

EG97000 Series

Layer 3 Hardened Managed 24-Port Gigabit and 4-Port 10G SFP+ Switch



Overview

[When should you use an Industrial Layer 3 switch?](#)

EtherWAN's EG97000 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 EG97000 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 1/10G dual-rate SFP+ ports for connections into the hub/core
8 x 10/100/1000BASE-T RJ45 ports

+ 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

+ Full Layer 3 Functionality

Optimized routing at hardware level
Improved fault isolation
Layer 3 capability connects networks together

+ Compliant Products

TAA Compliant for government projects
NEMA TS2 rated
UL certified for safety

+ Management/Security Features

Port control
Storm detection and control
Configure and monitor with eVue™ and eLite™

+ 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)

+ 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

VLANS
IEEE 802.1Q Tag VLANs
GVRP
GMRP

Link Aggregation
Static Trunk
IEEE 802.3ad LACP

IGMP Snooping v1/v2/v3

+ 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

+ Software Properties and Performance

Switching Fabric
128Gbps

Forwarding Rate
95.23Mpps

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

+ 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



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

+ 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

+ 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

+ 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

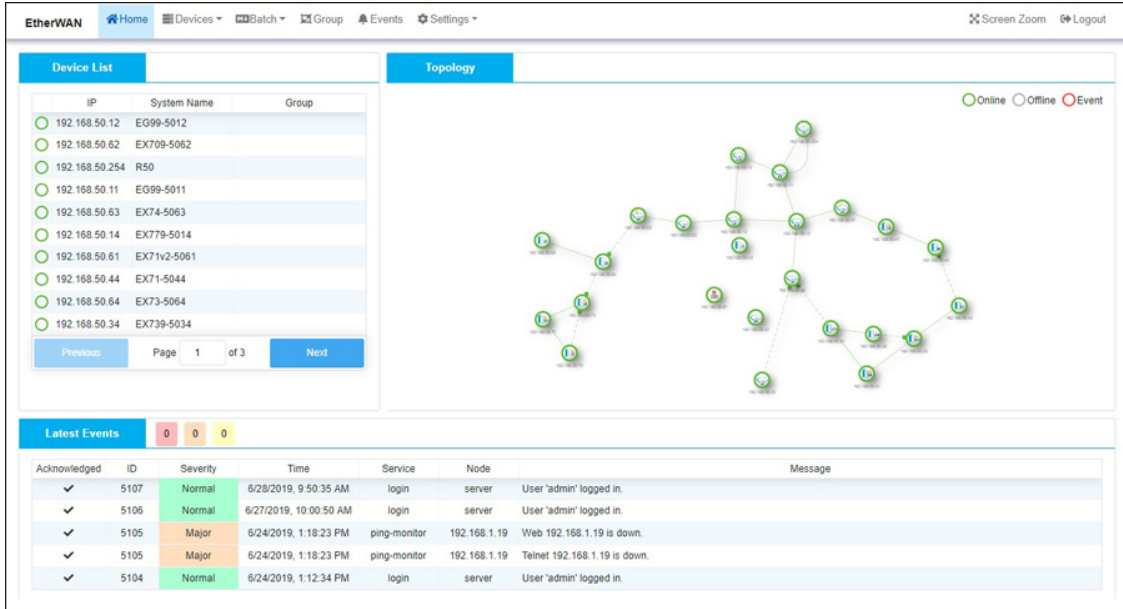
