

## EG99000 系列

強固級網管型 24埠10/100/1000BASE-T (8埠Combo SFP) +4埠10G SFP+ L3乙太網路交換器



### 產品亮點

#### 強固等級設計

- » 寬溫操作 (-40到75°C)
- » 堅固的金屬外殼設計，可有效避免高溫/高濕環境導致材質老化
- » 抗高衝擊和電磁波干擾

#### 智慧化管理&遠端安全存取介面

- » 支援QoS, VLAN, ACL 及 RADIUS等優化網路性能

#### L3擴充能力

- » 路由協定: RIP、OSPF for Layer 3 交換能力

## 產品介紹

EG99000為一款工業級Gigabit Layer 3交換器，24埠Gigabit乙太網路連接埠和4個10G超高速乙太網路連接埠有效提供高頻寬上傳或互連設計，搭配Dual-rate SFP光纖連接埠，可大幅增加未來網路架構擴充彈性。Layer 3功能支援IP路由、跨網段通訊以及VLANs等功能。

EG99000的IP路由功能，包括靜態路由、RIP v1 & v2, 和 OSPF v2，這些路由協定可使網路分配及路由控制工具同步運作，包括IP prefix-list和route-map。

EG99000通過EMI測試可抗2倍以上電磁干擾，強固等級設計，可在-40到75°C寬溫環境下穩定運作，透過內建的系統斷線回復機制，如VRRP和雙備援電源輸入，可使網路或系統斷線時間最小化，適用於大型的工業連線環境。

EtherWAN — "When Connectivity is Crucial."

## 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)
  - » Port mirroring: TX/RX and both
  - » NTP (Network Time Protocol) time synchronization
  - » IEEE 802.1ab LLDP (Link Layer Discovery Protocol)
  - » IPv4/IPv6
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### 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
  - » ACL (Up to 4096 entries)
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### Quality of Service (QoS)

- » Priority Queues: 8 queues per port
  - » Traffic classification based on IEEE 802.1p CoS, DSCP, WRR (Weighted round robin) and strict mode
  - » Rate Limiting (Ingress/Egress)
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### 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 Protocols

- IEEE 802.1D Spanning Tree Protocol (STP)
  - IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
  - IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- » VLANs
- IEEE 802.1Q Tag VLANs
  - GVRP (GARP VLAN Registration Protocol)
  - GMRP (GARP Multicast Registration Protocol)
- » Link Aggregation
- Static Trunk
  - IEEE 802.3ad Link Aggregation Control Protocol
- » IGMP Snooping
- IGMP Snooping v1/v2/v3
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## Layer 3 Features IPv4

- » Unicast Routing
- Static Routing (1K)
  - RIP v1/v2
  - OSPF v2
- » Multicast Routing
- PIM-DM
  - PIM-SM
- » Routing Redundancy
- VRRP
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## Layer 3 Features IPv6

- » IPv6 Unicast Routing\*
- RIPng
  - OSPF v3
- \* Available in Q4 2019
- » IPv6 Multicast Routing\*
- PIM-DM
  - PIM-SM
- \* Available in Q4 2019
- » IPv6 Routing Redundancy\*
- VRRP v3
- \* Available in Q4 2019
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## Performance

- » 128Gbps switching fabric
  - » Forwarding rate: 95.23Mpps
  - » 4GB DDR3 SDRAM and 2GB Flash Memory
  - » Total VLAN entry size: 4K
  - » With a maximum Ethernet frame size of 12Kbytes (Jumbo Frames)
  - » Configurable up to 24,000 unicast routes and up to 1,000 multicast routes at L2 managed level
  - » Configurable up to 8,000 unicast routes and up to 8,000 multicast routes at L3 (IPv4) managed level
  - » Configurable up to 2,000 unicast routes at L3 (IPv6) managed level
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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
- 14,880,952pps for 10Gbps

#### 緩衝記憶體封包

- 32M bits

#### 傳輸型式

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

#### MAC地址表

- 24K
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### 電源

#### 輸入電壓

- $\pm 48$ VDC Redundant (Terminal Block)
- 100-240VAC Redundant (Terminal Block)

- 100-240VAC Redundant (AC Inlet)

## 電力功耗

- 75W Max.
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## 機構

### 機殼

- 金屬材質
- IP30

### 尺寸

- Redundant Power:  
442 x 375.5 x 44.2mm (W x D x H)  
(17.4" x 14.8" x 1.74")

