

## EX61000A 系列

工業級網管型 8埠10/100BASE +2埠Gigabit 乙太網路交換器 (SFP選擇組合)



### 產品介紹

EX61000系列為網管型鋁軌式安裝設計機種，內建8個10/100BASE乙太網路連接埠及2個Gigabit埠，可搭配多種光纖介面(固定式光纖或SFP光纖模組)，適用各種自動化網路的解決方案。

EX61000系列為工業等級設計可在-10到60°C溫度環境下穩定運作，搭配益網獨家技術Alpha-Ring環狀網路備援機制，可在網路發生斷線時迅速啟動備援機制，於小於15毫秒內便可快速恢復連線通訊。

支援IPV4 and IPV6並具備完整管理功能，包含port security、IGMP snooping、VLANs、GARP協定、LACP；使用者可透過網頁瀏覽telnet、SNMP、RMON、TFTP和RS-232 console管理介面，使複雜的專案規劃事半功倍。

EtherWAN — "When Connectivity is Crucial."

### 產品亮點

#### + 多元彈性介面組合

支援8個10/100base-TX/FX/BX/SFP加2埠Gigabit-SX/LX/BX/SFP

#### + 工業等級設計

操作溫度(-10到60°C)

無風扇和堅固的金屬外殼設計，可有效避免高溫及高濕度環境導致材質老化

#### + 支援Dual firmware image

Dual flash images提供獨立的主要和次要作業系統以支援備援系統架構

## 產品特色

### + 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 and TACACS+  
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)  
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

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## 產品規格

### + 技術

#### 標準

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

#### 緩衝記憶體封包

12M bits

#### 傳輸型式

Store-and-Forward  
Auto Negotiation  
Half-duplex back-pressure and IEEE 802.3x full-duplex flow control  
Auto MDI/MDIX

#### MAC地址表

16K MAC addresses

### + 電源

#### 輸入電壓

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

#### 電力功耗

7.5W Max. 0.31A@24VDC

#### Protection

Reverse polarity protection

### + 機構

#### 機殼

Aluminum Case  
IP30

#### 尺寸

60 x 125 x 145mm (W x D x H)  
(2.36" x 4.92" x 5.7")

#### 重量

1.03Kg

**安裝方式**  
DIN-Rail

## + 介面

### 乙太網路埠

10/100BASE-TX: 4, 6 or 8 ports

100BASE-FX: 0 to 4 ports

Gigabit: 0, 1 or 2 ports

### Console Port

Port: One DB9 RS-232 port

### LED 指示燈號

Per Unit: Power 1, Power 2, Alarm

Per Port: Link/Activity, Speed

### Alarm Contact

One relay output with current 1A/250VAC

## + 環境

### 工作溫度

-10 to 60°C (-14 to 140°F)

Tested @ -20 to 70°C (-4 to 158°F)

### 儲存溫度

-40 to 85°C (-40 to 185°F)

### 工作濕度

5% to 95% (non-condensing)

## + 通過認證

### ISO

Manufactured in an ISO 9001 facility

### Safety

UL 61010

### EMI

FCC Part 15B Class A

EN 61000-6-4

EN 55032

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)

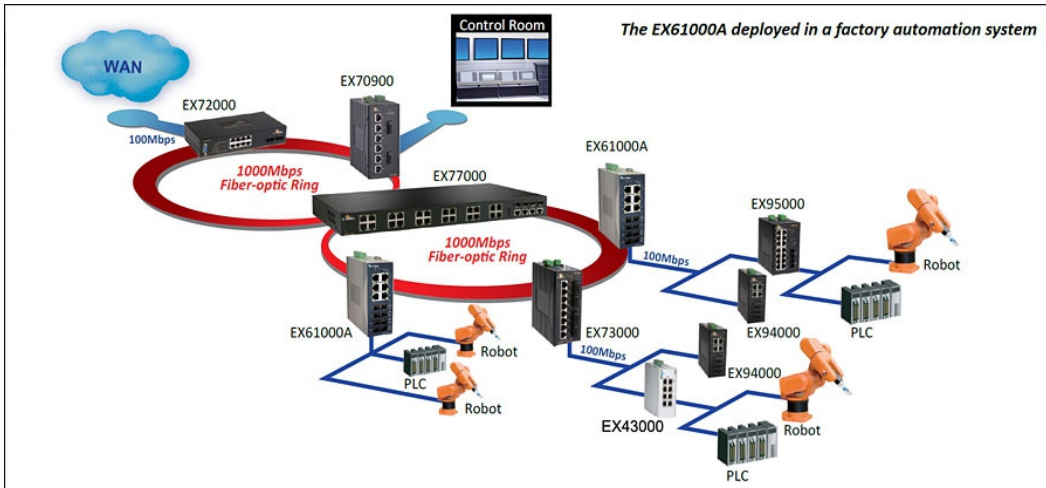
EN 61000-4-6 (Induced RFI Standards)

