

EX75900 系列

強固級網管型 28 埠 Gigabit PoE 乙太網路交換器



產品介紹

[什麼是第三層交換器 \(Layer 3 Switch\) ?](#)

益網 EX75900 系列是一個強固級網管型的 PoE 乙太網路交換器平台。EX75900 系列配備 24 個 Gigabit PoE 埠具備共 720W 的 PoE 功率預算、支援 IEEE 802.3bt 協定和 4 個 10-Gigabit SFP+ 埠，同時支援 IEEE 1588v2 標準的精確時間通訊協定，利用網路封包及時間戳記進行網路時間同步。為城市基礎設施、交通、安全和其他領域的重要網路連結，提供靈活、高速和可靠的通訊表現。

EtherWAN — "When Connectivity is Crucial."

產品亮點

+ 高頻寬和多功能性

24個 10/100/1000BASE-T(X)埠，適用於高頻寬連接
多達4個 1G/10G SFP+ 上行連結埠，適用於光纖連接
全雙工運行的全容量交換

+ 強固等級適用於不通風的惡劣環境

-40 至 75° C (-40 至 167° F) 的廣泛工作溫度範圍
無風扇作業
高衝擊、耐熱和電氣干擾抵抗力

+ Lite Layer 3 功能

靜態路由、RIP v1/v2 和 OSPF
VRRP 虛擬路由器備援協定
廣播流量減輕

+ PoE 乙太網供電功能

IEEE 802.3bt 支援60W PD; 720W的功率預算
PoE 看門狗監控設備的連接狀態與自訂排程

+ 管理/安全功能

連接埠控制
以 802.1x 連接埠基礎之網路登入控制以及透過
RADIUS 的遠端身份驗證
使用 eVue™ 和 eLite™ 設定和監控

+ 支援

提供技術支援
免費韌體升級和通知
有限終身保固

軟體特色

+ Interface

CLI, Telnet, Web GUI

+ Management

Firmware upgrade
Configuration backup
DHCP Server/Client
RMON (Remote Monitoring)
Port Mirroring
NTP (Network Time Protocol) synchronization
LLDP (Link Layer Discovery Protocol)
IPv4/IPv6
SNMP v1/v2c/v3
Modbus TCP

+ Security

MAC Address filtering
Enable/Disable port
Storm control
System logging
IEEE 802.1x LAN Access control
Remote authentication through RADIUS and TACACS+
Complex password support
Multi-user login and privileged access management
SSH for CLI and Telnet security
SSL and HTTPS for web security
ACL (Access Control List, up to 4096 entries)

+ 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

VLANs

IEEE 802.1Q Tag VLANs
GVRP
GMRP

Link Aggregation

Static Trunk (4 groups)
IEEE 802.3ad LACP

IGMP Snooping v1/v2/v3

+ Layer 3 Features

IP Packet Routing

Maximum number of routes in hardware: 64 entries
Static Routing
RIP v1/v2
OSPF v2

Routing Redundancy

VRRP

+ Quality of Service (QoS)

Priority Queues: 8 queues per port
Traffic classification based on IEEE 802.1p CoS (Cost of Service), DSCP (Differentiated Services Code Point), WRR (Weighted Round Robin), and strict mode
Rate Limiting (Ingress/Egress)

+ Software Properties and Performance

Switching Fabric

EX75960: 56Gbps
EX75964: 128Gbps

Forwarding Rate

95.23Mpps

Max VLANs

256 (4096 VID)

Jumbo Frame Size

9KB

MAC Table Size

16K

Packet Buffer Memory

12M bits

硬體規格

+ Interface

Ethernet

24 x 10/100/1000BASE-T(X)
4 x 1G/10G SFP+ or 4 x 1G SFP

Console

1 x RJ45

Config Backup

1 x USB (Type A Connector)

Digital Input

2 x Digital Input
Wet Contact: 0-3V for State 0; 13-30V for State 1;
Max Input Current: 8mA
Dry Contact: Logic Level 1–Close to GND; Logic
Level 0-Open

Alarm Contact

1 x Relay output, current capacity 0.5A/48VDC

LED Indicators

Per Unit: Power 1, Power 2, Alarm
Per Port: Link/Activity (Green)
Per PoE Port: PoE Status (Orange)

+ Physical

Casing Material

Metal

IP Rating

IP30

Dimensions

442 x 270 x 44.2mm (W x D x H)
17.4" x 10.6" x 1.74"

Weight

5.1Kg (11.2lbs)

Installation Type

Rack mounting

+ Environmental

Operating Temp.

-40 to 75°C (-40 to 167°F)

Storage Temp.

