

EX78984E-MiB

強固級網管型 12 埠 Gigabit PoE 乙太網路交換器



產品亮點

+ 高頻寬彈性配置

8 個 10/100/1000BASE-T(X) 高速連接埠
多達 4 個 10/100/1000 BASE SFP 光纖上行鏈路連接埠
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)的寬工作溫度範圍
無風扇設計
高衝擊、耐熱和電氣干擾抵抗力

+ 第三層網管功能

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 支援每埠最高60W, 總輸出功率達 240W
PoE 看門狗監控設備的連接狀態與自訂排程
支援 PoE Port 遠端開啟/關閉

+ 管理/安全功能

符合 IEC 62443 網路安全規範
連接埠控制連接埠控制, SFTP 安全檔案傳輸協定
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

+ 服務支援

提供技術支援
免費韌體升級和通知
有限終身保固

產品介紹

益網科技 EX78984E-MiB 系列是強固級網管型導軌式 PoE 乙太網交換機平台。配備多達 8 個 60W 功率的 Gigabit PoE 連接埠, 支援 IEEE 802.3bt 標準協議以及 4 個雙速率 Gigabit SFP 連接埠。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."

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 (Port & Port PoE on/off, Trap receive setting)
Support SNMP and provide MIB
Support SNMP MIB integration for network management SW monitoring

+ 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)
Support IEEE802.1X, IP and MAC Access control
Port Security

+ 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 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

+ Software Properties and Performance

Switching Fabric
32Gbps

Forwarding Rate
23.5Mpps

Max VLANs
256 (4096 VID)

Jumbo Frame Size
9KB

MAC Table Size
16K

Packet Buffer Memory
12M bits

硬體規格

+ Interface

Ethernet

8 x 10/100/1000BASE-T(X)

4 x 100/1000BASE 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

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

LED Indicators

Per Unit: Power 1, Power 2

Per Port: Link/Activity (Green)

Per PoE Port: PoE Status (Orange)

+ 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 I

IEEE 802.1ab LLDP

IEEE 802.3az EEE

IEEE 802.3af/at/bt Power over Ethernet

Forward/Filtering Rate

14,880pps for 10Mbps

148,810pps for 100Mbps

1,488,100pps for 1000Mbps

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

+ Power

Input
52-57VDC Redundant (Terminal block)

Power Consumption
20W Max (without PoE)

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
Ports 1-4, 9-12: Up to 30W/port
Ports 5-8: Up to 60W/port
Power Budget: 240W

Protection
Reverse Polarity Protection

+ Physical

Casing Material
Aluminum

IP Rating
IP30

Dimensions
72 x 140 x 170mm (W x D x H)
2.8" x 5.5" x 6.7"

Weight
1.5kg (3.3lbs)

Installation Type
DIN-rail 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
1,108,382 hours

+ Regulatory

ISO
Manufactured in ISO-9001 facility

EMC (EMI +EMS)
FCC Part 15B Class A
VCCI Class A
EN 61000-6-4, Level 3
EN 61000-3-2, Level 3
EN 61000-3-3, Level 3
EN 61000-4-2, Level 3 (ESD)
EN 61000-4-3, Level 3 (Radiated RFI)
EN 61000-4-4, Level 3 (Burst)
EN 61000-4-5, Level 3 (Surge)
PoE Ports: line to earth 6kV Surge
EN 61000-4-6, Level 3 (Induced RFI)
EN 61000-4-8, Level 3 (Magnetic field)

