

## EG97244 系列

強固級網管型 8 埠 10/100/1000BASE-T + 16 埠 100/1000BASE SFP+ 4 埠 1/10G SFP + 第 3 層乙太網路交換器



## 產品介紹

### [When should you use an Industrial Layer 3 switch?](#)

EtherWAN 的 EG97244 產品為高效能超高速第 3 層乙太網路交換器。EG97244 具有用於光纖的多個千兆位 (1G SFP) 連接埠以及 4 個 10 千兆 (10G SFP+) 的連接埠，主要定位是應用於骨幹型網路上。產品本身具有高度彈性、快速和穩定可靠的優勢，可廣泛應用於城市基礎設施、交通、安全和以及其它與網路串聯相關的網路管理工程領域中。

EtherWAN — "When Connectivity is Crucial."

## 產品亮點

### + 具高頻寬且多點網路連結的靈活性與傳輸能力 + 專案合規等級的網路產品

16 個 100/1000M 雙速率 SFP 連接埠，用於多組光纖連接

4 個 1/10G 雙速率 SFP+ 連接埠，用於連接到核心與集線核心層

8 個 10/100/1000BASE-T RJ45 連接埠，用於乙太網路的銅線連接

符合美國政府 TAA 專案標準

符合 NEMA TS2 等級

符合 UL 安全認證

### + 適用於不通風和惡劣環境的強固設計

-40 至 75°C (-40 至 167°F) 寬工作溫度範圍

無風扇設計

高耐溫衝擊和高雜訊抗噪

### + 穩定且安全的網路管理機制

連接埠端口控管 (Port control)

透過風暴 (Storm detection and control) 偵測和控管

可搭配 eVue™ 和 eLite 軟體來做網路監管

### + 完備的第 3 層網路功能等級

硬件等級的路由優化

故障隔離的再加強

運用第 3 層網路功能將整個網絡連接在一起

### + 終身保固服務

提供免費技術支援

提供免費韌體升級服務

包含 ECN 和 EOL 通知

## 產品特色

### + 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

### + Security

MAC Address filtering

Enable/Disable port

Storm control

System logging

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

### + 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)

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

#### VLANs

IEEE 802.1Q Tag VLANs

GVRP

GMRP

#### Link Aggregation

Static Trunk

IEEE 802.3ad LACP

IGMP Snooping v1/v2/v3

## + Layer 3 Features IPv4

#### Unicast Routing

Static Routing (1K)

RIP v1/v2

OSPF v2

#### Multicast Routing

PIM-DM

PIM-SM

PIM-SSM

#### Routing Redundancy

VRRP

## + Layer 3 Features IPv6

IPv6 Unicast Routing

RIPng  
OSPF v3

#### IPv6 Multicast Routing

PIM6-DM  
PIM6-SM

#### IPv6 Routing Redundancy

VRRP v3

## + Software Properties and Performance

#### Switching Fabric

128Gbps

#### Forwarding Rate

95.23Mpps

#### Total VLAN Entries

256 (4096 VID)

#### Jumbo Frame Size

12KB

#### MAC Table Size

24K

#### Packet Buffer Memory

32M bits

#### L2 Routes

Up to 24,000 unicast and 1,000 multicast routes

#### L3 IPv4 Routes

Up to 8,000 unicast and 8,000 multicast routes

#### L3 IPv6 routes

Up to 2,000 unicast routes

## 產品規格

### + Interface

#### Ethernet

8 x 10/100/1000BASE-T

16 x 100/1000BASE SFP

4 x 1G/10G SFP+

#### Console

1 x RJ45

#### Config Backup

1 x USB (Type A Connector)

#### Alarm Contact

Relay output, current capacity 0.6A/30VDC

#### LED Indicators

Per Unit: Power 1, Power 2, Alarm

Per Port: Link/Activity

### + Technology

#### Standards

IEEE 802.3 10BASE-T

IEEE 802.3u 100BASE-TX/100BASE-FX

IEEE 802.3ab 1000BASE-T

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

**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**

4Gb DDR3 SDRAM

**Flash Storage**

2GB

**+ Power****Input**

VTR:  $\pm 48$ VDC Redundant (Terminal block)

VWR: 100-240VAC Redundant (Terminal block)

VCR: 100-240VAC Redundant (AC Inlet)

**Power Consumption**

75W Max

**+ Physical****Casing Material**

Aluminum

**Dimensions**

442 x 325 x 44mm (W x D x H)

17.4" x 12.8" x 1.73"

**Weight**

5.6kg (12.3lbs)

