EG97244 Series

24-port Gigabit and 4-port 1G/2.5G/10G SFP+ Hardened Managed Layer 3 Switch



Overview

When should you use an Industrial Layer 3 switch?

EtherWAN's EG97244 is a hardened layer 3 switch/router, which allow for connecting networks. With multiple gigabit SFP connections for fiber along with a 10-gigabit backbone, the EG97244 provides flexibility, speed, and reliability to support networks for urban infrastructure, transportation, security, and other areas where connectivity is crucial.

EtherWAN — "**When Connectivity is Crucial.**"

Highlights

High Bandwidth and Highly Flexible Ports

16 x 100/1000M dual-rate SFP ports for multiple fiber connections

4 x 1G/2.5G/10G dual-rate SFP+ ports for connections into the hub/core

8 x 10/100/1000BASE-T RJ45 ports

Compliant Products

TAA Compliant for government projects

NEMA TS2 rated

UL certified for safety

Hardened-Grade for Non-Ventilated & Harsh Environments

Wide operating temperature range -40 to 75°C (-40 to 167°F)

Fan-less operation

High impact, thermal shock, and electrical noise resistance

Management/Security Features

Port control

Storm detection and control

Configure and monitor with eVue™ and eLite™

Full Layer 3 Functionality

Optimized routing at hardware level

Improved fault isolation

Layer 3 capability connects networks together

Lifetime Warranty

Complimentary Technical Support

Free Firmware Upgrades

Includes ECN and EOL notices

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

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)
TLS 1.3

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

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

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

Software Properties and Performance

Switch IC Capability

320Gbps

Forwarding Rate

238.08Mpps

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

Specifications

Interface

Ethernet

8 x 10/100/1000BASE-T

16 x 100/1000BASE SFP

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

Console

1 x RJ45

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

VTR: ±48VDC Redundant (Terminal block)

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

1,143,890 hours

What's Included

Device

Ethernet Switch

Cables

1 Console Cable

Power

1 AC Power Cord

Installation

Mounting brackets, screws

Documentation

Quick install guide

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

IEEE 802.1ab LLDP

IEEE 802.3 bz for 2.5Gbps support

Forward/Filtering Rate

14,880pps for 10Mbps

148,810pps for 100Mbps

1,488,100pps for 1000Mbps

3,720,000pps for 2.5Gbps

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

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 61000-4-2 (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

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

Aluminum

Dimensions

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

Weight

5.6kg (12.3lbs)

