EG97023 系列

強固級網管型 12 埠 1/2.5/10 Gigabit SFP+ + 8 埠 1000BASE SFP 第 3 層乙太網路交換器



產品介紹

什麼是第三層交換器 (Layer 3 Switch) ?

EtherWAN的 EG97023 是一款高效能強固型的第三層乙太網路交換器。主要除了能在惡劣環境下穩定運作外, 它還提供了極高頻寬的網路連結效能。 EG97023 配備了 12 個 10G SFP+ 的連接埠，每個連接埠能夠達到 10 千兆 (10G SFP+) 的連線速度，另外還有8個千兆連接埠 (1G SFP) 可供網路連結，其超高頻寬的傳輸能力，可有效的達成連接到多個網路節點的網路場域中，為您的網路規畫提供了最佳解決方案。產品本身具有高度的使用彈性、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工程領域中。

除了具備完整的第 3 層網路功能的優勢之外，EG97023 獨有的故障隔離設計、簡化的安全管理機制、網絡流量適量隔離措施、較低的網絡延遲性以及簡易的故障排除等特點外，EG97023 的硬體設計上，更具備了獨特的無風扇散熱以及風流導向設計，讓其強固的機身更可順利的在惡劣的環境下持久運行。 除此之外，EG97023 也提供終身維修保固服務，提供您後續使用上有優質的服務與保障。

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

多個網路連接埠端口以超高速的 10 千兆 (10G SFP+) 頻寬做滿載負荷運行

12 個雙速 SFP+ 埠支援 1G/2.5G/10G 光纖連接到核心與集線核心層

8 個雙速 SFP 埠支援 1G 埠光纖用於支援到節點/邊緣運算的網路連接

專案合規等級的網路產品

符合 NEMA TS2 等級

符合 UL 安全認證

符合美國政府 TAA/NDAA 專案標準

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

透過連接埠端口的檢查、身份驗證和訪問控制來控管安全

透過風暴 (Storm Control) 偵測、IP ACL 控管和系統日誌記錄來監督

可搭配 eVue™ 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

軟體功能

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

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
ITU-T G.8032 Ethernet Ring
Protection Switch (ERPS)

VLANs
IEEE 802.1Q Tag VLANs
GVRP
GMRP
Private VLANs and MAC/Subnet/Protocol Based VLANs

Link Aggregation
Static Trunk
IEEE 802.3ad LACP

IGMP Snooping v1/v2/v3

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)

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

256Gbps

Forwarding Rate

190.4Mpps

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

硬體規格

Interface

Ethernet

8 x 100/1000 BASE-SFP

12 x 1G/2.5G/10G SFP+

Console

1 x RJ45, 1 x USB

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

Power

Input

VWR: 100-240VAC Redundant (Terminal block)

VCR: 100-240VAC Redundant (AC Inlet)

Power Consumption

75W Max

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

585224 Hours at 25°C

What's Included

Device

Ethernet Switch

Cables

1 Console Cable

Power

2 AC Power Cord

Installation

Mounting Brackets, Screws

Documentation

Quick Install Guide

Technology

Standards

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 802.3ae 10Gbit/s Ethernet over fiber for LAN
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 202.3bz for 2.5Gbps support

Forward/Filtering Rate

148,810pps for 100Mbps
1,488,100pps for 1000Mbps
14,881,000pps for 10Gbps
3,720,000pps for 2.5G bps

Processing Type

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

System Memory

4Gb DDR3 SDRAM

Flash Storage

2GB

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 61000-6-2
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 62368-1

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

Physical

Casing Material

Metal

Dimensions

442 x 325 x 44mm (W x D x H)
17.4" x 12.8" x 1.73"

Weight

6.2kg (13.7lbs)

