EX78900G 系列

強固級網管型 8 埠 Gigabit PoE++ (90W) + 4 埠 100/1G/2.5G SFP 乙太網路交換器





產品介紹

2.5G 上行、高功率 PoE、工業強固型設計，EX78900G 滿足現代智慧網路所需一切，支援先進的 2.5G SFP 光纖上行連接，大幅提升資料傳輸效能，特別適用於影像串流、AI 分析與邊緣運算等高頻寬應用。**內建 4 個 SFP 埠，支援三種速率切換（100Mbps / 1Gbps / 2.5Gbps），提供靈活的網路擴展性**。其中 2.5G 提供高速傳輸能力，1G 則兼具通用性與相容性，是現代智慧監控與大量資料通訊的理想選擇。

本系列配備 8 個 Gigabit PoE 千兆埠，單埠最高可輸出 90W，整體 PoE 總功率高達 480W，完全符合 IEEE 802.3bt (PoE++)、IEEE 802.3at (PoE+) 與 IEEE 802.3af (PoE) 標準，確保各類高功率 PD 裝置獲得持續、穩定的電力支援。

EX78900G 具備**完整的 L2/L3 網管功能**，包括 **VLAN 分割**、**QoS 服務品質**、網路備援機制等，可有效提升網路效率與安全性。其工業級設計通過耐高溫、防塵（IP30 等級）與防震測試，適用於工廠自動化、智慧城市、交通監控與公共安全等各類嚴苛環境，提供靈活、高速且穩定的通訊表現，是建構未來工業網路基礎架構的理想選擇。

EtherWAN — "When Connectivity is Crucial."

產品亮點

2.5GbE 高頻寬網路交換器

8 埠 PoE Gigabit 全千兆高頻寬連接
4 個獨立 SFP 埠支援三速 100/1G/2.5G 光纖連接
高達 36Gbps 交換容量的全雙工運行
支援 2.5Gbps 超高速連接埠，頻寬再升級

適用於不通風和惡劣環境的強固設計

-40 至 75°C 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
6Kv防雷突波設計

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

PoE供電

支援所有PoE標準 – IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt (PoE, PoE+, PoE++)
高功率 PoE 輸出 – 每埠支援 90W
高功率 PoE 預算 – 整機支援高達 480W 總功率
智慧遠端監控 – PoE 看門狗 (PoE Watchdog) 功能

支援 RESTful API

簡化資料擷取流程，提升遠端部署與管理效率

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

產品特色

Interface

CLI, Telnet, Web GUI

Management

Firmware Upgrade
Configuration Backup
DHCP Server/Client/Snooping/Relay
RMON (Remote Monitoring)
Port Mirroring
NTP (Network Time Protocol) Synchronization
LLDP (Link Layer Discovery Protocol)
IPv4/IPv6
SNMP v1/v2c/v3
RESTful API

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)

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

Link Aggregation
Static Trunk (8 groups)
IEEE 802.3ad LACP

IGMP Snooping v1/v2/v3

Layer 3 Features

IP Packet Routing
Maximum 512 hosts
Maximum 64 routes
Static routing
RIP v1/v2
OSPF v2

Routing Redundancy
VRRP v2

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)

Software Properties and Performance

Switching Fabric

36Gbps

Forwarding Rate

26.78Mpps

Max VLANs

256 (4096 VID)

Jumbo Frame Size

9KB

MAC Table Size

16K

Packet Buffer Memory

512KB (4M bits)

產品規格

Interface

Ethernet

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

2 or 4 x 100/1000/2500BASE SFP

Console

1 x RJ45

Config Backup

1 x USB (Type A Connector)

Alarm Contact

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 (Amber)

Physical

Casing Material

Metal

IP Rating

IP30

Dimensions

62 x 125 x 145mm (W x D x H)

Weight

0.75 kg (1.65 lbs)

Installation Type

DIN-rail mounting

Wall mounting (Optional)

