port: Link/Activity (Green: Copper; Orange: Fiber)

### Alarm Contact

One relay output with current 0.6A@30VDC

## + Environment

### Operating Temperature

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

### Storage Temperature

-45 to 85°C (-49 to 185°F)

### Ambient Relative Humidity

5% to 95% (non-condensing)

## + Power

### Input

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

### Power Consumption

8.06W 0.336A@24VDC

### Protection

Reverse polarity protection

## + Mechanical

### Casing

Metal Case

IP30

### Dimensions

59 x 125 x 145mm (W x D x H)  
(2.32" x 4.92" x 5.71")

### Weight

0.84Kg

### Installation

DIN-Rail

## + Regulatory Approvals

### ISO

Manufactured in an ISO 9001 facility

### Safety

UL 61010 (pending)

### EMI

FCC Part 15B Class A

EN 61000-6-4

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)

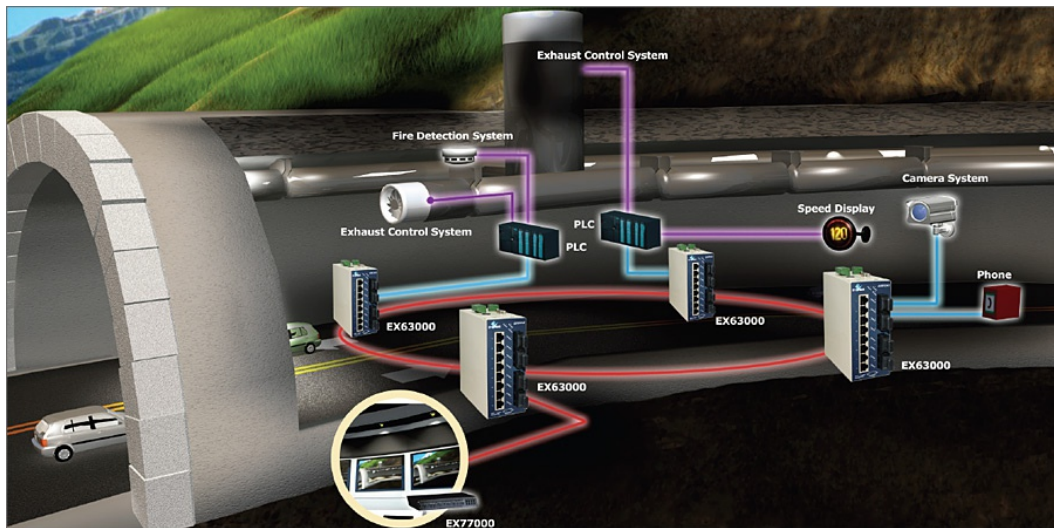
-EN 61000-4-8 (Magnetic Field Standards)

### Environmental Test Compliances

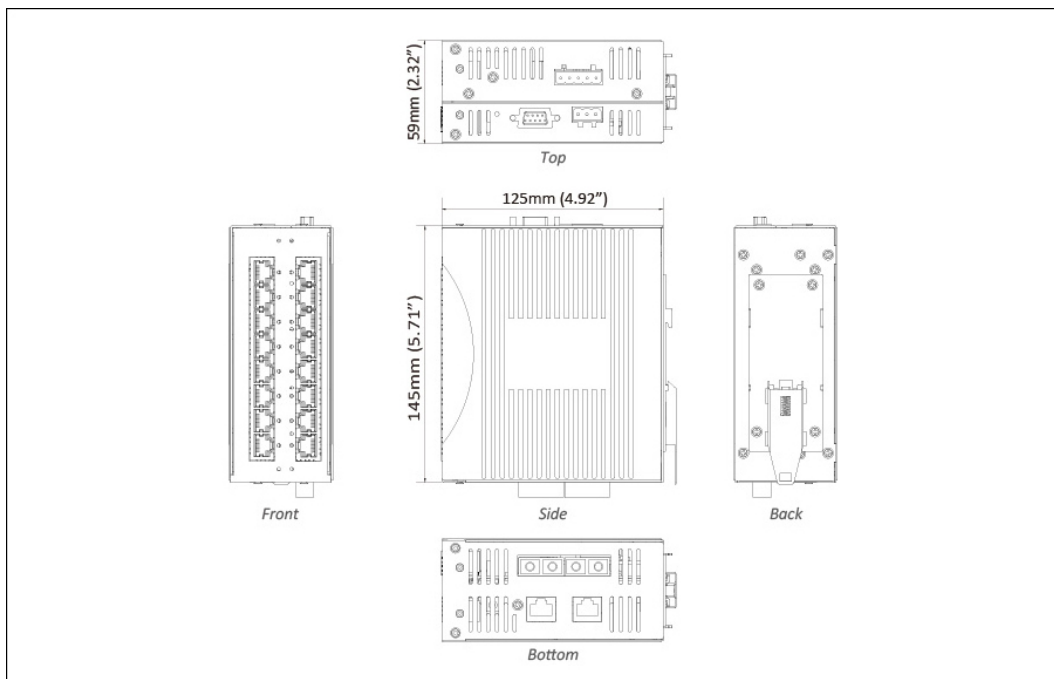
IEC 60068-2-6 Fc (Vibration Resistance)

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

## Application



## Dimensions



# Ordering Info

## + Model

EX63400-00B	16-port 10/100BASE-TX Industrial Managed Ethernet Switch
EX63402-0YB	16-port 10/100BASE-TX +2-port Gigabit Industrial Managed Ethernet Switch

\* DIN-Rail mounting kit included.

## + Gigabit Port Options (Y)

1	10/100/1000BASE-TX (No Gigabit Fiber port supported)
3	Combo port: 10/100/1000BASE-TX with 1000BASE-SX (SC) - 550m
4	Combo port: 10/100/1000BASE-TX with 1000BASE-SX (SC) - 2Km
5	Combo port: 10/100/1000BASE-TX with 1000BASE-SX (ST) - 550m
A	Combo port: 10/100/1000BASE-TX with 1000BASE-LX (SC) - 10Km
B	Combo port: 10/100/1000BASE-TX with 1000BASE-LX (SC) - 20Km

## + Optional Accessories

KP-AA96-480	Panel mounting Kits
HDR-30-24	30W/1.5A DIN-Rail 24VDC Industrial Power Supply
HDR-60-24	60W/2.5A DIN-Rail 24VDC Industrial Power Supply
EX41-136046-X	Power Supply 36W 12VDC with Open Wire (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA

