# 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

## 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)

## 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)

## 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

## Layer 3 Features IPv4

» Unicast Routing
- Static Routing (1K)
- RIP v1/v2
- OSPF v2

» Multicast Routing
- PIM-DM
- PIM-SM

» Routing Redundancy
- VRRP

## 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

## 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

# 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

## 電源

### 輸入電壓

- ±48VDC Redundant (Terminal Block)
- 100-240VAC Redundant (Terminal Block)
- 100-240VAC Redundant (AC Inlet)

### 電力功耗

- 75W Max.

## 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

## 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)

## 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)

## 通過認證

**ISO**

• Manufactured in an ISO 9001 facility

**EMI**

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

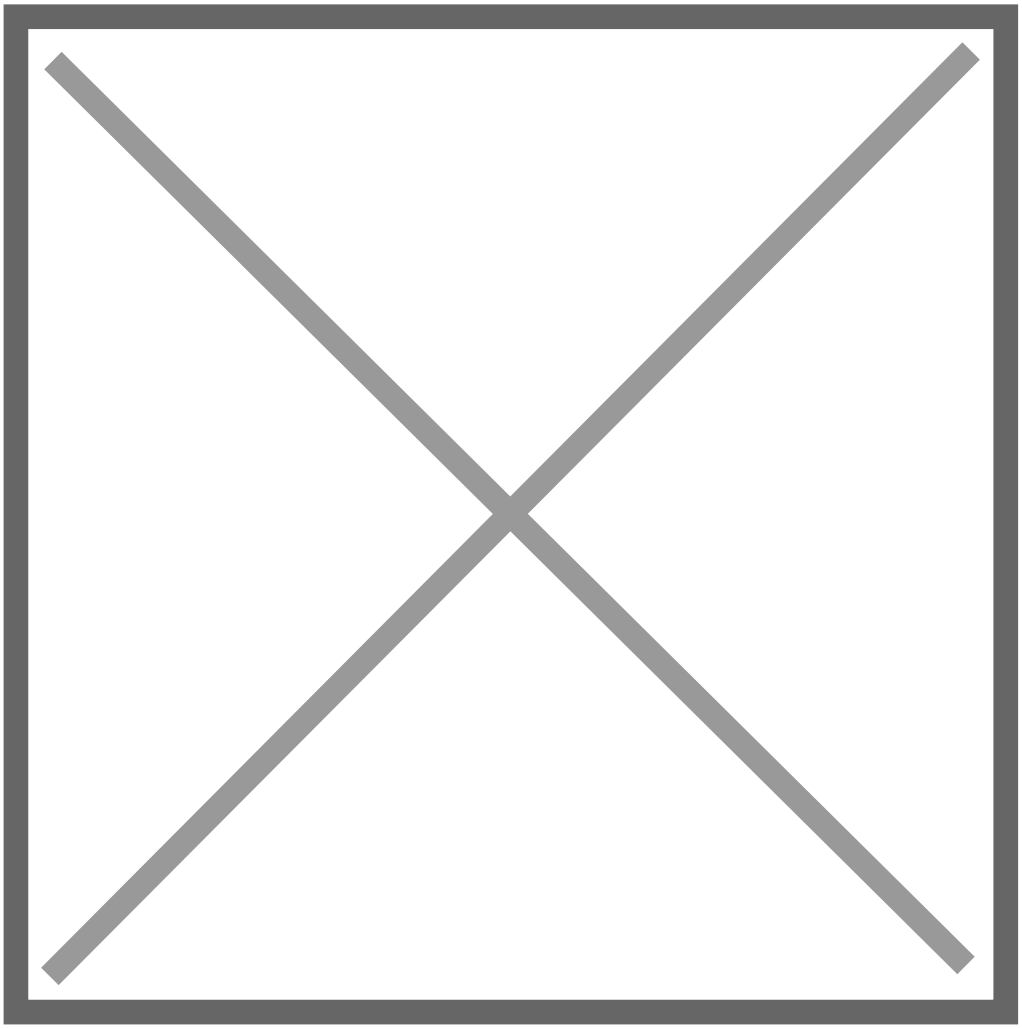
**EMS**

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)

