

EX73000 系列

強固級網管型 16埠10/100BASE +2埠Gigabit Combo 乙太網路交換器



產品介紹

EX73000系列為強固級網管型乙太網路交換器，鋁軌式安裝機型，具備16個10/100BASE乙太網路連接埠及2個Gigabit combo埠，可搭配固定式光纖，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。

EX73000系列符合ISA 12.12.01防爆認證標準，工業等級設計可在高EMI環境及-40 到 75°C 寬溫環境下穩定運作，支援益網獨家技術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，小於15毫秒內便可快速恢復連線通訊。EX73000系列同時支援Redundant Pair協定，可將不同的備援環狀網路串接在一起，大幅延伸備援機制架構，最高可同時支援235個環狀網路，在50毫秒內回復網路連線，適用於中大型網路架構。

EtherWAN — "When Connectivity is Crucial."

產品亮點

+ Hardened-Grade for Non-Ventilated & Harsh Environments

Wide operating temperature range -40 to 75°C
(-40 to 167°F)
Fanless operation
High impact, thermal shock, and electrical noise resistance

+ Compliance

EN 50121-4 certified for railway applications
NEMA TS2 rated
UL certified for safety

+ Management/Security Features

Port control
802.1x port-based network access control and remote authentication through RADIUS
Configure and monitor with eVue™ and eLite™

+ Support

Complimentary Technical Support
Free Firmware Upgrades
Limited Lifetime Warranty

產品特色

+ Interface

CLI, Telnet, Web Browser

SNMP v1/v2c/v3

+ Management

Firmware upgrade

Configuration backup via TFTP

DHCP Server/Client

RMON (Remote Monitoring): group 1, 2, 3, 9

Port Mirroring: TX/RX and both

NTP (Network Time Protocol) 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

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 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 Protocols

IEEE 802.1D STP

IEEE 802.1w RSTP

IEEE 802.1s MSTP

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

VLANs

Port-based VLANs

IEEE 802.1Q Tag VLANs (128 groups, 4096 VID)

GVRP

GMRP

Link Aggregation

Static Trunk (2 groups, support MAC base)

IEEE 802.3ad LACP

IGMP Snooping v1/v2/v3

+ Performance

Switching Capability

7.2Gbps

產品規格

+ Interface

Ethernet

16 x 10/100BASE-T(X)

0, 1 or 2 x Gigabit

Console

1 x DB9 RS-232

Alarm Contact

1 x Relay output, current capacity 0.6A/30VDC

LED Indicators

Per Unit: Power 1, Power 2

Per Port: Link/Activity (Green: Copper, Orange: Fiber)

+ 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 PNAC

Forward/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

+ Environmental

Operating Temp.

-40 to 75°C (-40 to 167°F)

Tested @ -40 to 85°C (-40 to 185°F)

Storage Temp.

-45 to 85°C (-49 to 185°F)

Relative Humidity

5% to 95% (non-condensing)

+ Power

Input

12-48VDC Redundant (Terminal block)

Power Consumption

8.06W 0.336A@24VDC

Protection

Reverse Polarity Protection

+ Physical

Casing Material

Aluminum

IP Rating

IP30

Dimensions

60 x 125 x 145mm (W x D x H)

2.56" x 4.92" x 5.71"

Weight

1.19kg

Installation Type

DIN-rail mounting

+ Regulatory

ISO

Manufactured in ISO-9001 facility

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)

EN 61000-4-3 (Radiated RFI)

EN 61000-4-4 (Burst)

EN 61000-4-5 (Surge)

EN 61000-4-6 (Induced RFI)

EN 61000-4-8 (Magnetic Field)

