EX77000 シリーズ

広範囲動作温度対応産業用/管理型 24ポート 10/100BASE ＋4ポート ギガビット 光オプション イーサネット スイッチ



概要

本商品につきましては2026年7月28日をもって販売を終了させて頂きました。代替製品については こちらのページ をご覧ください。

EtherWAN の EX77000 シリーズは広範囲動作温度対応 管理型 最大28ポート運用が可能なイーサネットロ スイッチです。安定した通信が必要不可欠な過酷な環境にも対応する堅牢な管理機能を備えたハイパフォーマンスな製品です。

EX77000 シリーズは 10/100BASEファスト イーサネット 24ポートを標準装備し、ギガビット SX/LX/BX/WDM 光ポートとSFP コンボポート4個を選択できます。1U ラックに対応した EX77000 シリーズは リング構成の1ルートが遮断されても15ms以内で自動復帰する Alpha-Ring という独自リングプロトコルを搭載していて、高度な接続信頼性が必要な環境に柔軟に対応します。

ポートセキュリティやIGMP、VLAN、GARP プロトコル、LACPなどの管理機能はブラウザ経由で設定可能です。Telnet、SNMP、RMON、TFTP、RS-232 コンソール接続などにも対応します。

EtherWAN — "When Connectivity is Crucial."

特長

多様な接続の応用に適合

24ポート 10/100BASE-TX/FX/BX/SFP +ギガビット-TX/SX/LX/BX/SFP 4ポートを装備でき、組み合わせの柔軟性を提供します。

安全なリモートアクセス

IEEE 802.1x, ACL (Access Control List) と RADIUS をサポートします。

広範囲動作温度対応

-40～75°C (-40～167°F) までの過酷な環境に問題なく、動作します。

ファンレス＆堅牢な筐体。

ハイショックと電磁ノイズの耐性。

機能

Interface

CLI, Telnet and Web Browser

SNMP v1/v2c/v3

Management

Firmware and configuration upgrade and backup via TFTP

Supports DHCP Server/Client

RMON (Remote Monitoring)

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 and TACACS+

SSHv1/v2 for CLI and Telnet security

SSL for web security

ACL

System log (Remote/Local)

Multi-level user account/password against unauthorized configuration

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

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)

EtherWAN's Alpha-Ring network fault recovery (<15ms) and Alpha-Chain

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 (8 groups, support MAC base)

IEEE 802.3ad Link Aggregation Control Protocol

IGMP Snooping

IGMP Snooping v1/v2/v3

Performance

Switching Capability: 12.8Gbps

Jumbo Frame: 9K bytes

仕様

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: 0, 8, 16 or 24 ports

100BASE-FX: 0, 8, 16 or 24 ports

Gigabit: 4 ports

Console Port

One DB9 RS-232 port

Alarm Contact

One relay output with current 0.6A/30VDC

LED Indicators

Per Unit: Power, Alarm

Per Port: Link/Activity (Green)

Per SFP Slot: Selected (Green)

Environment

Operating Temperature

-40 to 75°C (-40 to 167°F)

Tested @ -40 to 85°C (-40 to 185°F)

Storage Temperature

-45 to 85°C (-49 to 185°F)

Ambient Relative Humidity

5% to 95% (non-condensing)

Power

Input

Power input can be configured as:

• (T): ±48VDC Internal Universal PSU

• (W): 88-300VDC or 100-240VAC Internal Universal PSU

• (C): 100-240VAC, 50-60Hz Internal Universal PSU

Power Consumption

For models with all copper ports: EX77604 Series: 21.9W@230VAC

For models with all fiber ports: EX77064 Series: 40.6W@230VAC

Mechanical

Casing

Metal Case

IP30

Dimensions

Redundant Power:442 x 375 x 44mm (W x D x H) (17.4" x 14.7" x 1.73")

Single Power:442 x 250 x 44.2mm (W x D x H) (17.4" x 9.8" x 1.74")

Weight

5Kg (11lbs.)

Installation

Rack mounting

Regulatory Approvals

ISO

Manufactured in an ISO 9001 facility

Safety

• UL 62368

EMI

• FCC Part 15B Class A

• EN 61000-6-4

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)

