

EG97244 Series

24-port Gigabit and 4-port 1G/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 + Compliant Products

16 x 100/1000M dual-rate SFP ports for multiple fiber connections
4 x 1/10G dual-rate SFP+ ports for connections into the hub/core
8 x 10/100/1000BASE-T RJ45 ports

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)

+ 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

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/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

+ 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

+ 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

+ Warranty

Length

Limited Lifetime

Details

www.etherwan.com/support/warranty-policy

+ 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

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

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

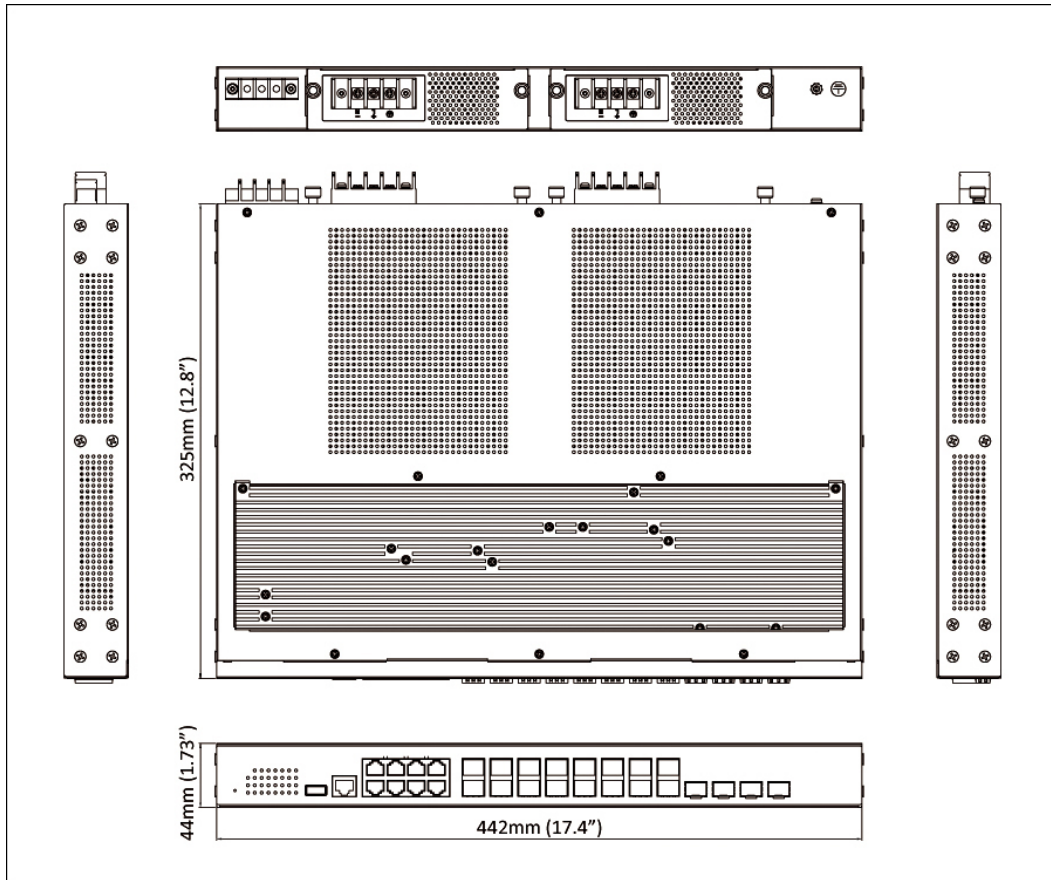
Shock

IEC 60068-2-27