### 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

1,143,890 hours

## + Regulatory

### ISO

Manufactured in ISO-9001 facility

### EMC

EN 55032

### EMI

FCC Part 15B Class A

VCCI Class A

EN 61000-6-4

### EMS

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 62368

### Traffic

NEMA TS2

### Rail



EN 50121-4

**Vibration**

IEC 60068-2-6

**Shock**

IEC 60068-2-27

**Free Fall**

FED STD 101C Method 5007.1

**+ Warranty**

**Length**

Limited Lifetime

**Details**

[www.etherwan.com/support/warranty-policy](http://www.etherwan.com/support/warranty-policy)

**+ What's Included**

**Device**

Ethernet Switch

**Cables**

1 Console Cable

**Power**

1 AC Power Cord

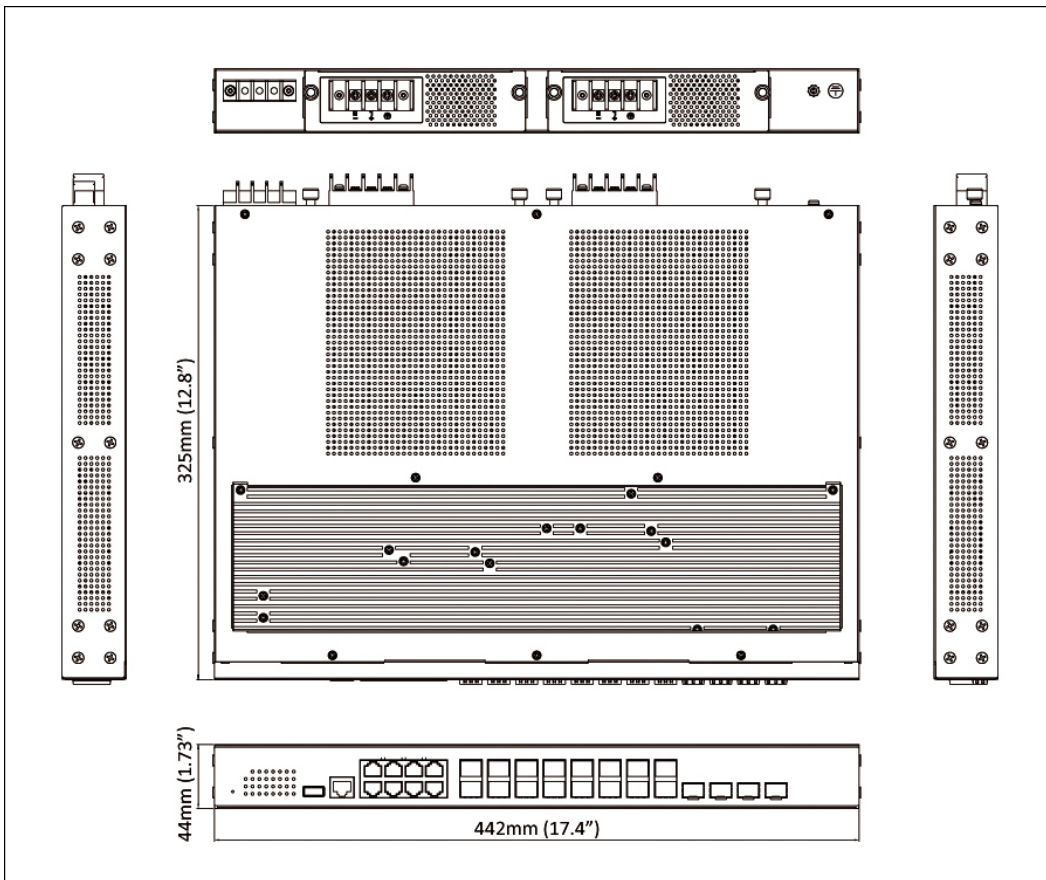
**Installation**

Mounting brackets, screws

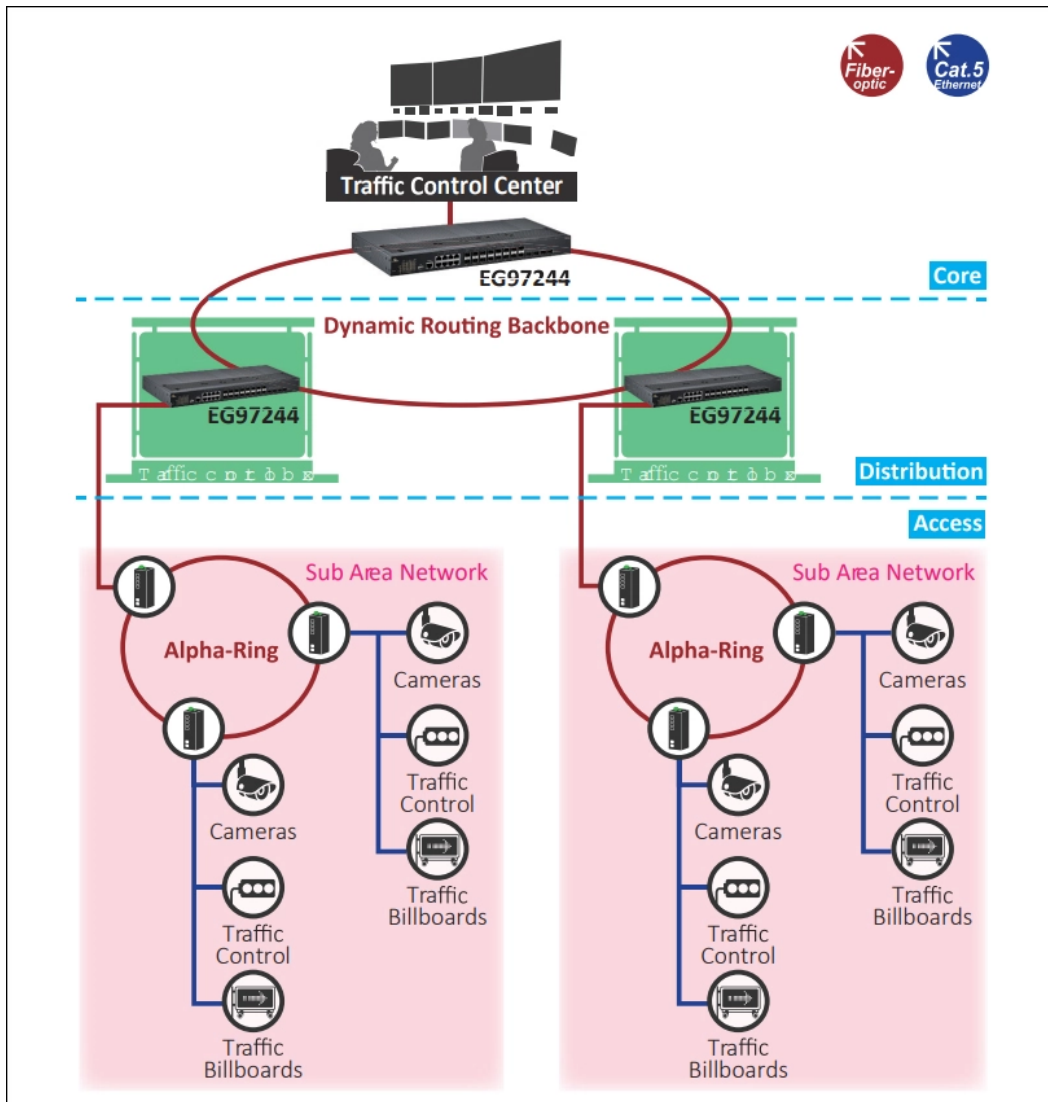
**Documentation**

Quick install guide

## 產品尺寸圖

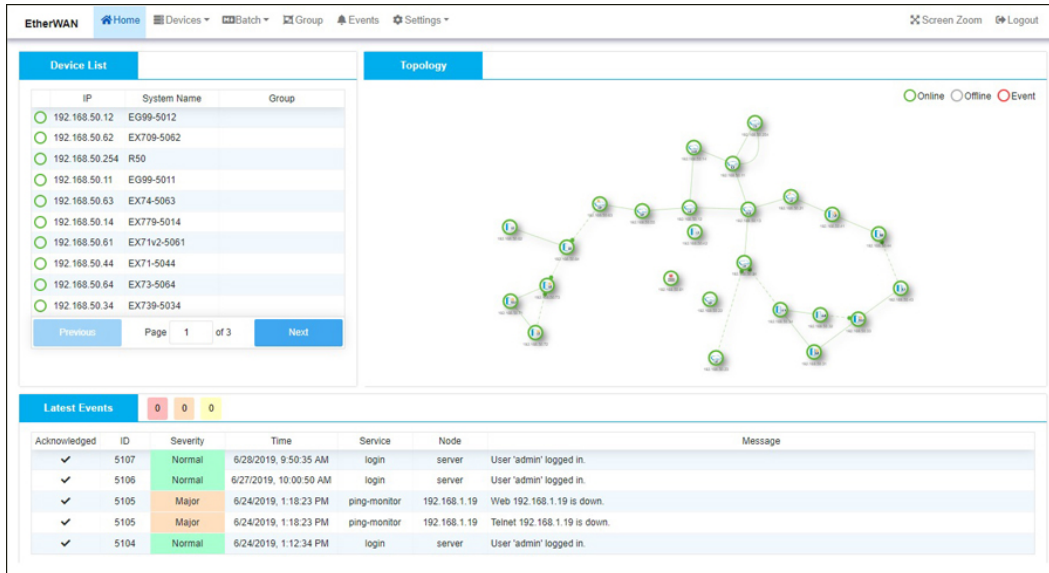


