EX75900 Series

Hardened Managed 28-Port Gigabit PoE Ethernet Switch



Overview

The EtherWAN EX75900 Series is a hardened, rackmount managed PoE Ethernet switch platform designed for mission-critical industrial and infrastructure networks. Featuring 24 10/100/1000BASE-T(X) PoE ports,**the series offers a choice of up to 60W or 90W per port,** allowing customers to select the appropriate power level for different connected devices.

For high-power PoE applications, the **EX75964-0VTH provides up to 90W per port with IEEE 802.3bt Type 4 support**, making it ideal for devices such as PTZ cameras, high-performance wireless access points, digital signage, and other power-intensive edge equipment. The series delivers a total PoE power budget of up to 720W and provides either 4 1G/2.5G/10G SFP+ or 4 Gigabit SFP uplink ports, depending on the selected model.

Engineered for harsh environments and continuous operation, the EX75900 Series is ideal for urban infrastructure, intelligent transportation systems, public safety and security deployments, and other applications requiring reliable, high-power PoE connectivity.

IEC 62443-4-2 Certified – Strengthening cyber resilience for critical industrial and infrastructure applications.

Highlights

High Bandwidth and Flexible Uplinks

- 24 × 10/100/1000BASE-T(X) ports
- 4 × 1G SFP or tri-speed 1G/2.5G/10G SFP+ uplinks
- Full wire-speed switching with full-duplex operation

High-Power PoE

- IEEE 802.3af/at/bt support
- Up to 90W per port with a 720W PoE budget
- PoE Watchdog with monitoring and scheduling

Hardened for Harsh Environments

- Wide operating temperature range -40 to 75°C (-40 to 167°F)
- Fanless design for reliable operation
- High resistance to impact, thermal shock, and electrical noise

Management and Security

- Secure management with Multi-user Privilege
- IEEE 802.1X with RADIUS and TACACS+ authentication
- Centralized monitoring with eVue™ and eLite™

Lite Layer 3 Functionality

- Static routing, RIP v1/v2, and OSPF
- VRRP for gateway redundancy
- Reduces amount of broadcast traffic

Support

- Complimentary Technical Support
- Free Firmware Upgrades and notifications
- Limited Lifetime Warranty

Features

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
Modbus TCP
SFlow

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)
IPSG (IP Source guard)
DAI (Dynamic ARP Inspection)
DHCP Snooping

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

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

EX75960: 56Gbps

EX75964: 128Gbps

Forwarding Rate

95.23Mpps

Max VLANs

256 (4096 VID)

Jumbo Frame Size

9KB

MAC Table Size

16K

Packet Buffer Memory

12M bits

Specifications

Interface

Ethernet

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

4 x 1G/2.5G/10G SFP+ or 4 x 1G 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

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

LED Indicators

Per Unit: Power 1, Power 2, Alarm

Per Port: Link/Activity (Green)

Per PoE Port: PoE Status (Orange)

Physical

Casing Material

Metal

IP Rating

IP30

Dimensions

442 x 270 x 44.2mm (W x D x H)
17.4" x 10.6" x 1.74"

Weight

5.1Kg (11.2lbs)

Installation Type

Rack 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

1,444,959 hours

Technology

Standards

IEEE 802.3 10BASE-T

IEEE 802.3u 100BASE-TX/100BASE-FX

IEEE 802.3ab 1000BASE-T

IEEE 802.3ae 10Gigabit Ethernet

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

IEEE 802.1ab LLDP

IEEE 802.3af/at/bt Power over Ethernet

IEEE 1588v2 PTP

Forward/Filtering Rate

14,880pps for 10Mbps

148,810pps for 100Mbps

1,488,100pps for 1000Mbps

14,881,000pps for 10Gbps

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

Regulatory

ISO

Manufactured in ISO-9001 facility

EMI

FCC Part 15B Class A

VCCI Class A

EN 61000-6-4

BSMI

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)

PoE Ports: line to earth 6kV Surge

EN 61000-4-6 (Induced RFI)