Safety
UL 61010

Traffic
NEMA TS2

Vibration
IEC 60068-2-6

Shock
IEC 60068-2-27

Free Fall

FED STD 101C Method 5007.1

Industrial
EN 50121-4

+ Warranty

Length
Limited Lifetime

Details
www.etherwan.com/support/warranty-policy

+ What's Included

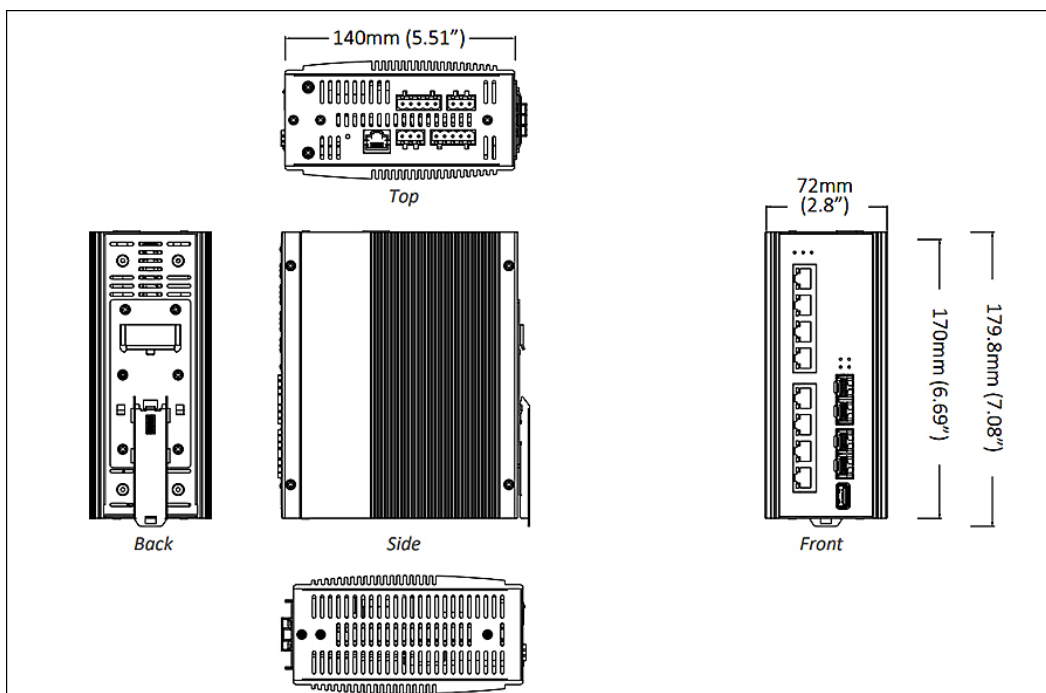
Device
Ethernet Switch

Cables
1 Console Cable

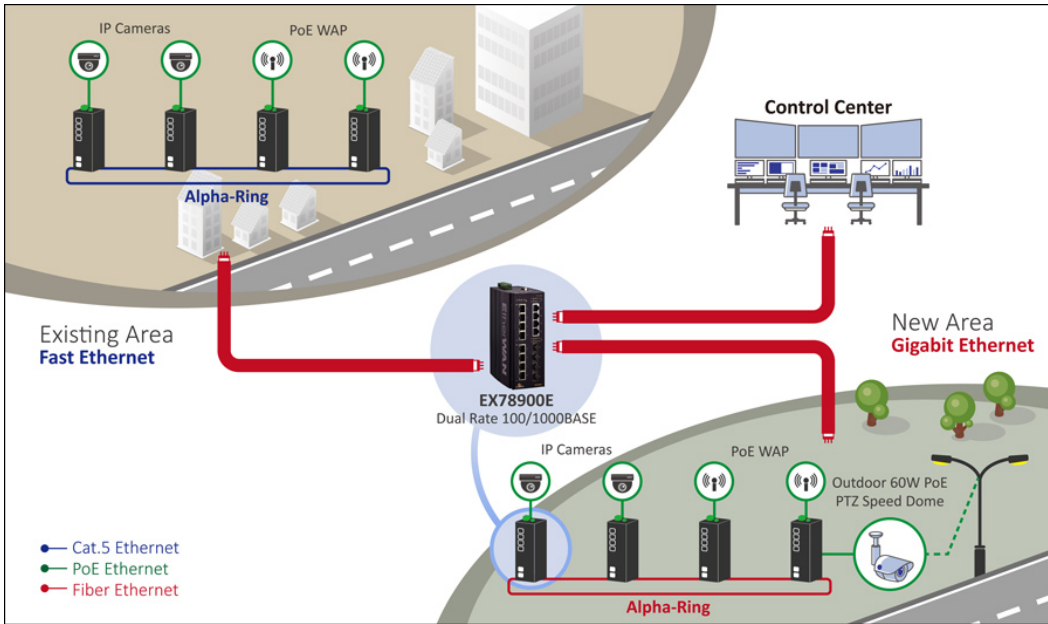
Installation
Mounting brackets, screws

Documentation
Quick Install Guide

產品尺寸圖



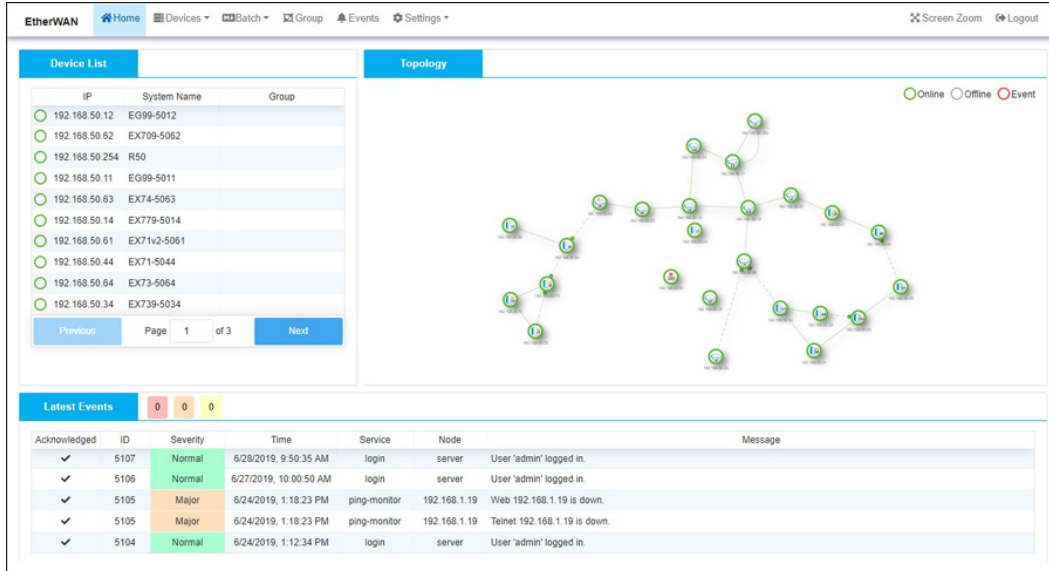
應用圖



軟體工具

網路管理
網路探索

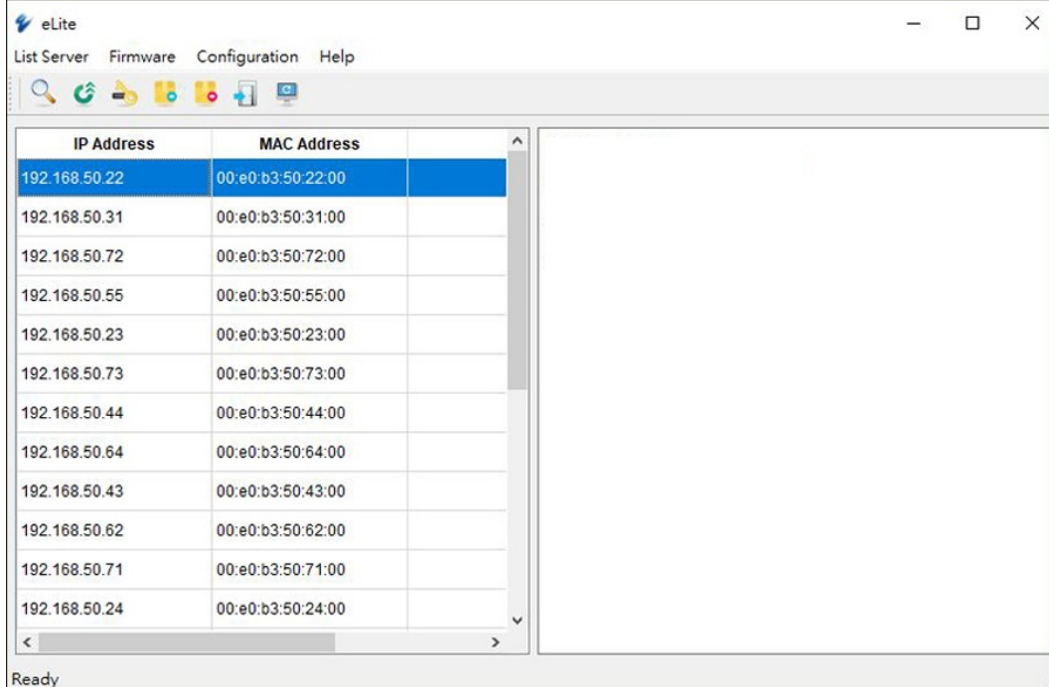
eVue™ 網路配置和監控工具
eLite™ 網路偵測和 IP 配置工具



The screenshot shows the EtherWAN web interface. On the left, there is a 'Device List' table with columns for IP, System Name, and Group. The table contains 10 entries. On the right, there is a 'Topology' diagram showing a network of interconnected nodes. Below the topology, there is a 'Latest Events' section with a table of events.

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	

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.



The screenshot shows the eLite application window. It has a menu bar with 'List Server', 'Firmware', 'Configuration', and 'Help'. Below the menu bar, there is a table with columns for IP Address and MAC Address. The table contains 13 entries.

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

訂購型號

+ 型號

EX78984E-MiB 8埠 10/100/1000BASE-T(X) PoE + 4埠 100/1000BASE SFP



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EtherWAN is constantly developing and improving products. Specifications are subject to change without notice and without incurring any obligation.