## 產品應用圖



# 管理軟體

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



**Device List**

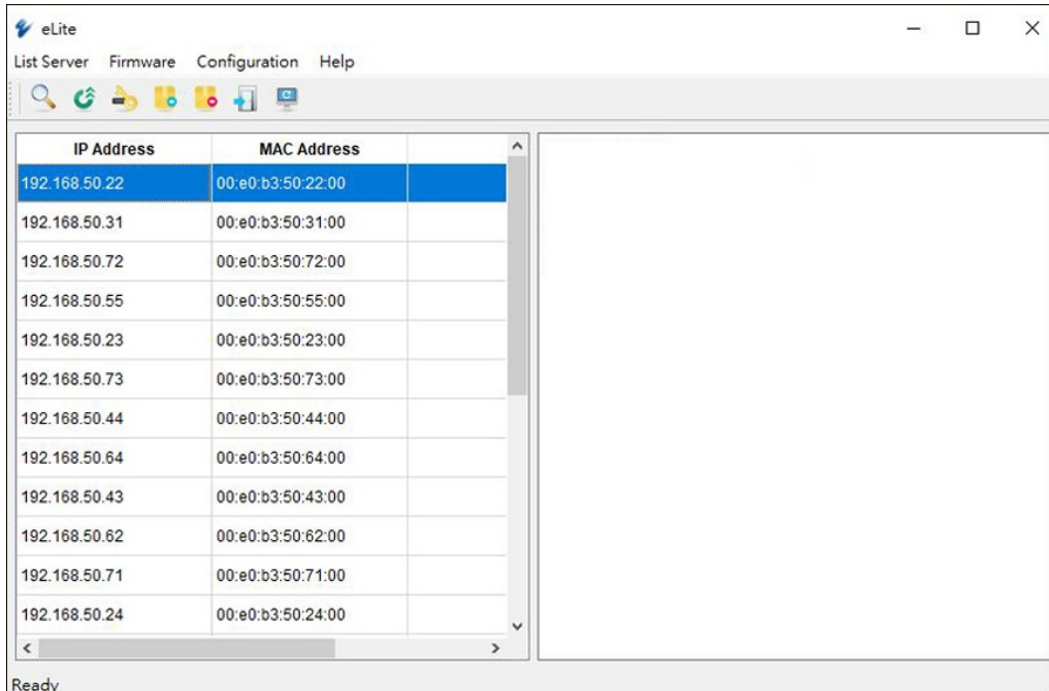
| IP             | System Name | Group |
|----------------|-------------|-------|
| 192.168.50.12  | EG99-5012   |       |
| 192.168.50.62  | EX709-5062  |       |
| 192.168.50.254 | R50         |       |
| 192.168.50.11  | EG99-5011   |       |
| 192.168.50.63  | EX74-5063   |       |
| 192.168.50.14  | 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   | 6/28/2019, 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.      |



**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

## 訂購型號

### + Model

|             |  |
|-------------|--|
| EG97244-4VZ | 8-port 10/100/1000BASE-T + 16-port 100/1000BASE SFP + 4-port 1/10G SFP+ Hardened Managed Layer 3 Ethernet Switch |
|-------------|--|

### + Power Input Interface (Z)

|    |                                       |
|----|---------------------------------------|
| TR | ±48VDC Redundant (Terminal Block)     |
| WR | 100-240VAC Redundant (Terminal Block) |
| CR | 100-240VAC Redundant (AC Inlet)       |

### + Accessories

|                              |  |
|------------------------------|--|
| Hardened 100BASE SFP Modules | <a href="http://www.etherwan.com/products/sfp-fiber-transceiver">www.etherwan.com/products/sfp-fiber-transceiver</a>                 |
| Hardened Gigabit SFP Modules | <a href="http://www.etherwan.com/products/sfp-fiber-transceiver">www.etherwan.com/products/sfp-fiber-transceiver</a>                 |
| Power Supplies               | <a href="http://www.etherwan.com/products/power-supplies/power-adapters">www.etherwan.com/products/power-supplies/power-adapters</a> |
| EX41-2750A240                | Power Module for EG97244 series, 100-240VAC PSU (75W), AC Inlet  |