-45 to 85°C (-49 to 185°F)

Relative Humidity

5% to 95% (non-condensing)

MTBF

1,444,959 hours

+ Technology

Standards

IEEE 802.3 10BASE-T
IEEE 802.3u 100BASE-TX/100BASE-FX
IEEE 802.3ab 1000BASE-T
IEEE 802.3ae 10Gigabit Ethernet
IEEE 802.3ad link aggregation control
IEEE 802.3z 1000BASE-SX/1000BASE-LX
IEEE 802.3x full duplex and flow control
IEEE 802.1D STP
IEEE 802.1p QoS
IEEE 802.1Q Tag VLANs
IEEE 802.1s MSTP
IEEE 802.1w RSTP
IEEE 802.1x PNAC
IEEE 802.1ab LLDP
IEEE 802.3af/at/bt Power over Ethernet
IEEE 1588v2 PTP

Forward/Filtering Rate

14,880pps for 10Mbps
148,810pps for 100Mbps
1,488,100pps for 1000Mbps
14,881,000pps for 10Gbps

Processing Type

Store-and-forward
Auto-negotiation
Half-duplex back-pressure and full-duplex flow control
Auto MDI/MDIX

System Memory

2Gb DDR3 SDRAM

Flash Storage

1Gb

+ Regulatory

ISO

Manufactured in ISO-9001 facility

EMI

FCC Part 15B Class A
VCCI Class A
EN 61000-6-4

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)
PoE Ports: line to earth 6kV Surge
EN 61000-4-6 (Induced RFI)
EN 61000-4-8 (Magnetic field)

Safety

UL 62368

Vibration

IEC 60068-2-6

Shock

IEC 60068-2-27

Free Fall

FED STD 101C Method 5007.1

Industrial

EN 50121-4

+ Power

Input

46-57VDC Redundant (Terminal block)**

** 46-57VDC for IEEE 802.3af type 1, ≤15.4W PD devices.

52-57VDC for IEEE 802.3at/bt type 2/3, 30W, 60W PD devices.

PoE Modes

802.3af/at Mode A: Pins 1/2(-), 3/6(+)

802.3bt (60W): Mode A & B, Pins 1/2(-), 3/6(+), 4/5(+), 7/8(-)