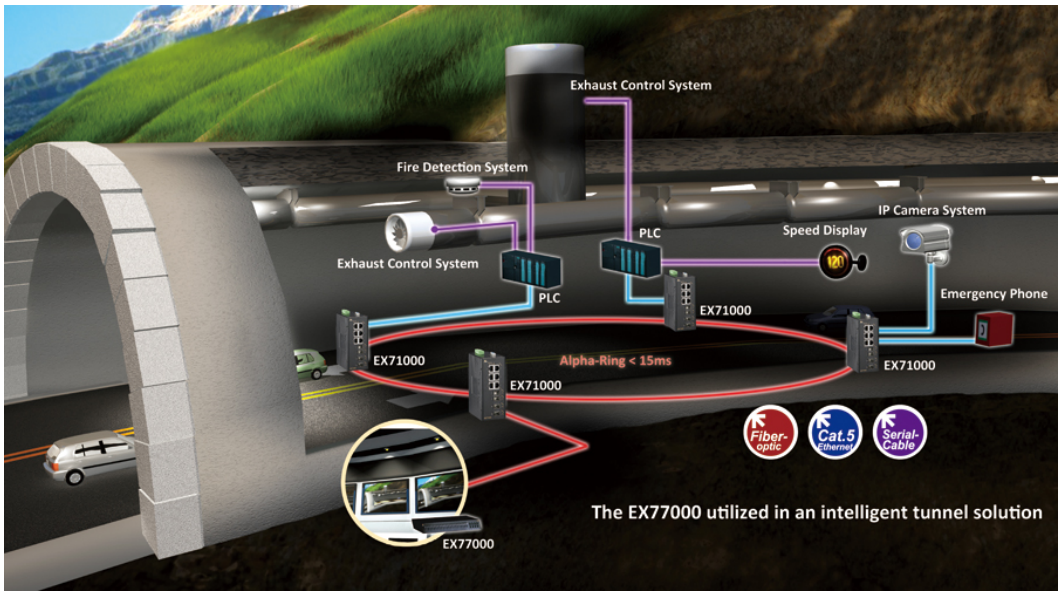
• IEC 60068-2-27 Ea (Shock)