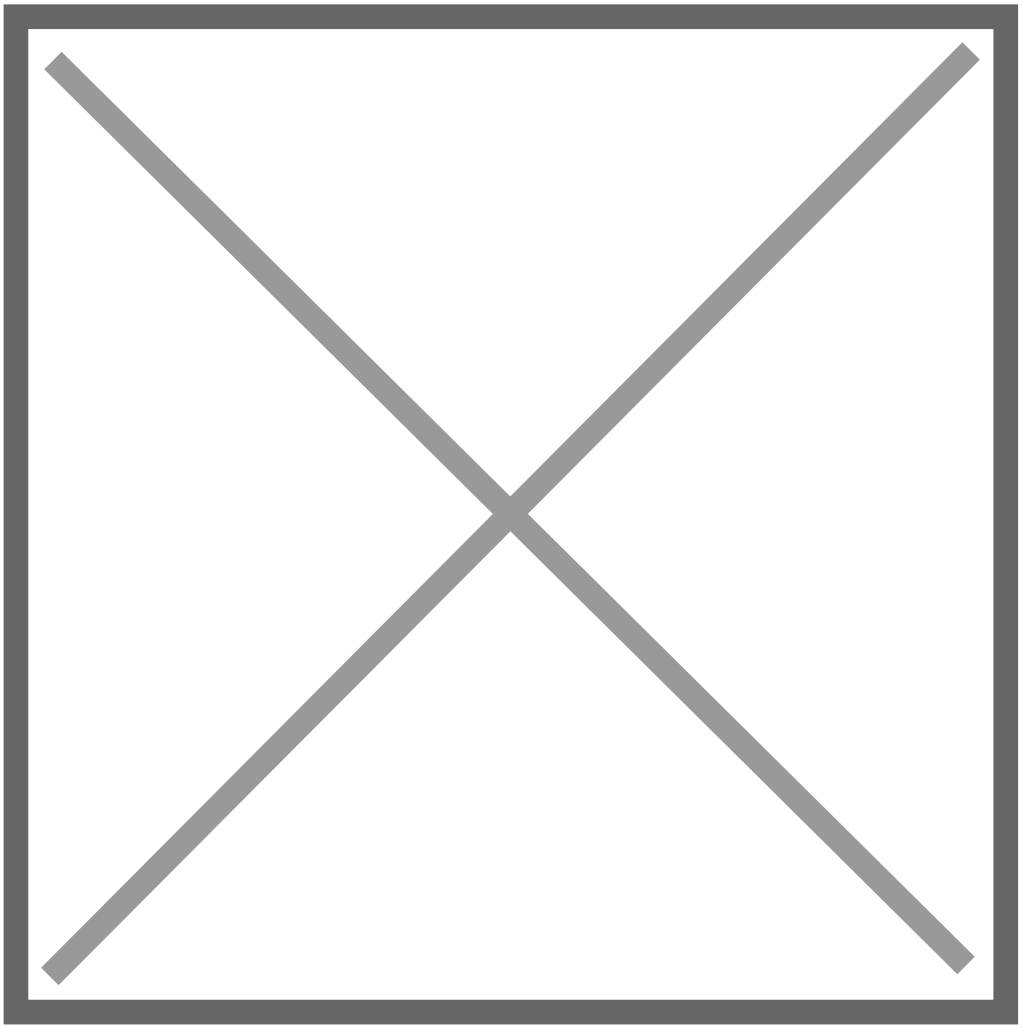
**Environmental Test Compliance**

IEC 60068-2-6 Fc (Vibration Resistance)
IEC 60068-2-27 Ea (Shock)
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

| | |
|---|---|
| **EG99424-8VZ** | 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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