Rack mounting (Optional)

Panel mounting (Optional)

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 Radius

IEEE 802.1ab LLDP

IEEE 802.3az Energy-Efficient Ethernet (EEE)

IEEE 802.3af/at/bt Power over Ethernet

Forward/Filtering Rate

14,880pps for 10Mbps

148,809pps for 100Mbps

1,488,095pps for 1000Mbps

3,720,238pps for 2500Mbps

Processing Type

Store-and-forward

Auto-negotiation

Half-duplex back-pressure and full-duplex flow control

Auto MDI/MDIX

System Memory

1GB DDR3 SDRAM

Flash Storage

128MB

Regulatory

ISO

Manufactured in ISO-9001 facility

EMI

FCC Part 15B Class A

VCCI Class A

EN 61000-6-4

EN 61000-3-2

EN 61000-3-3

EN 55032

BSMI

EMS

EN 61000-6-2

- IEC 61000-4-2 (ESD)
- IEC 61000-4-3 (Radiated RFI)
- IEC 61000-4-4 (Burst)
- IEC 61000-4-5 (Surge)
- PoE Ports: line to earth 6kV Surge
- IEC 61000-4-6 (Induced RFI)
- IEC 61000-4-8 (Magnetic field)

Safety

UL 62368

Traffic

NEMA TS2

Railway

EN 50121-4

Vibration

IEC 60068-2-6

Shock

IEC 60068-2-27

Free Fall

IEC 60068-2-31

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

2,696,769 hours

Power

Input

46-57VDC Redundant (Terminal block)**
** Connected powered devices (PDs) power input requirements:
IEEE 802.3 af (15W): 46 – 57 VDC
IEEE 802.3 at (30W): 52 – 57 VDC
IEEE 802.3 bt (Type 3: 60 Watts): 52 – 57 VDC
IEEE 802.3 bt (Type 4: 90 Watts): 54 – 57 VDC

Power Consumption

Max. 14W (without PoE)

Power Budget (Max.)

For EX78912G-0BT:
• 240 Watts
For EX78924G-0BT & EX78922G-0BT:
• 480 Watts up to operating temp. 70°C
• 400 Watts up to operating temp. 75°C