PoE Power Output

Port: Up to 60W/port

Power Budget: 720W

Protection

Reverse Polarity Protection

+ Warranty

Length

Limited Lifetime

Details

www.etherwan.com/support/warranty-policy

+ What's Included

Device

Ethernet Switch

Cables

1 Console Cable

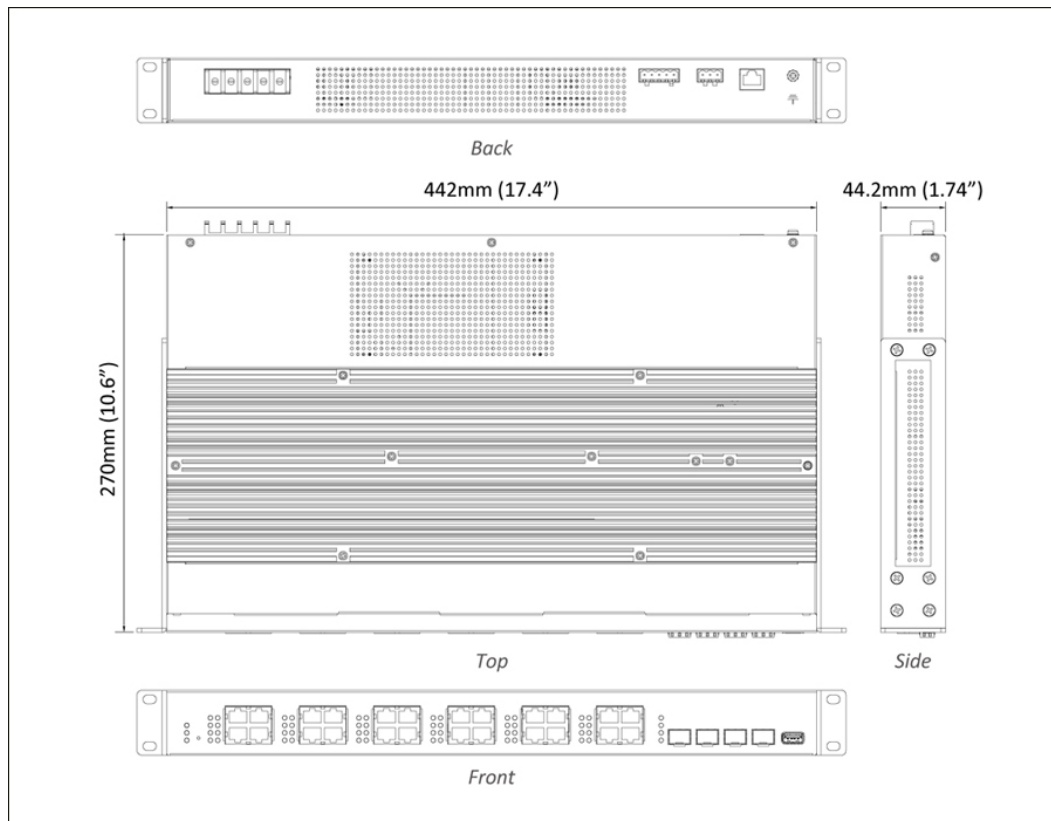
Installation

Mounting brackets, screws

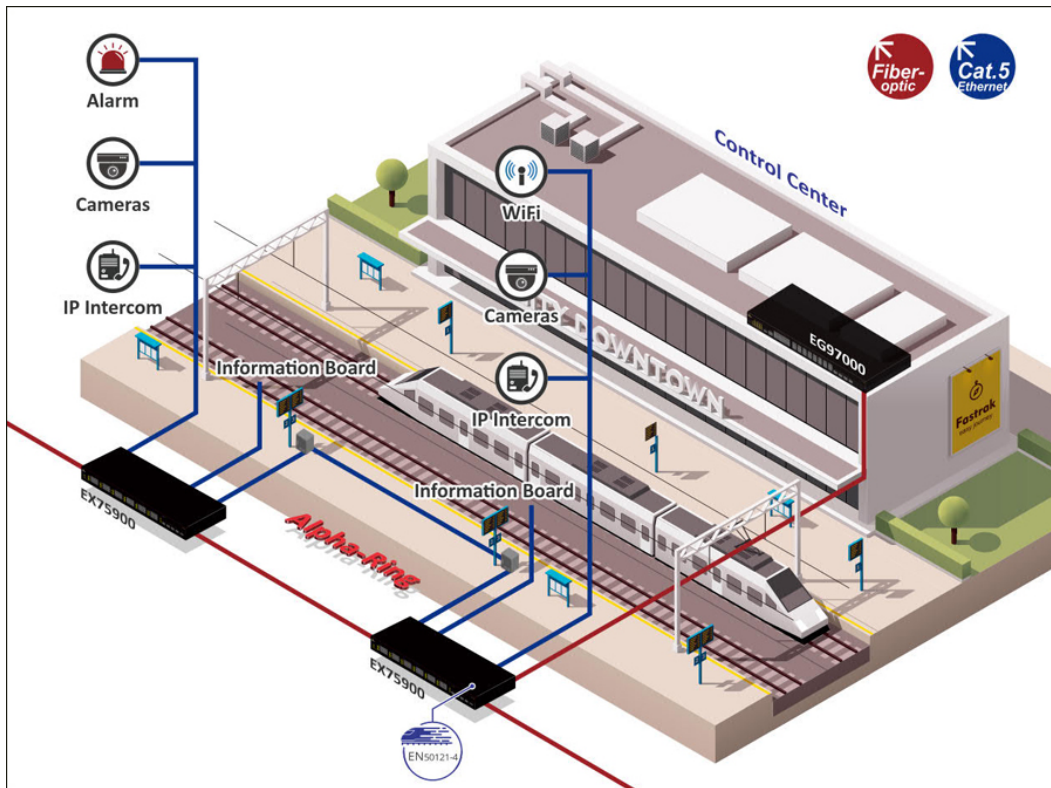
Documentation

Quick Install Guide

產品尺寸圖



產品應用圖



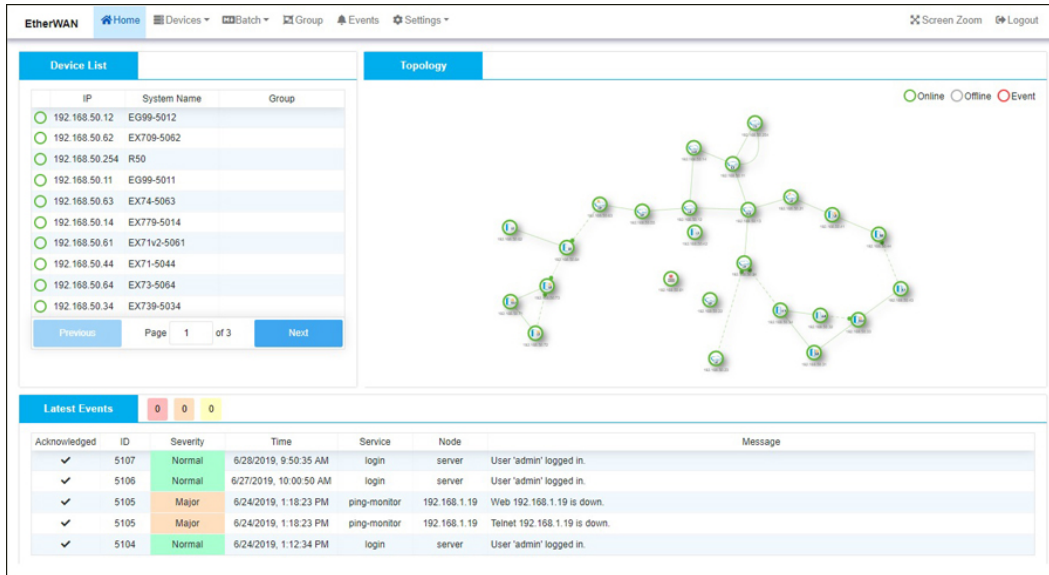
軟體

Network Management

[eVue™ Network Configuration and Monitoring Tool](#)

Network Discovery

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



Device List

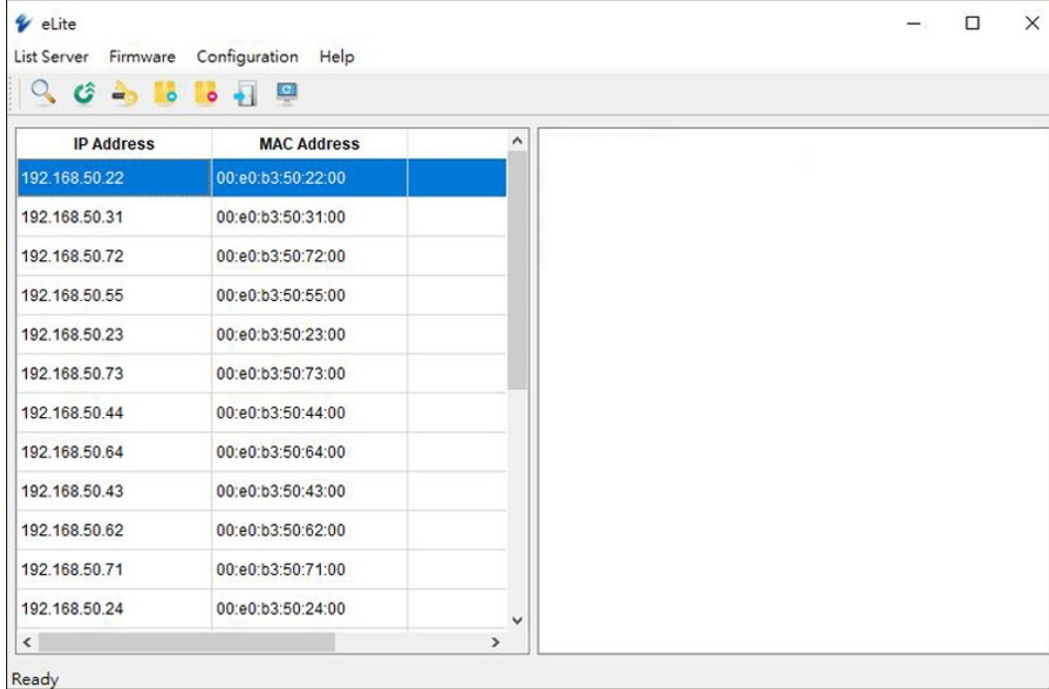
IP	System Name	Group
192.168.50.12	EG99-5012	
192.168.50.62	EX709-5062	
192.168.50.254	R50	
192.168.50.11	EG99-5011	
192.168.50.63	EX74-5063	
192.168.50.14	EX779-5014	
192.168.50.61	EX71v2-5061	
192.168.50.44	EX71-5044	
192.168.50.64	EX73-5064	
192.168.50.34	EX739-5034	

Topology

Legend: ● Online ○ Offline ○ Event

Latest Events

Acknowledged	ID	Severity	Time	Service	Node	Message
✓	5107	Normal	6/29/2019, 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.



eLite

List Server Firmware Configuration Help

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

Ready

訂購資訊

+ Model

EX75964-0VTU	24-port 10/100/1000BASE-T(X) PoE + 4-port 1G/10G SFP+
EX75960-0VTU	24-port 10/100/1000BASE-T(X) PoE + 4-port 1000BASE SFP

+ Accessories

Hardened 100BASE SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
Hardened Gigabit SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
DIN-Rail Power Supplies	www.etherwan.com/products/din-rail-power-supply