Installation Type

Rack mounting

IP Rating

IP30

Warranty

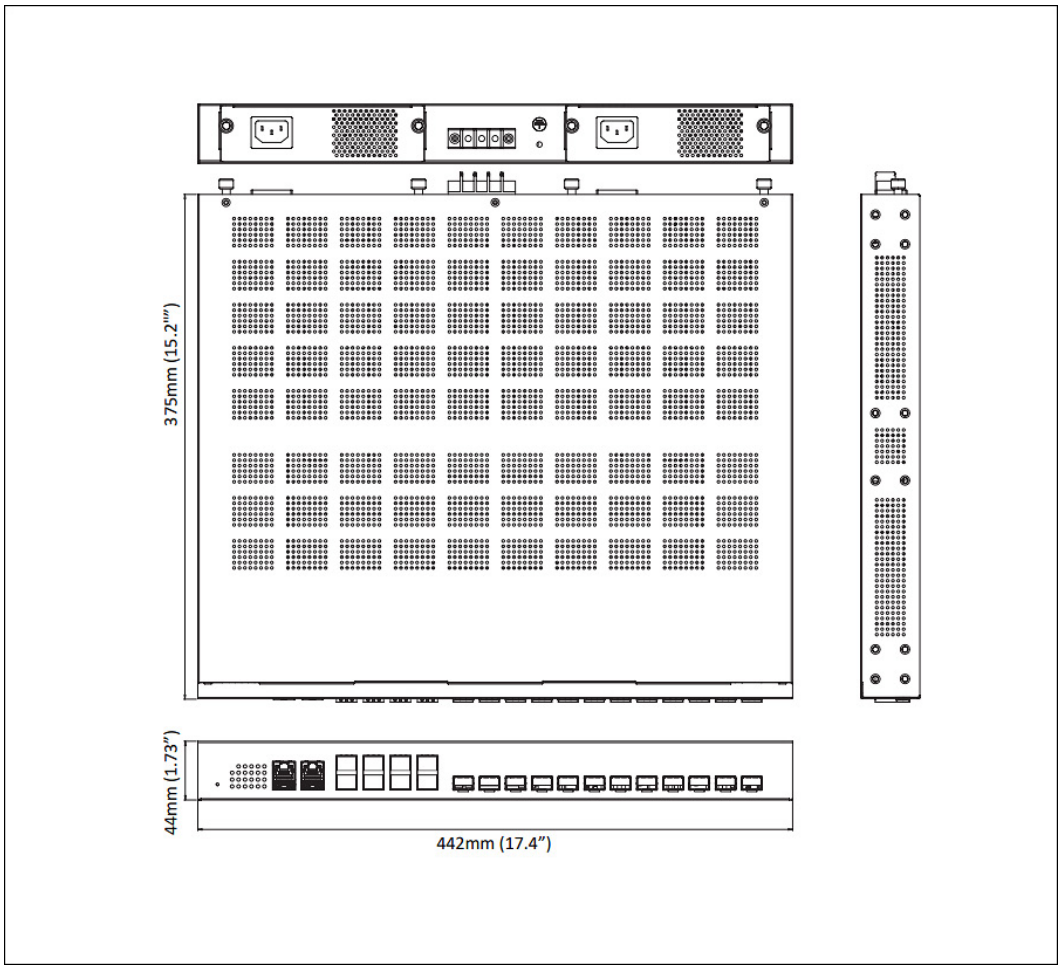
Length

Limited Lifetime

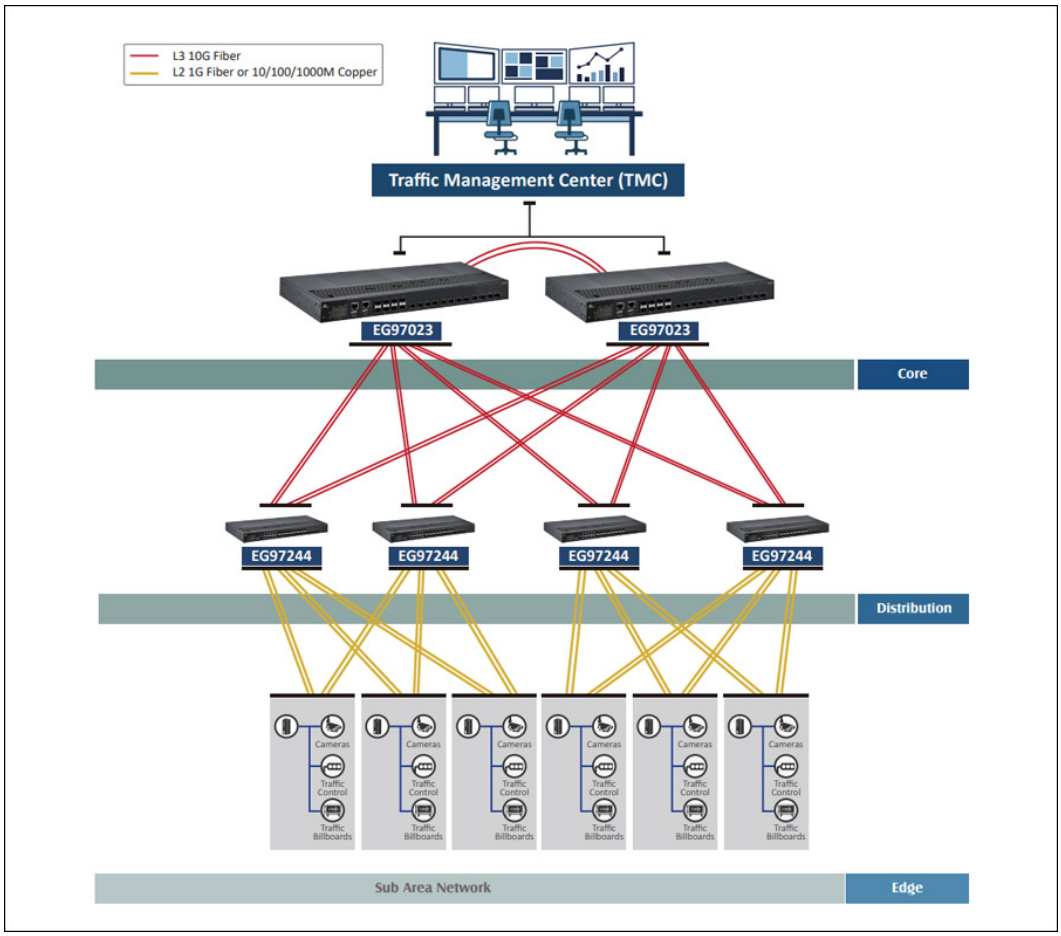
Details

www.etherwan.com/support/warranty-policy

產品尺寸圖

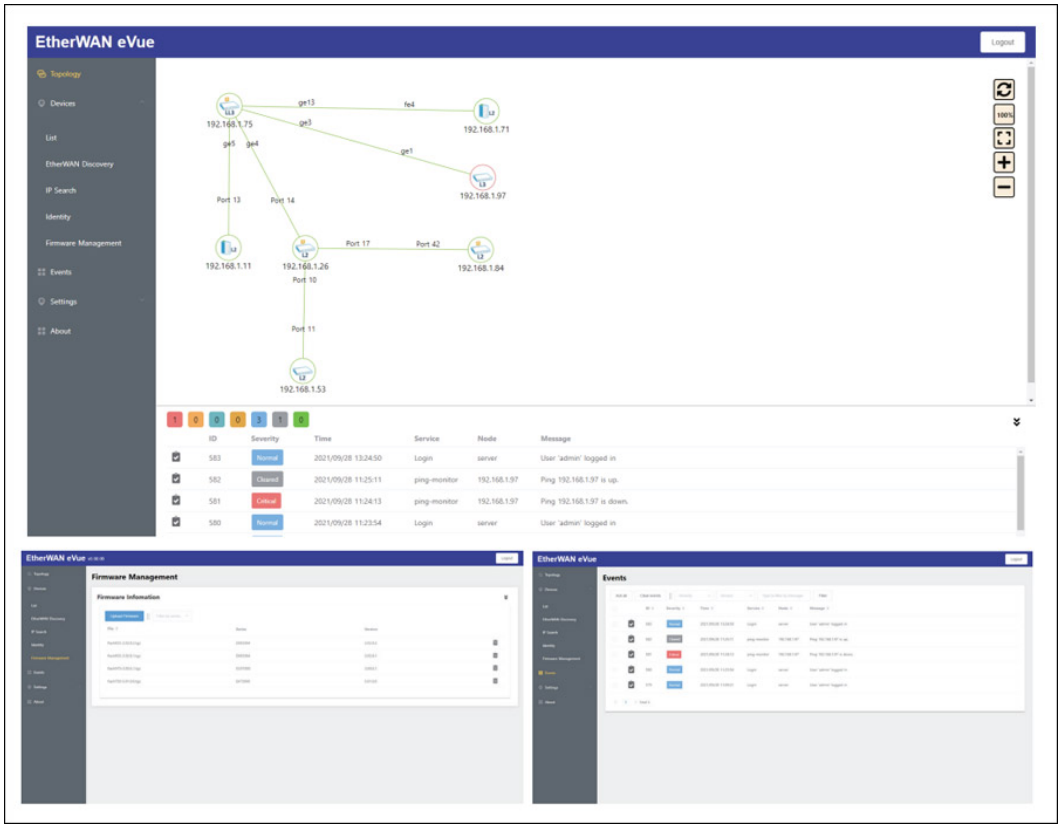


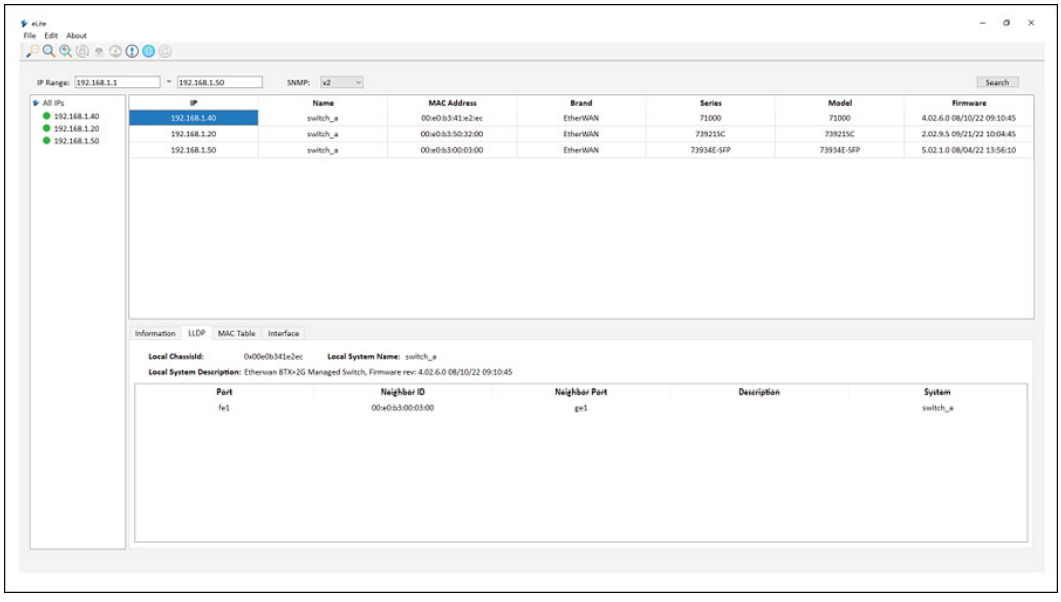
應用圖


L3 10G Fiber
L2 1G Fiber or 10/100/1000M Copper
Traffic Management Center (TMC)
EG97023
EG97023
Core
EG97244
EG97244
EG97244
EG97244
Distribution
Cameras
Traffic Control
Traffic Billboards
Sub Area Network
Edge

軟體工具

Network Management	eVue™ Network Configuration and Monitoring Tool
Network Discovery	eLite™ Network Discovery and IP Configuration Tool





訂購型號

Model



	EG97023-2VZ
100/1000Base SFP	8
1/2.5/10G SFP+	12
QoS	Layer 3 Managed
	訂購諮詢

Power Input Interface (Z)

WR	100-240VAC Redundant (Terminal Block)
CR	100-240VAC Redundant (AC Inlet)

Accessories

Hardened SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
Power Modules	Spare Power Module for EG97023 series, 100-240VAC PSU (85W), AC Inlet

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