Mounting brackets, screws

Documentation

Quick install guide

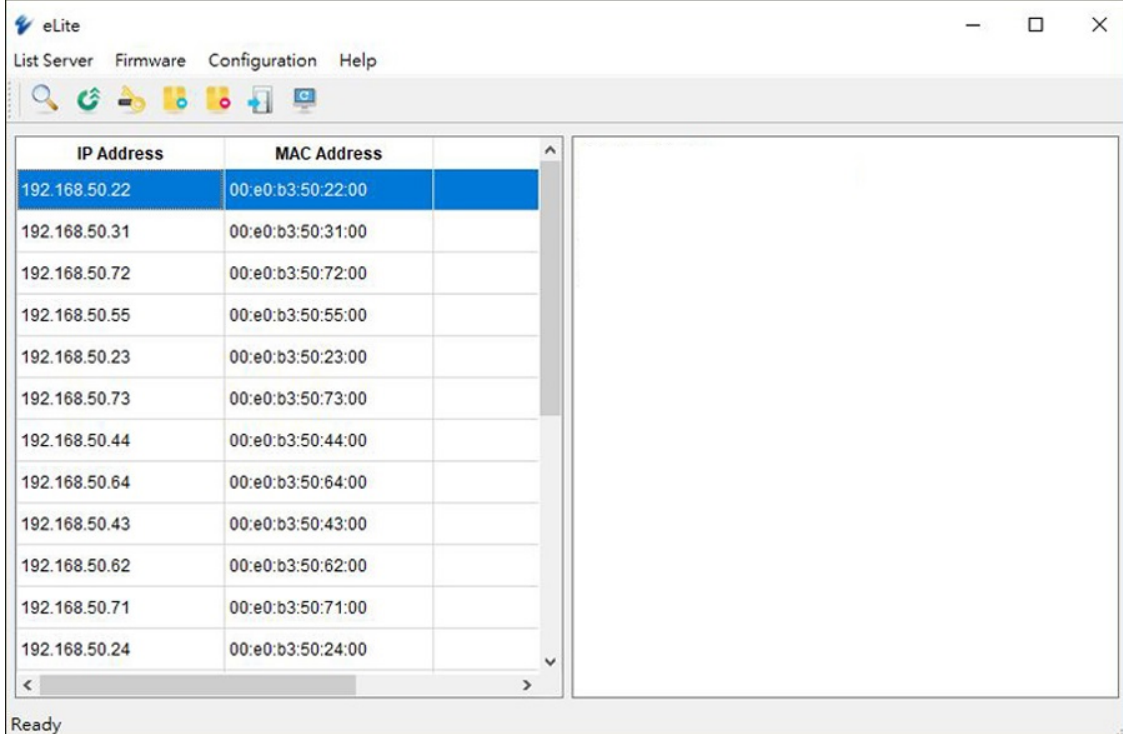
Software

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 are navigation tabs: Home, Devices, Batch, Group, Events, and Settings. On the right, there are links for Screen Zoom and Logout. The main content area is divided into three sections:

- Device List:** A table with columns for IP, System Name, and Group. It lists 12 devices, all with green status indicators.
- Topology:** A network diagram showing interconnected nodes, each with a status indicator (green for online, red for offline).
- Latest Events:** A table with columns for Acknowledged, ID, Severity, Time, Service, Node, and Message. It shows five events, including login attempts and ping-monitor alerts.



The screenshot shows the eLite application window. The title bar reads "eLite" and the menu bar includes "List Server", "Firmware", "Configuration", and "Help". Below the menu bar is a toolbar with various 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

At the bottom left of the window, the status "Ready" is displayed.

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

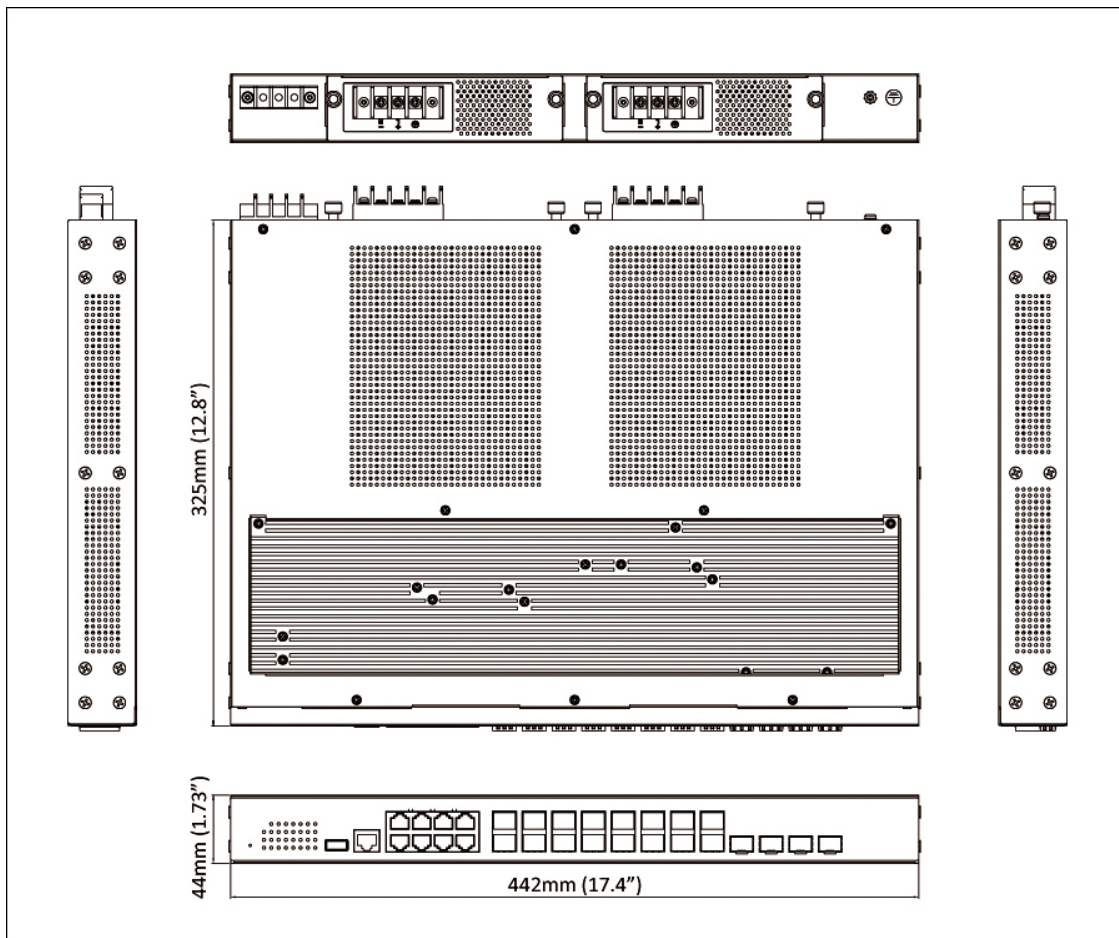
Hardened 100BASE SFP Modules www.etherwan.com/products/sfp-fiber-transceiver

Hardened Gigabit SFP Modules www.etherwan.com/products/sfp-fiber-transceiver

Power Supplies www.etherwan.com/products/power-supplies/power-adapters
(for TR Input Interface)

EX41-2750A240 Spare Power Module for EG97000 series, 100-240VAC PSU (75W), AC Inlet

Dimensions



Application