EN 61000-4-8 (Magnetic Field Standards)

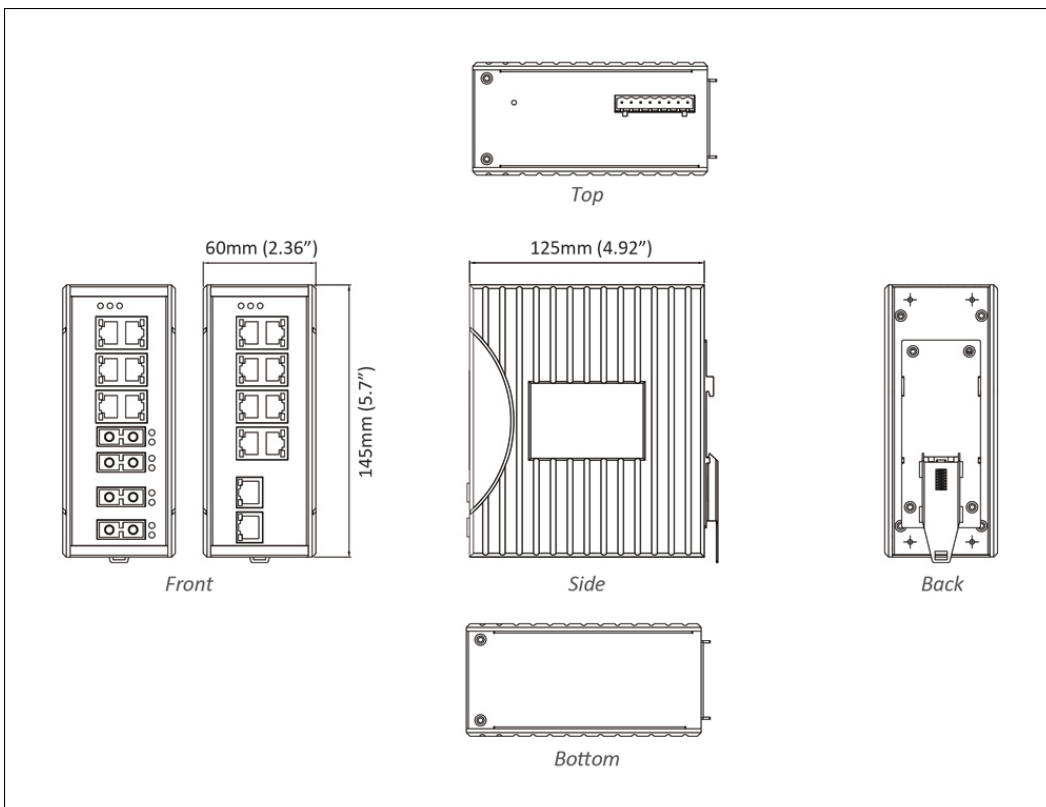
### Environmental Test Compliances

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

## 產品應用圖



## 產品尺寸圖



## 訂購型號

### + 型號

<b>EX61802A-0YB</b>	8-port 10/100BASE-TX +2-port Gigabit Industrial Managed Ethernet Switch
<b>EX61620A-X0B</b>	6-port 10/100BASE-TX +2-port 100BASE-FX Industrial Managed Ethernet Switch
<b>EX61622A-XYB</b>	6-port 10/100BASE-TX +2-port 100BASE-FX +2-port Gigabit Industrial Managed Ethernet Switch
<b>EX61440A-X0B</b>	4-port 10/100BASE-TX +4-port 100BASE-FX Industrial Managed Ethernet Switch

\* DIN-Rail mounting kit included.

### + 100FX Fiber Options (X)

<b>1</b>	Multi Mode (SC) - 2Km
<b>2</b>	Multi Mode (ST) - 2Km
<b>A</b>	Single Mode (SC) - 20Km
<b>B</b>	Single Mode (SC) - 40Km
<b>V</b>	100BASE SFP (DDM)

\* More 100FX Fiber options also available upon request.

### + Gigabit Port Options (Y)

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

\* More Gigabit options also available upon request.

### + Optional Accessories

<b>KP-AA96-480</b>	Panel mounting kits
<b>KR-BK71000</b>	Rack mounting kits
<b>HDR-30-24</b>	30W/1.5A DIN-Rail 24VDC Industrial Power Supply
<b>HDR-60-24</b>	60W/2.5A DIN-Rail 24VDC Industrial Power Supply
<b>EDR-75-24</b>	75W/3.2A DIN-Rail 24VDC Industrial Power Supply
<b>EX41-145046-X</b>	Power Supply 45W 12VDC with Open Wire (X) = 1: US, 2: EU, 3: UK, 4: AU, 5: JP, 6: SA