Safety

UL 61010

ISA 12.12.01

Vibration

IEC 60068-2-6 Fc

Shock

IEC 60068-2-27 Ea

Free Fall

FED STD 101C Method 5007.1

Industrial Compliance

NEMA TS2

+ Warranty

Length

Limited Lifetime

Details

www.etherwan.com/support/warranty-policy

+ What's Included

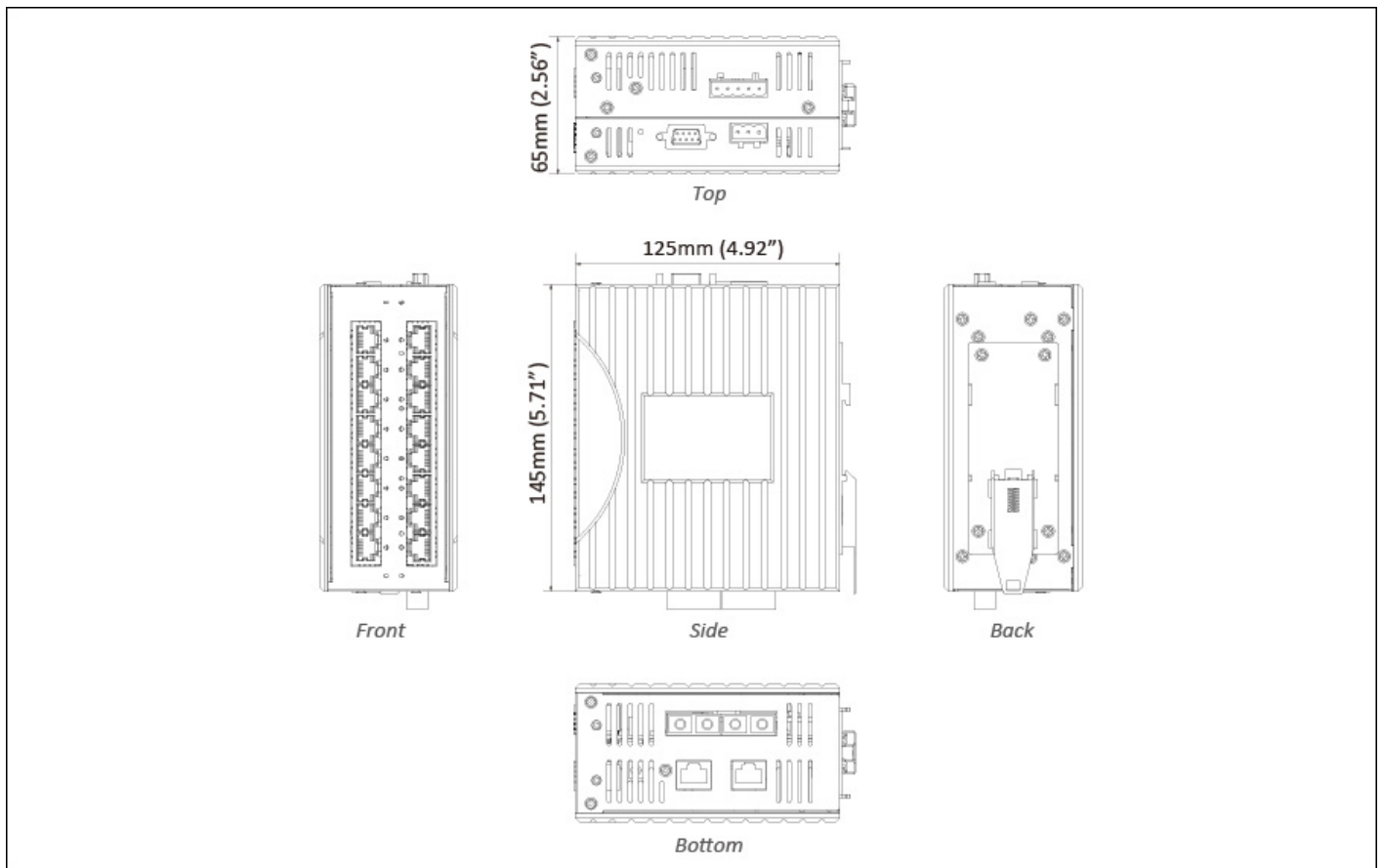
Device

Ethernet Switch

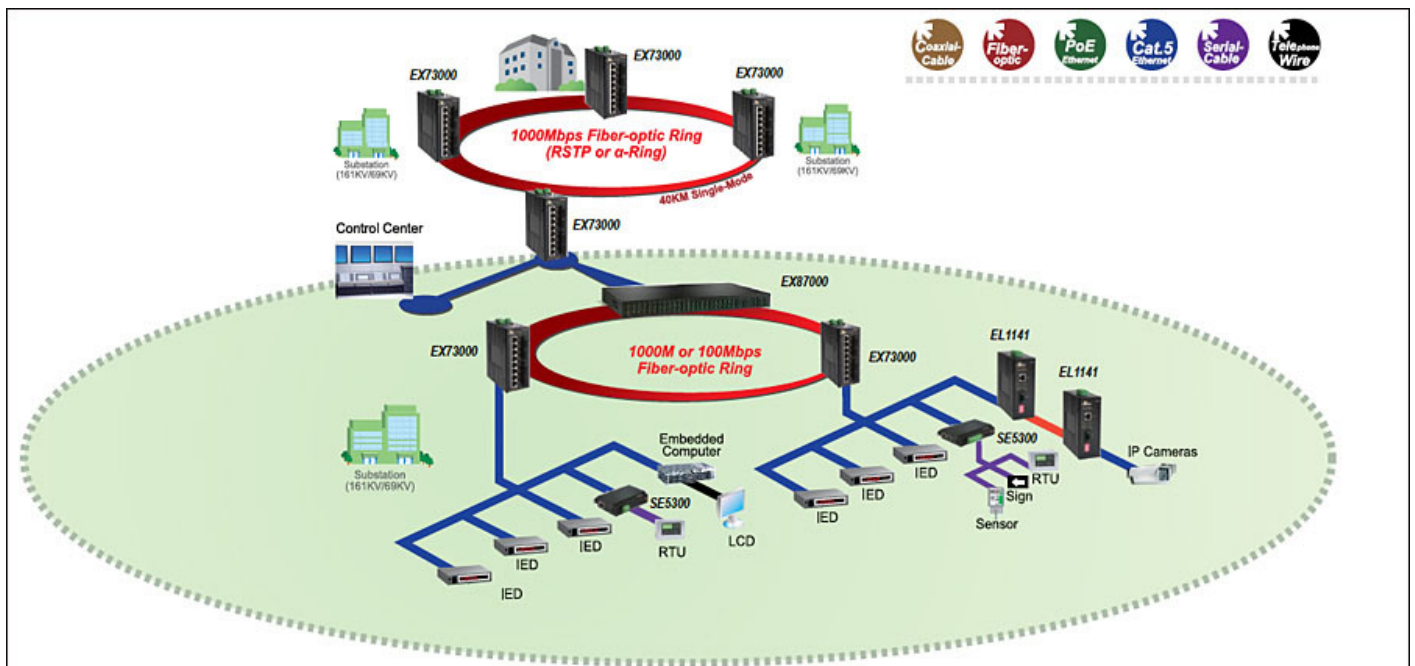
Documentation

Quick Install Guide

產品尺寸圖

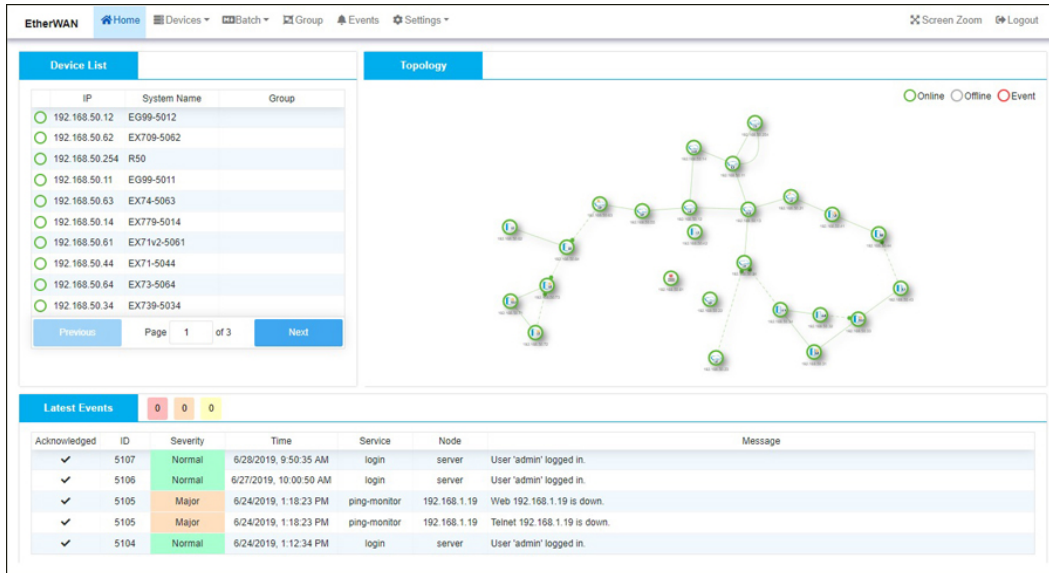


產品應用圖



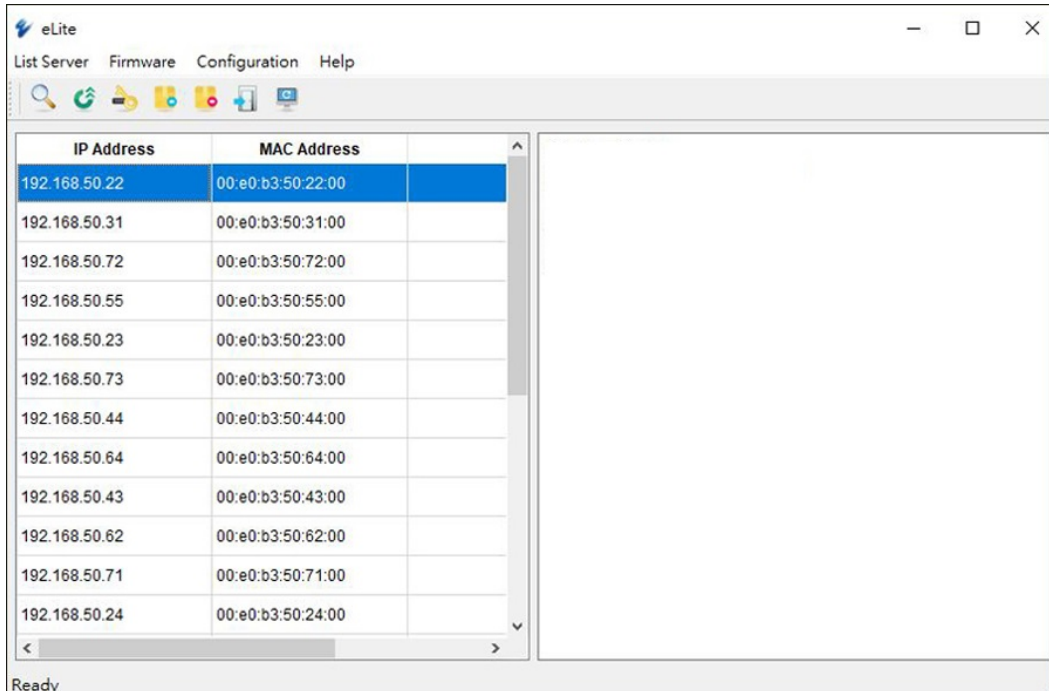
管理軟體

Network Management [eVue™ Network Configuration and Monitoring Tool](#)
 Network Discovery [eLite™ Network Discovery and IP Configuration Tool](#)



The screenshot shows the EtherWAN web interface. On the left, there is a 'Device List' table with columns for IP, System Name, and Group. On the right, there is a 'Topology' diagram showing a network of interconnected devices. Below these, there is a 'Latest Events' section with a table of recent system events.