### 重量

- 5.6kg (12.3lbs)

### 安裝方式

- Rack mounting
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## 介面

### 乙太網路埠

- 10/100/1000BASE-T: 24 or 16 ports
- 1000BASE-SFP: 8 ports
- 10G SFP+: 4 ports

### Console Port

- One DB-9 RS-232 port
- One RJ45 managed port

### USB Port

- One USB port (Type A connector)

### Alarm Contact

- One relay output with current 0.6A/30VDC

### Digital Inputs

- Two Digital inputs

- +13 to +30V for state "1"
- 0 to +3V for state "0"
- Max. Input Current: 8 mA

### LED 指示燈號

- Per Unit: Power1, Power2, Alarm
  - Per Port: Link/Activity (Green)
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## 環境

### 工作溫度

- -40 to 75°C (-40 to 167°F)

### 儲存溫度

- -45 to 85°C (-49 to 185°F)

### 工作濕度

- 5% to 95% (無凝結)
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## 通過認證

### ISO

- Manufactured in an 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 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)

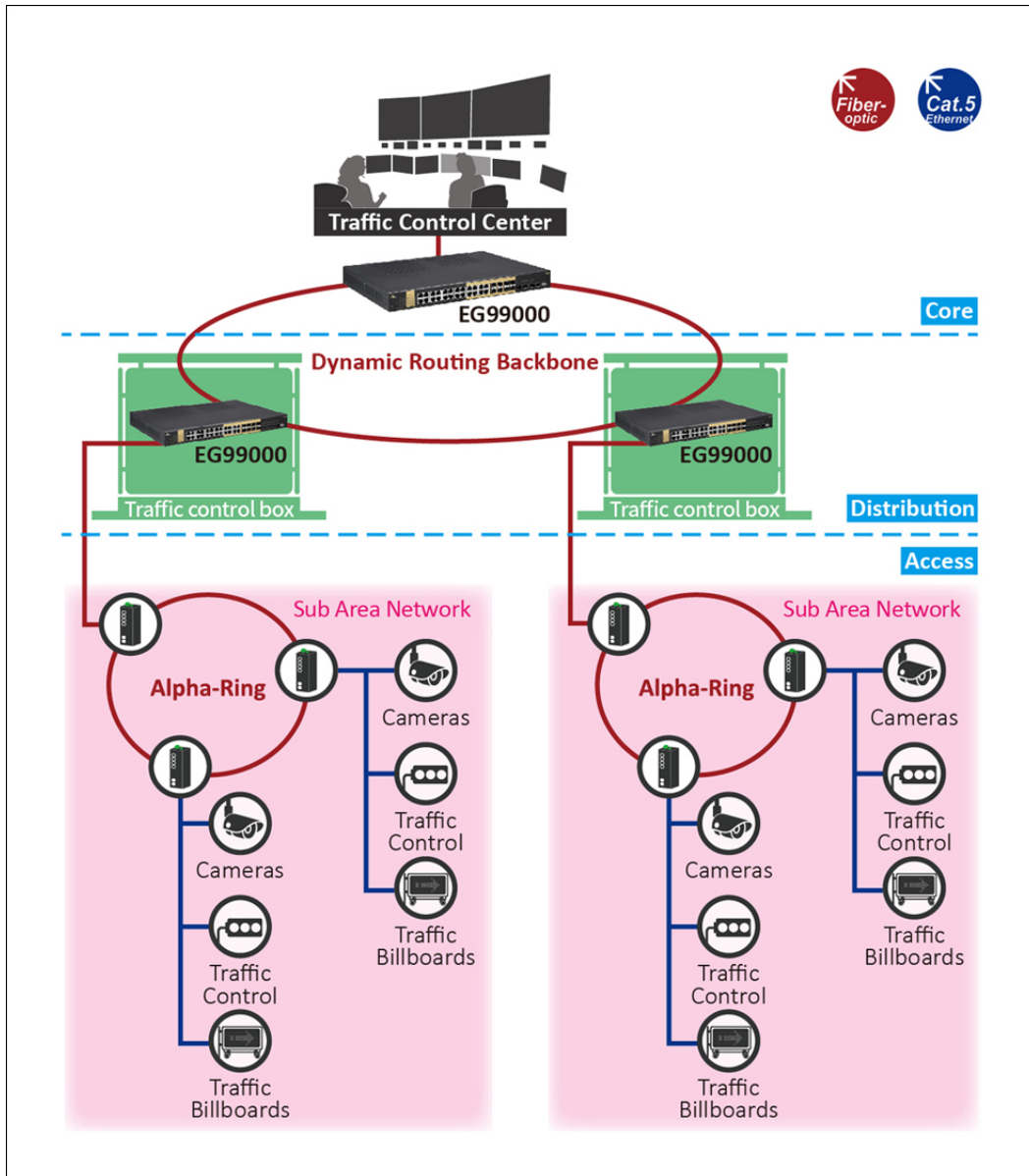
### Environmental Test Compliance

IEC 60068-2-6 Fc (Vibration Resistance)

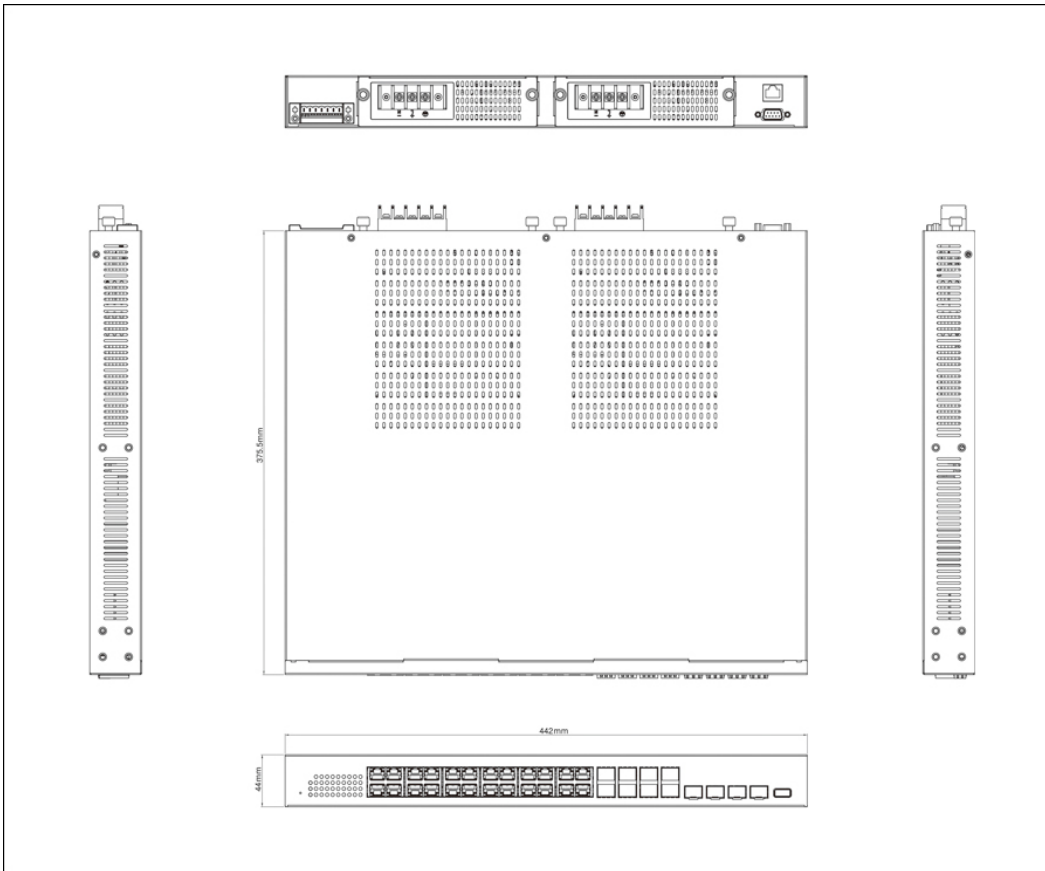
IEC 60068-2-27 Ea (Shock)



## 產品應用圖



## 產品尺寸圖



## 訂購型號

### 型號

|                    |   |
|--------------------|---|
| <b>EG99424-8VZ</b> | 16-port 10/100/1000BASE-TX +8-port 1000BASE SFP Combo +4-port 10G SFP+ Hardened Layer 3 Managed Ethernet Switch |
|--------------------|---|

\* Rack mounting kit included.

### Power Input Interface (Z)

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



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