Protection

Reverse Polarity Protection

Warranty

Length

Limited Lifetime

Details

www.etherwan.com/support/warranty-policy

What's Included

Device

Ethernet switch

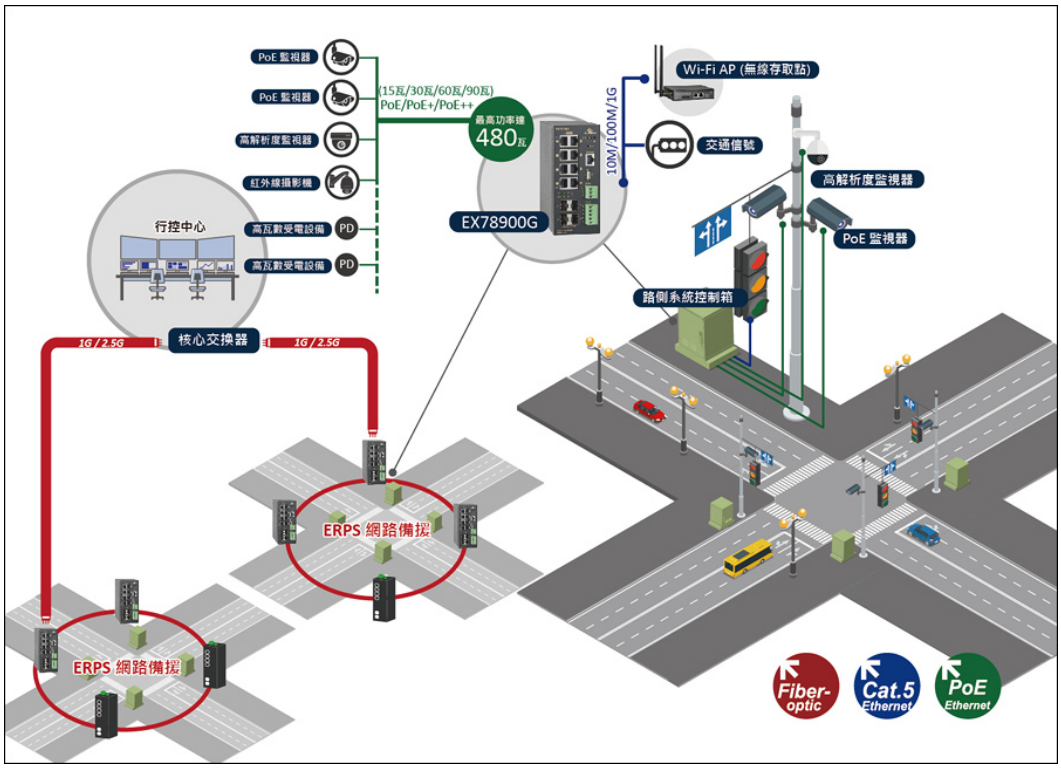
Cables

1 Console cable

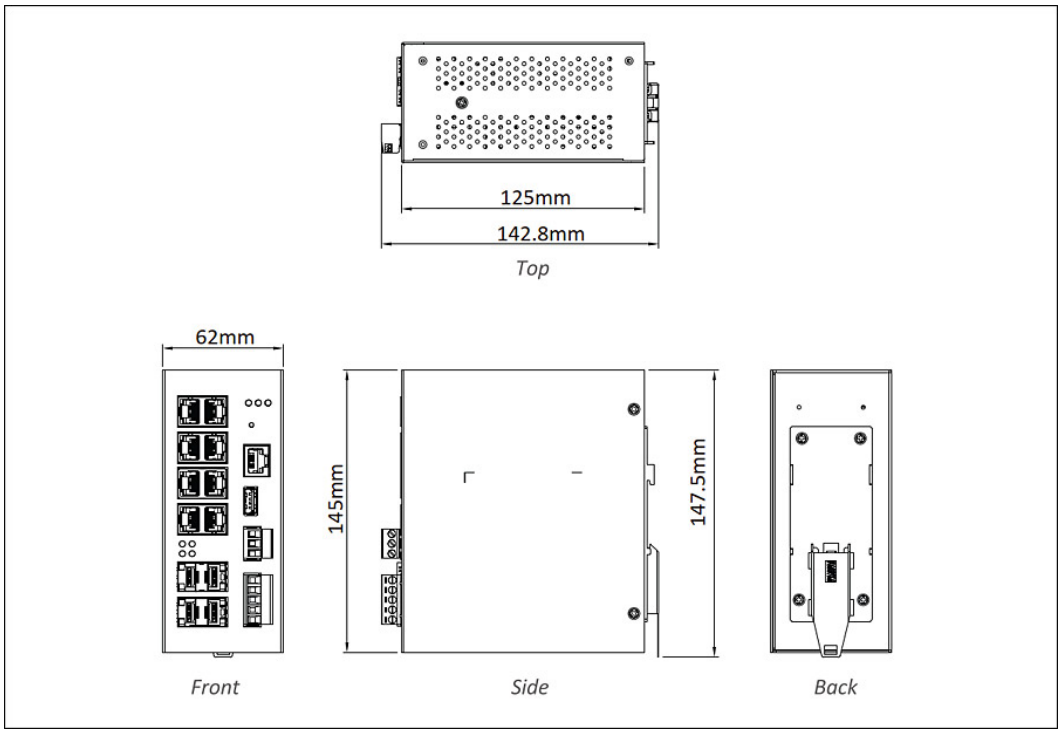
Installation

DIN-Rail mounting kit

產品應用圖


PoE 監視器
PoE 監視器
高解析度監視器
紅外線攝影機
(15瓦/30瓦/60瓦/90瓦)
PoE/PoE+/PoE++
最高功率達
480瓦
EX78900G
10M/100M/1G
Wi-Fi AP (無線存取點)
交通信號
高解析度監視器
PoE 監視器
路側系統控制箱
行控中心
高瓦數受電設備
高瓦數受電設備
PD
PD
核心交換器
1G / 2.5G
1G / 2.5G
ERPS 網路備援
ERPS 網路備援
Fiber-optic
Cat.5 Ethernet
PoE Ethernet