Acknowledged	ID	Severity	Time	Service	Node	Message
✓	5107	Normal	6/28/2019, 9:50:35 AM	login	server	User 'admin' logged in.
✓	5106	Normal	6/27/2019, 10:00:50 AM	login	server	User 'admin' logged in.
✓	5105	Major	6/24/2019, 1:18:23 PM	ping-monitor	192.168.1.19	Web 192.168.1.19 is down.
✓	5105	Major	6/24/2019, 1:18:23 PM	ping-monitor	192.168.1.19	Telnet 192.168.1.19 is down.
✓	5104	Normal	6/24/2019, 1:12:34 PM	login	server	User 'admin' logged in.



The screenshot shows the eLite application window. It features a menu bar with 'List Server', 'Firmware', 'Configuration', and 'Help'. Below the menu is a toolbar with various icons. The main area contains a table with IP addresses and MAC addresses.

IP Address	MAC Address
192.168.50.22	00:e0:b3:50:22:00
192.168.50.31	00:e0:b3:50:31:00
192.168.50.72	00:e0:b3:50:72:00
192.168.50.55	00:e0:b3:50:55:00
192.168.50.23	00:e0:b3:50:23:00
192.168.50.73	00:e0:b3:50:73:00
192.168.50.44	00:e0:b3:50:44:00
192.168.50.64	00:e0:b3:50:64:00
192.168.50.43	00:e0:b3:50:43:00
192.168.50.62	00:e0:b3:50:62:00
192.168.50.71	00:e0:b3:50:71:00
192.168.50.24	00:e0:b3:50:24:00

訂購型號

+ Model

EX73400-00B	16-port 10/100BASE-TX
EX73402-0YB	16-port 10/100BASE-TX + 2-port Gigabit (Combo)

* DIN-Rail mounting kit included.

+ Gigabit Fiber 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

+ Accessories

Hardened SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
DIN-Rail Power Supplies	www.etherwan.com/products/din-rail-power-supply (*)
*Recommended Power Supply	HDR-30-24 30W 24VDC DIN-Rail Power Supply
EB-232	Configuration Backup and Restoration Tool