EN 61000-4-8 (Magnetic field)

Safety

UL 62368

Cybersecurity

IEC 62443-4-1

IEC 62443-4-2

Vibration

IEC 60068-2-6

Shock

IEC 60068-2-27

Free Fall

FED STD 101C Method 5007.1

Traffic

NEMA TS2

Railway

EN 50121-4

Power

Input

46-57VDC Redundant (Terminal block)**
** 46-57VDC for IEEE 802.3af type 1, ≤15.4W PD devices.
52-57VDC for IEEE 802.3at/bt type 2/3/4, 30W, 60W, 90W (54-57VDC) PD devices.

Power Consumption

26W Max (without PoE)

PoE Modes

802.3af/at Mode A: Pins 1/2(-), 3/6(+)

802.3bt (60W/90W): Mode A & B, Pins 1/2(-), 3/6(+), 4/5(+), 7/8(-)

PoE Power Output

Port: Up to 60W/port
Up to 90W/port (EX75964-0VTH)

Power Budget: 720W

Protection

Reverse Polarity Protection

Warranty

Length

Limited Lifetime

Details

www.etherwan.com/support/warranty-policy

What's Included

Device

Ethernet Switch

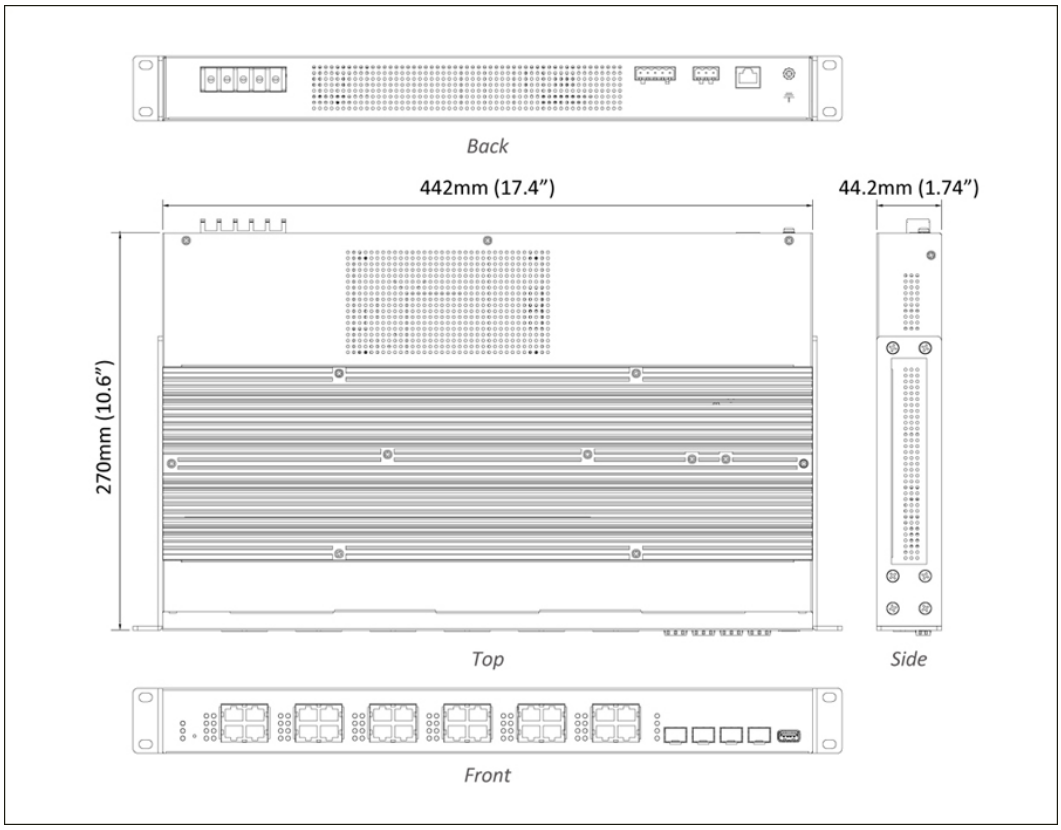
Cables

1 Console Cable

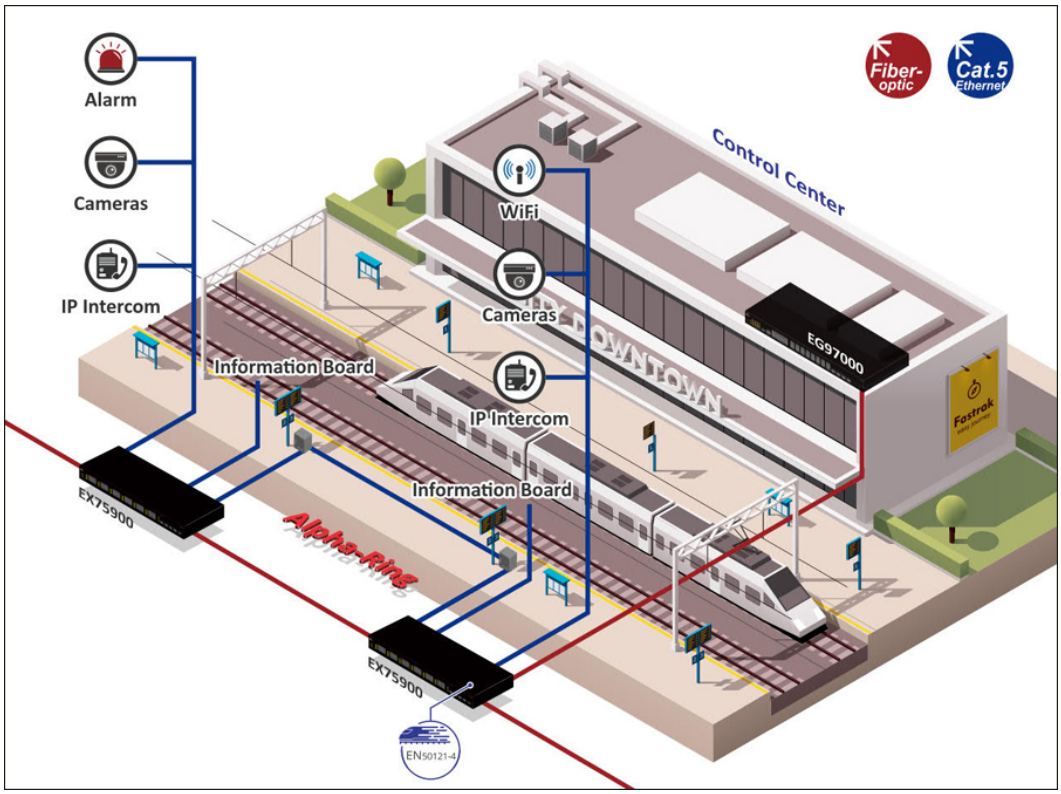
Installation

Mounting brackets, screws

Dimensions

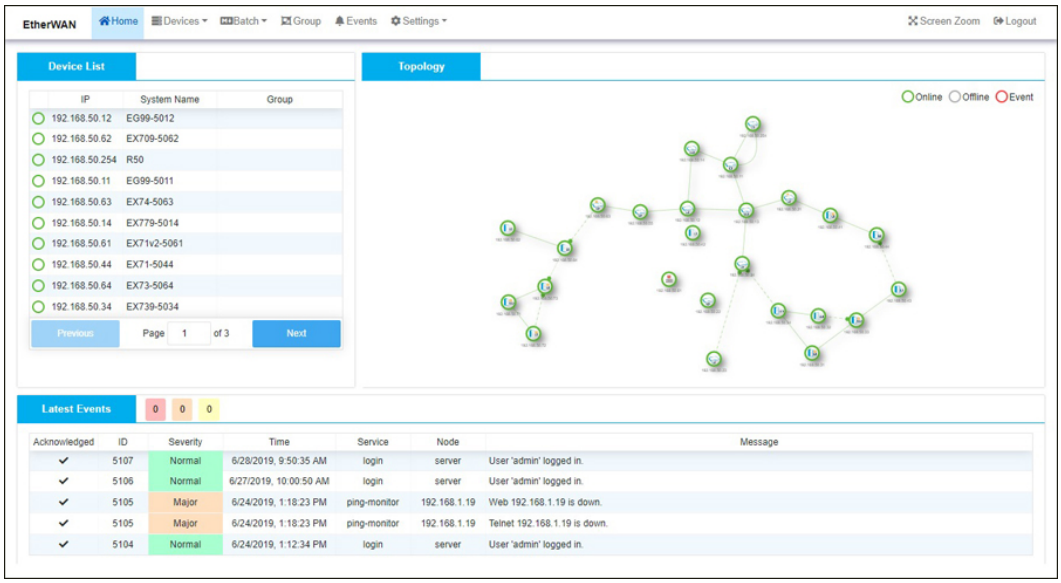


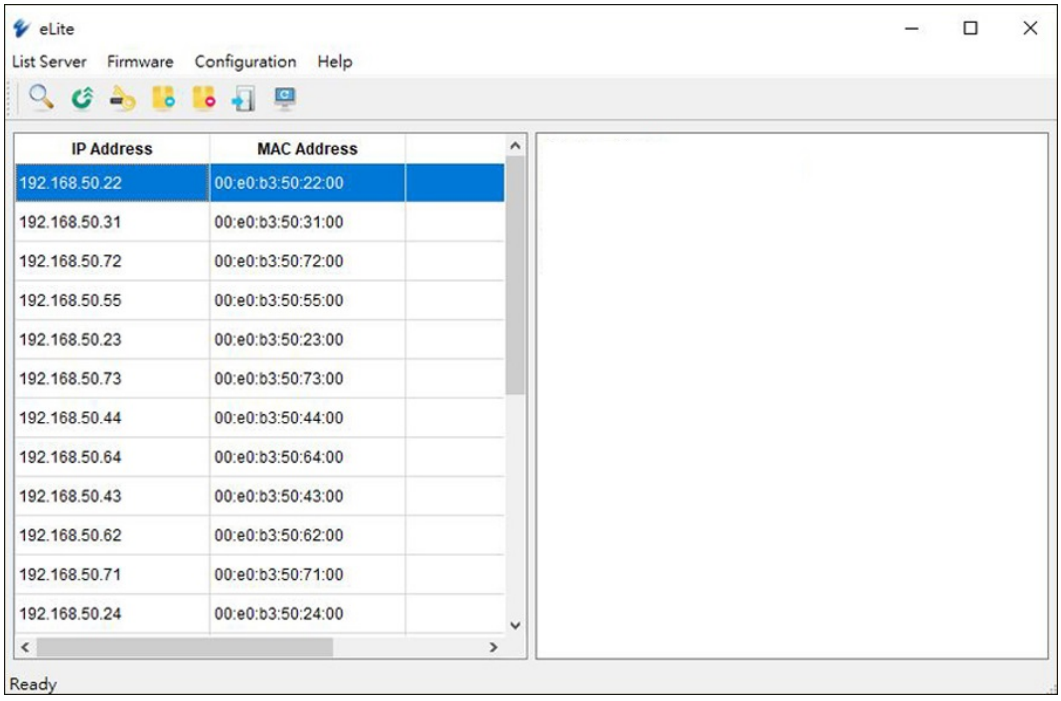
Application



Software

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





Ordering Info

Model

			
	EX75964-0VTH New!	**EX75964-0VTU**	**EX75960-0VTU**
10/100/1000BASE-T(X)	24	24	24
1G/2.5G/10G SFP+	4	4	-
1000BASE SFP	-	-	4
PoE per port	**90W**	60W	60W
	Quote	Quote	Quote

Accessories

Hardened 100BASE SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
Hardened Gigabit SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
DIN-Rail Power Supplies	www.etherwan.com/products/din-rail-power-supply

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