Installation Type

Rack mounting

IP Rating

IP30

Warranty

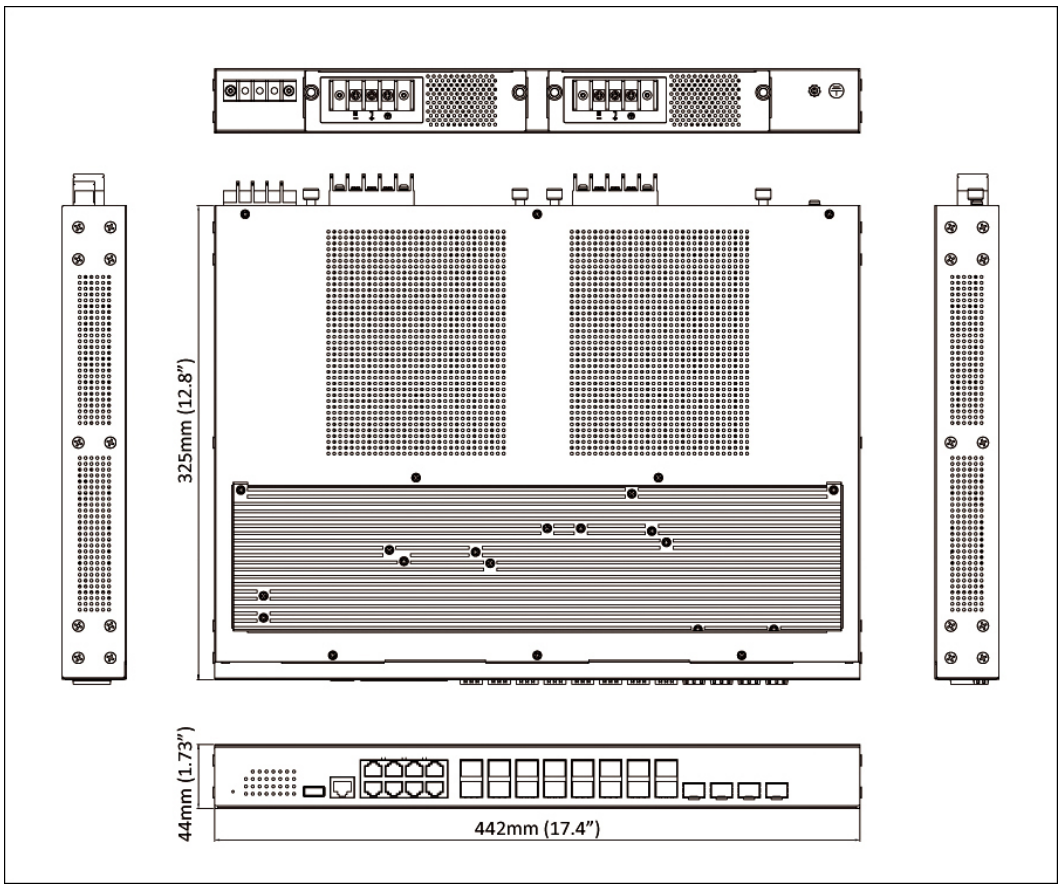
Length

Limited Lifetime

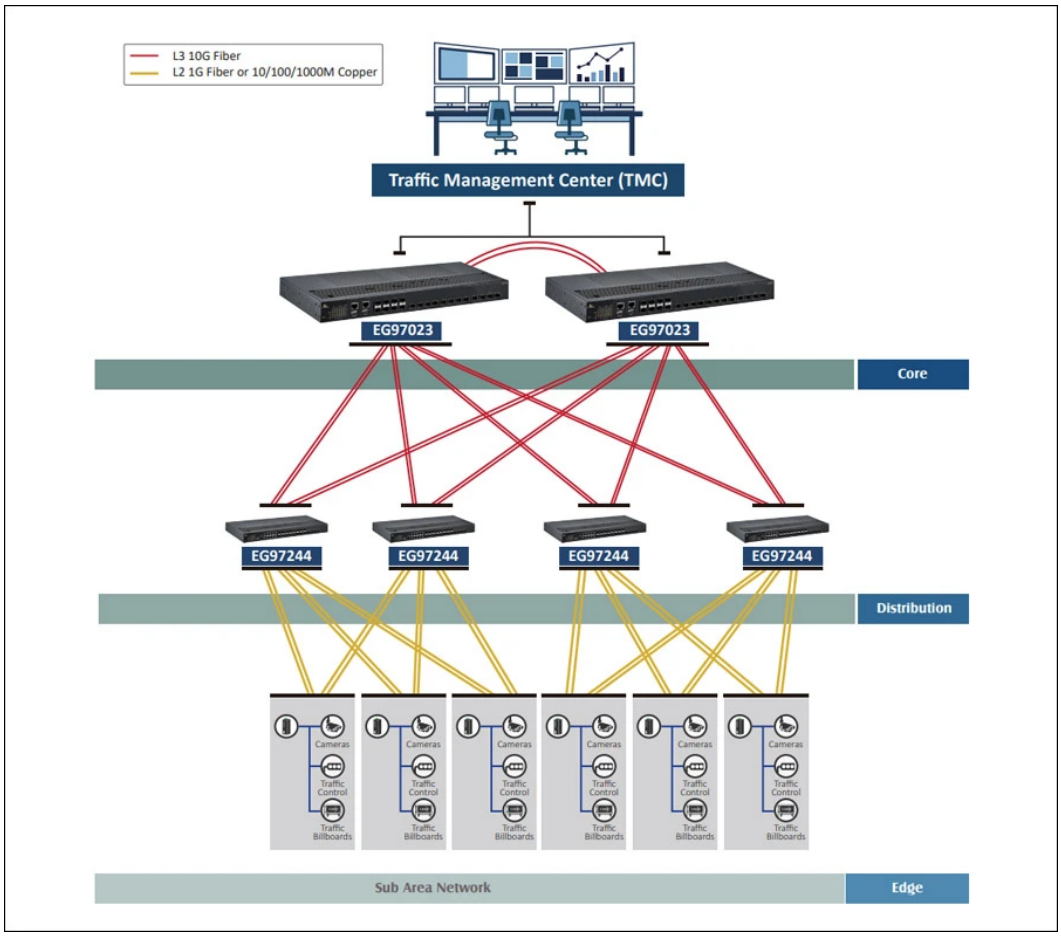
Details

www.etherwan.com/support/warranty-policy

Dimensions

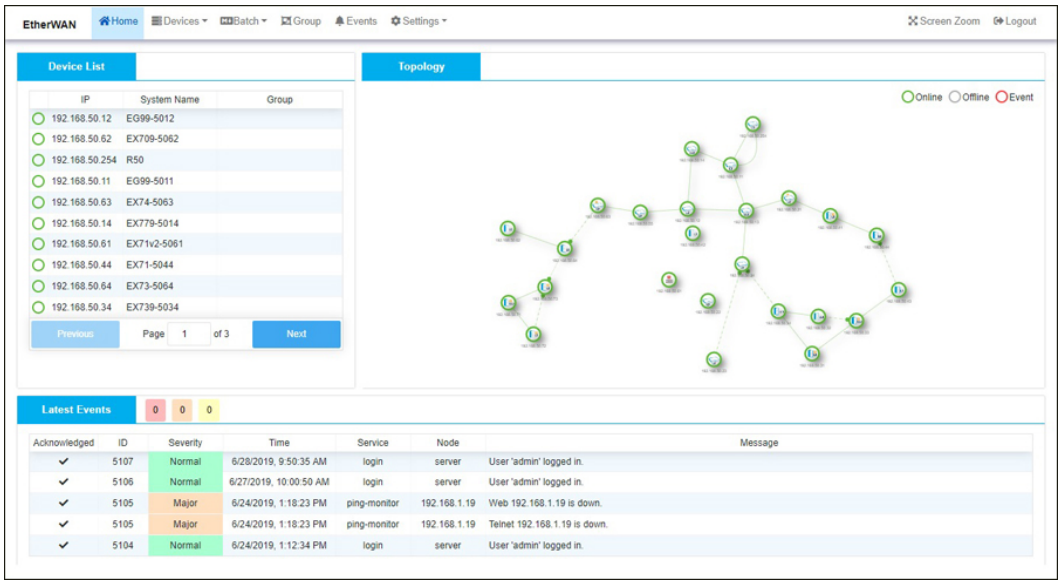


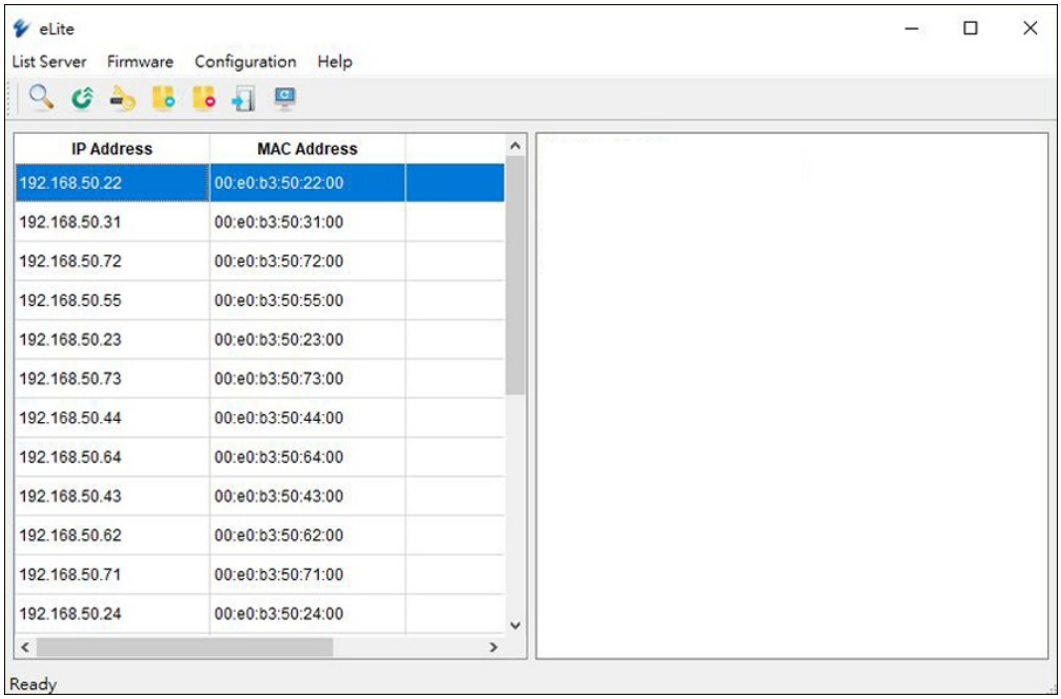
Application



Software

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





Ordering Info

Model

EG97244-4VZ	8-port 10/100/1000BASE-T + 16-port 100/1000BASE SFP + 4-port 1/10G SFP+ Hardened Managed Layer 3 Ethernet Switch

Power Input Interface (Z)

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

Accessories

SFP Modules

Hardened 1G & 10G SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
EX41-2750A240	Power Module for EG97244 series, 100-240VAC PSU (75W), AC Inlet

Power Supplies

EPOW-54-240	Power Supply, Hardened (-40°C - +75°C) External 100-277 VAC Input; NEMA-TS2 rated; 240W, 54VDC, 0-11.1A with Open Wire (US Plug) - No Deration at High Temps
EPOW-54-400	Hardened Power Supply, 100-277 VAC Input; NEMA-TS2 Rated; 54VDC, 400W/7.4A, with Open Wire (US Plug) - No Deration at High Temps
EPOW-54-600	Power Supply, Hardened (-40°C - +75°C) External 100-277 VAC Input; NEMA-TS2 rated; 600W, 54VDC, 0-11.1A with Open Wire (US Plug) - No Deration at High Temps
EPHX-48-240	240W/5A DIN-Rail 48VDC (42-56VDC Adjustable) Industrial Power Supply - No Deration at High Temps
EPHX-48-480	480W/10A DIN-Rail 48VDC (36-55VDC Adjustable) Industrial Power Supply - No Deration at High Temps

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