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

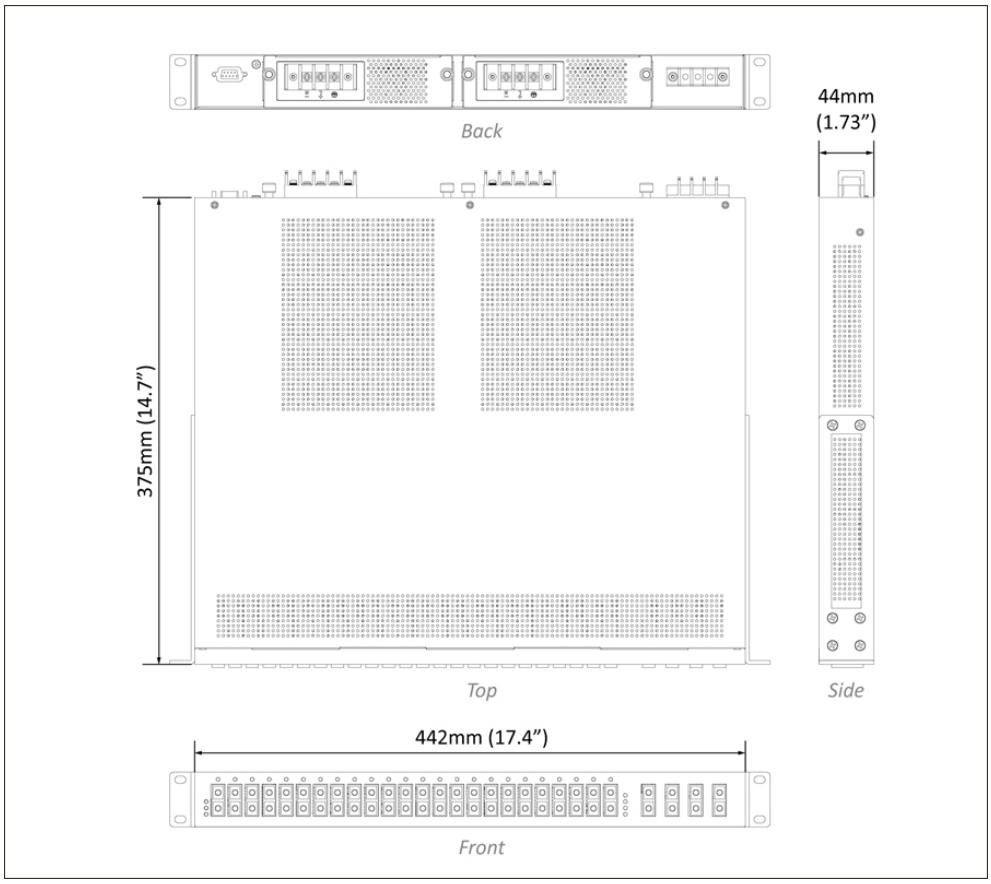
Industrial Compliance

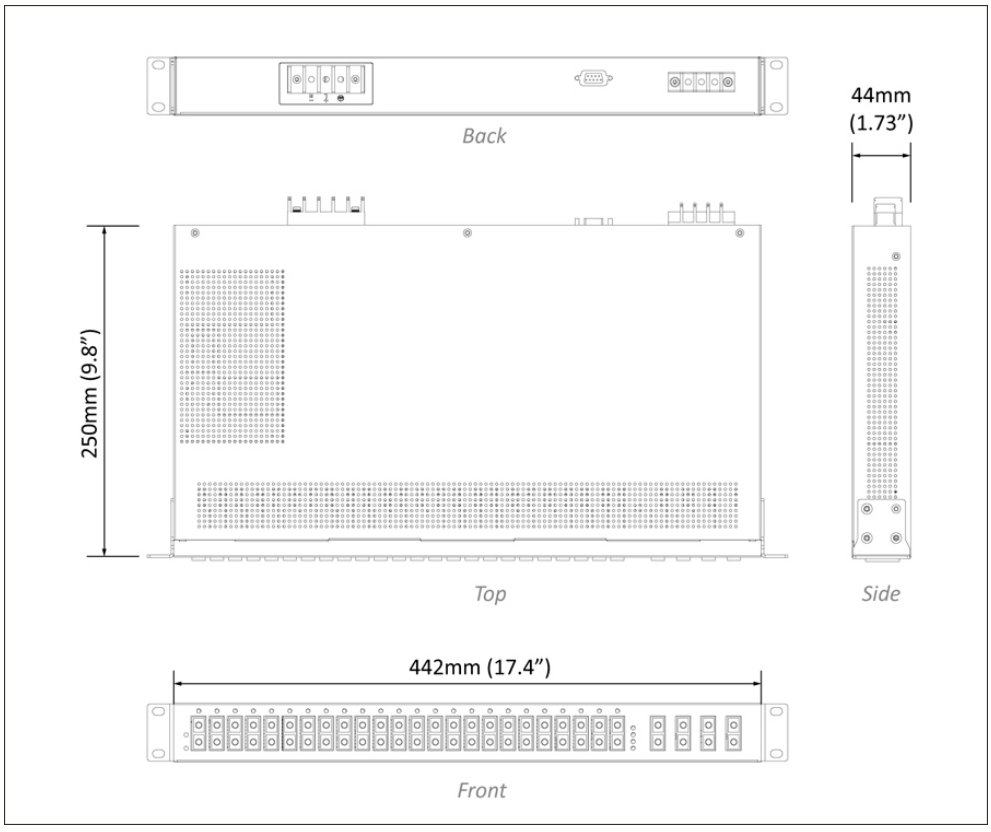
• NEMA TS2

応用例


Exhaust Control System
Fire Detection System
Exhaust Control System
PLC
PLC
Speed Display
IP Camera System
Emergency Phone
EX71000
EX71000
EX71000
EX71000
Alpha-Ring < 15ms
Fiber-optic
Cat.5 Ethernet
Serial-Cable
EX77000
The EX77000 utilized in an intelligent tunnel solution

寸法図


Back
44mm
(1.73")
375mm (14.7")
Top
Side
442mm (17.4")
Front


Back
44mm
(1.73")
250mm (9.8")
Top
Side
442mm (17.4")
Front

製品型番

Model

EX77604-0XYZ	24-port 10/100BASE-TX +4-port Gigabit Managed Ethernet Switch
EX77424-WXYZ	16-port 10/100BASE-TX +8-port 100BASE-FX +4-port Gigabit Managed Ethernet Switch
EX77244-WXYZ	8-port 10/100BASE-TX +16-port 100BASE-FX +4-port Gigabit Managed Ethernet Switch
EX77064-WXYZ	24-port 100BASE-FX +4-port Gigabit Managed Ethernet Switch
EX77064-V0VZ	24-port 100BASE-SFP +4-port Gigabit SFP Combo Managed Ethernet Switch

* Rack mounting kit included.

100FX Fiber Options (W)

1	Multi Mode (SC) - 2Km
2	Multi Mode (ST) - 2Km
A	Single Mode (SC) - 20Km
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
V	SFP

Numbers of fixed Gigabit Fiber (X)

0	None
4	Four Gigabit Fiber Ports

Gigabit Port Options (Y)

3	1000BASE-SX (SC) - 550m
4	1000BASE-SX (SC) - 2Km
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	4-port 100/1000BASE SFP Combo with 10/100/1000BASE-TX

Power Input Interface (Z)

T	±48VDC (Terminal Block)
W	88-300VDC or 100-240VAC (Terminal Block)
C	100-240VAC (AC Inlet)
TR	±48VDC Redundant (Terminal Block)
WR	88-300VDC or 100-240VAC Redundant (Terminal Block)
CR	100-240VAC Redundant (AC Inlet)

© EtherWAN Systems, Inc. All rights reserved. 20260512
EtherWAN is constantly developing and improving products. Specifications are subject to change without notice and without incurring any obligation.