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

✚ Hardened Grade

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

✚ Secure Remote Access

IEEE 802.1x, and RADIUS support

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)
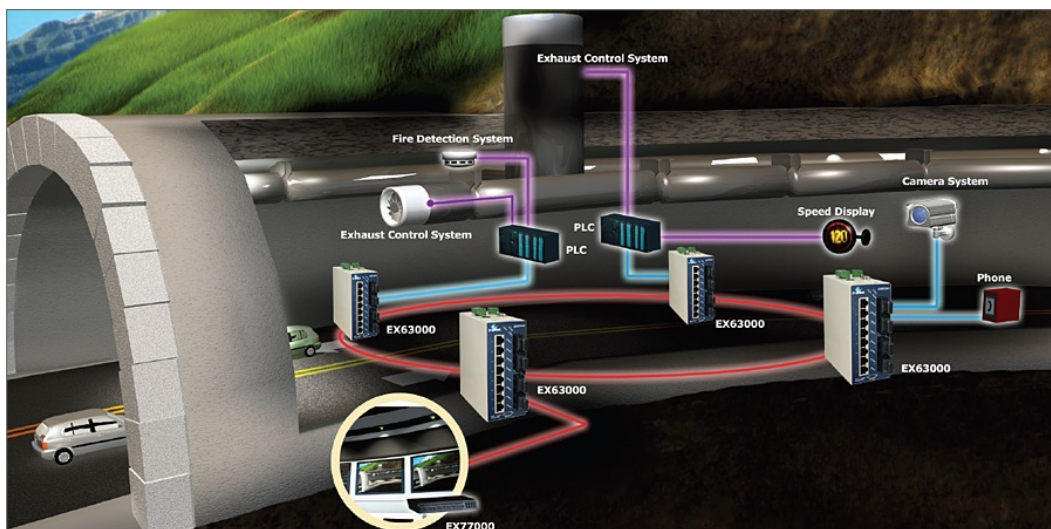-EN 61000-4-6 (Induced RFI Standards)
-EN 61000-4-8 (Magnetic Field Standards)
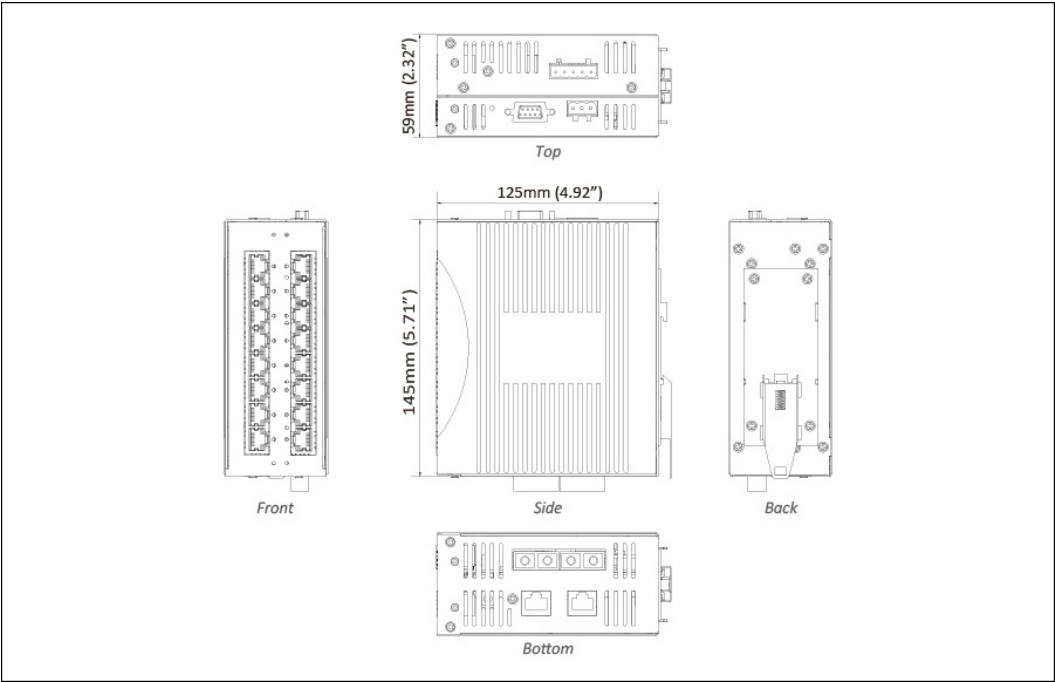
Environmental Test Compliances
IEC 60068-2-6 Fc (Vibration Resistance)
FED STD 101C Method 5007.1 (Free fall w/package)

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