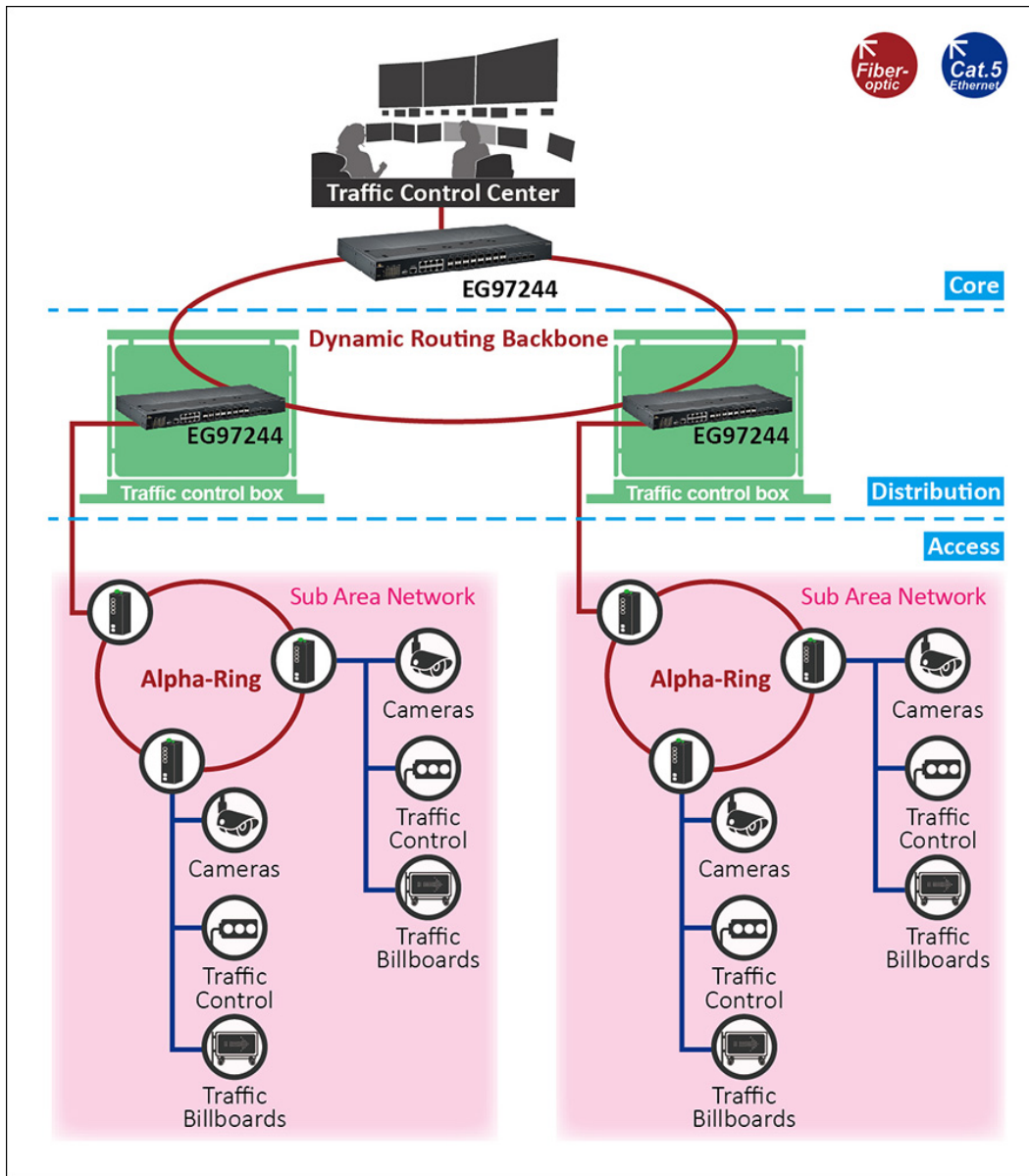
Free Fall

FED STD 101C Method 5007.1

Dimensions

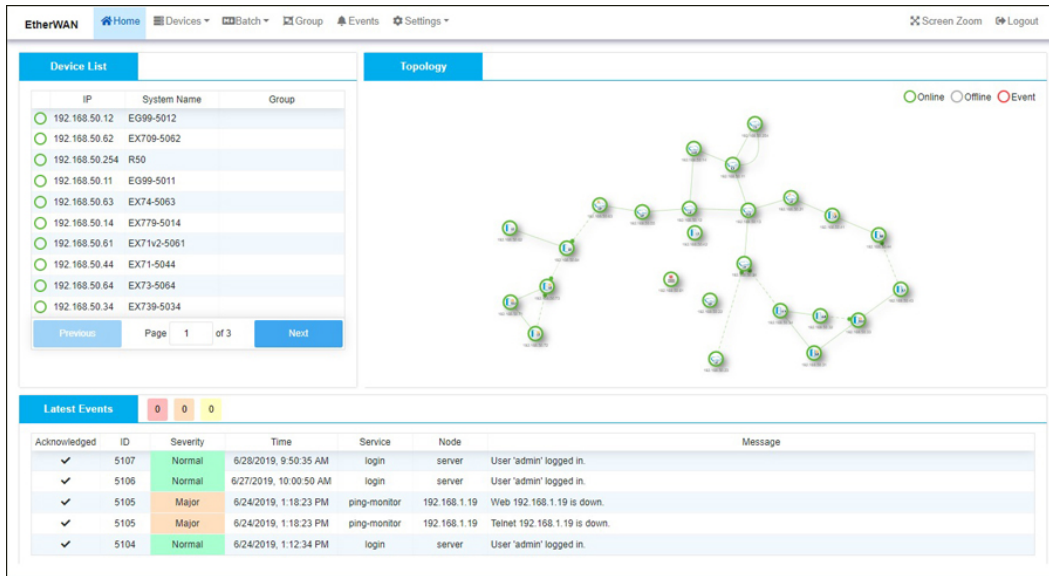


Application



Software

- Network Management** [eVue™ Network Configuration and Monitoring Tool](#)
- Network Discovery** [eLite™ Network Discovery and IP Configuration Tool](#)



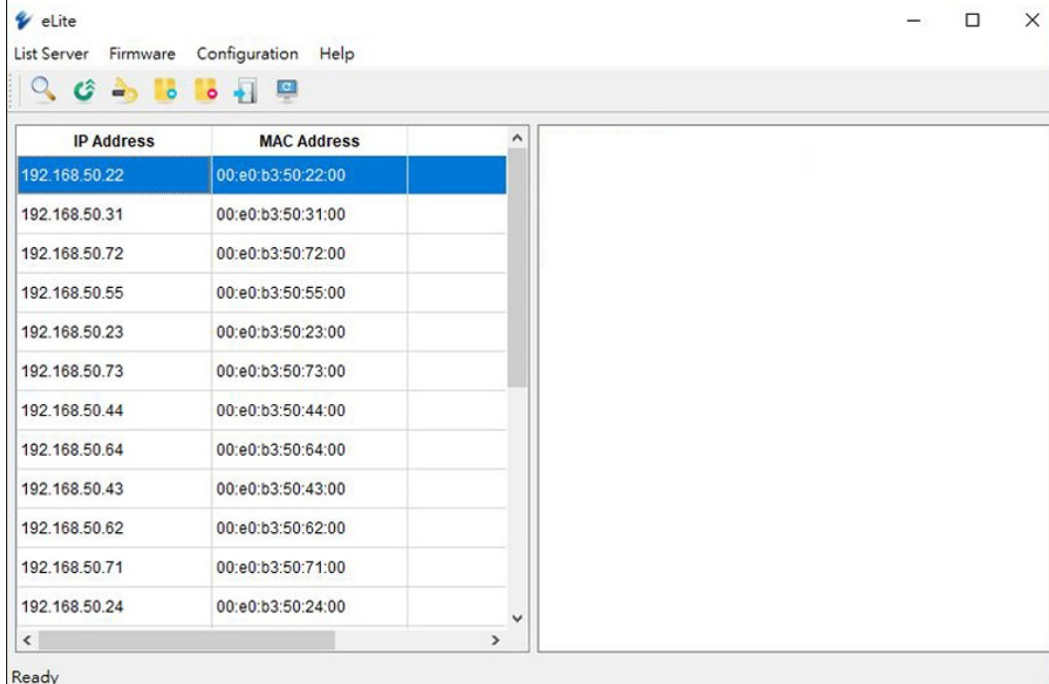
The screenshot shows the EtherWAN web interface. At the top, there is a navigation bar with 'Home', 'Devices', 'Batch', 'Group', 'Events', and 'Settings'. Below this, the interface is split into two main sections: 'Device List' and 'Topology'.

Device List: A table with columns for IP, System Name, and Group. It lists 13 devices, all with green status indicators. The table is paginated to show 'Page 1 of 3'.

Topology: A network diagram showing various nodes connected in a mesh-like structure. A legend indicates that green circles represent 'Online' devices, white circles represent 'Offline' devices, and red circles represent 'Event' devices.

Latest Events: A table showing recent system events. It includes columns for Acknowledged status, ID, Severity, Time, Service, Node, and Message.

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 is a toolbar with several icons. The main area contains a table with two columns: 'IP Address' and 'MAC Address'.

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

The status bar at the bottom of the window displays 'Ready'.

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
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+ Power Input Interface (Z)

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

+ Accessories

Hardened 100BASE SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
Hardened Gigabit SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
Power Supplies	www.etherwan.com/products/power-supplies/power-adapters
EX41-2750A240	Power Module for EG97244 series, 100-240VAC PSU (75W), AC Inlet