產品尺寸圖



訂購型號

Model

			
	EX78924G-XYZ	**EX78922G-XYZ**	**EX78912G-XYZ**
10/100/1000BASE TX	8	8	8
100/1000/2500BASE SFP	4	2	2
supports PoE++	8	8	4
PoE per port		90W	
Conformal Coating	N/A	N/A	N/A
	Quote	Quote	Quote

Model (Conformal Coating)

			
	EX78924G-XYZCC	**EX78922G-XYZCC**	**EX78912G-XYZCC**
10/100/1000BASE TX	8	8	8
100/1000/2500BASE SFP	4	2	2
supports PoE++	8	8	4
PoE per port		90W	
Conformal Coating	✓	✓	✓
	Quote	Quote	Quote

Power Input Range (X)

0	46 to 57VDC

PoE PSE Standard Support (Y)

B	IEEE 802.3bt / IEEE 802.3at / IEEE 802.3af

Power Input Interface (Z)

T	Terminal Block

Conformal Coating (CC)

CC	Conformal Coating

Accessories

SFP Modules

Model Number	Transmission Speed	Mode	Distance	Operating Temperature	Wavelength	Connector Type	DDM
SFP2IS20M	2500Mbps	Single-mode	20km	-40 to 85°C	1310nm	Duplex LC	✔
SFP2IM2AM	2500Mbps	Multi-mode	160m	-40 to 85°C	850nm	Duplex LC	✔
SFP2XT1AM	2500Mbps	-	100m	-40 to 85°C	-	RJ-45	-
SFPGIM5AM	1000Mbps	Multi-mode	275/550m	-40 to 85°C	850nm	Duplex LC	✔
SFPGIM02M	1000Mbps	Multi-mode	2km	-40 to 85°C	1310nm	Duplex LC	✔
SFPGIS10M	1000Mbps	Single-mode	10km	-40 to 85°C	1310nm	Duplex LC	✔
SFPGIS20M	1000Mbps	Single-mode	20km	-40 to 85°C	1310nm	Duplex LC	✔
SFPGXT1AM	1000Mbps	-	100m	-40 to 85°C	-	RJ-45	-
EX-0155NSP-MB2L-A	100Mbps	Multi-mode	2km	-40 to 85°C	1310nm	Duplex LC	-
SFPMIS20M (DDM)	100Mbps	Single-mode	20km	-40 to 85°C	1310nm	Duplex LC	✔

For more SFP, please visit website: www.etherwan.com/tw/products/sfp-fiber-transceiver

Industrial DIN-Rail Power Supplies

Model Number	Input Voltage	Output Voltage	Description	Operating Temperature
NDR-480-48	90 - 264VAC	48VDC	480W/10A DIN-Rail 48VDC Industrial Power Supply	-20 to 70°C
NDR-240-48	90 - 264VAC	48VDC	240W/5A DIN-Rail 48VDC Industrial Power Supply	-20 to 70°C
NDR-120-48	90 - 264VAC	48VDC	120W/2.5A DIN-Rail 48VDC Industrial Power Supply	-20 to 70°C

For more Power Supplies, please visit website: www.etherwan.com/tw/products/din-rail-power-supply.

Mounting Kits

Part Name	Description	Image
KP-AA96-480	Panel Mounting Adapter	
KP-BK78900G	Panel Mounting Bracket	
KR-BK71000	Rack Mounting Bracket	

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