EG97023 Series

12-port 1/2.5/10 Gigabit and 8-port Gigabit Hardened Managed Layer 3 Switch



Overview

When should you use an Industrial Layer 3 switch?

EtherWAN's EG97023 is a hardened layer 3 core/distribution switch, designed to support high bandwidth routing in harsh environments. Equipped with 12 ports capable of up to 10-gigabit speed each and 8 additional gigabit ports, along with a full capacity switching bandwidth, the EG97023 provides the optimal solution for connecting multiple networks. In addition to layer 3 benefits such as improved fault isolation, simplified security management, network traffic segregation, lower network latency, and simplified troubleshooting, the EG97023 is hardened and fan-less, designed to last and operate through the harshest environments. Backed by a limited lifetime warranty, the EG97023 provides flexibility, ultra-fast speeds, and reliability to support networks in urban infrastructure, transportation, security and other areas where connectivity is crucial.

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

Highlights

High Density, High Bandwidth Fiber Solution

Multiple ports with ultra-fast 10-gigabit speeds running at full capacity

12 dual-rate 10-gigabit SFP+ ports for fiber connections into the core/hub

8 dual-rate gigabit SFP ports for fiber connections to the nodes/edge

Compliant Products

NEMA TS2 rated

UL certified for safety

TAA/NDAA compliant for government projects

Hardened-Grade for Non-Ventilated & Harsh Environments

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

Fan-less operation

Thermal shock and electrical noise resistance

Management/Security Features

Port Security, Authentication, and Access Control

Storm Detection, IP ACL, and System Logging

Configure and monitor with eVue™

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

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 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

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 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

256Gbps

Forwarding Rate

190.4Mpps

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 100/1000 BASE-SFP

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

Console

1 x RJ45, 1 x USB

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

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

585224 Hours at 25°C

What's Included

Device

Ethernet Switch

Cables

1 Console Cable

Power

2 AC Power Cord

Installation

Mounting Brackets, Screws

Documentation

Quick Install Guide

Technology

Standards

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 802.3ae 10Gbit/s Ethernet over fiber for LAN
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 202.3bz for 2.5Gbps support

Forward/Filtering Rate

148,810pps for 100Mbps
1,488,100pps for 1000Mbps
14,881,000pps for 10Gbps
3,720,000pps for 2.5G bps

Processing Type

Store-and-forward
Auto-negotiation
Half-duplex back-pressure and fullduplex 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 61000-6-2
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 62368-1

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

Metal

Dimensions

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

Weight

6.2kg (13.7lbs)

Installation Type

Rack mounting

IP Rating

IP30

Warranty

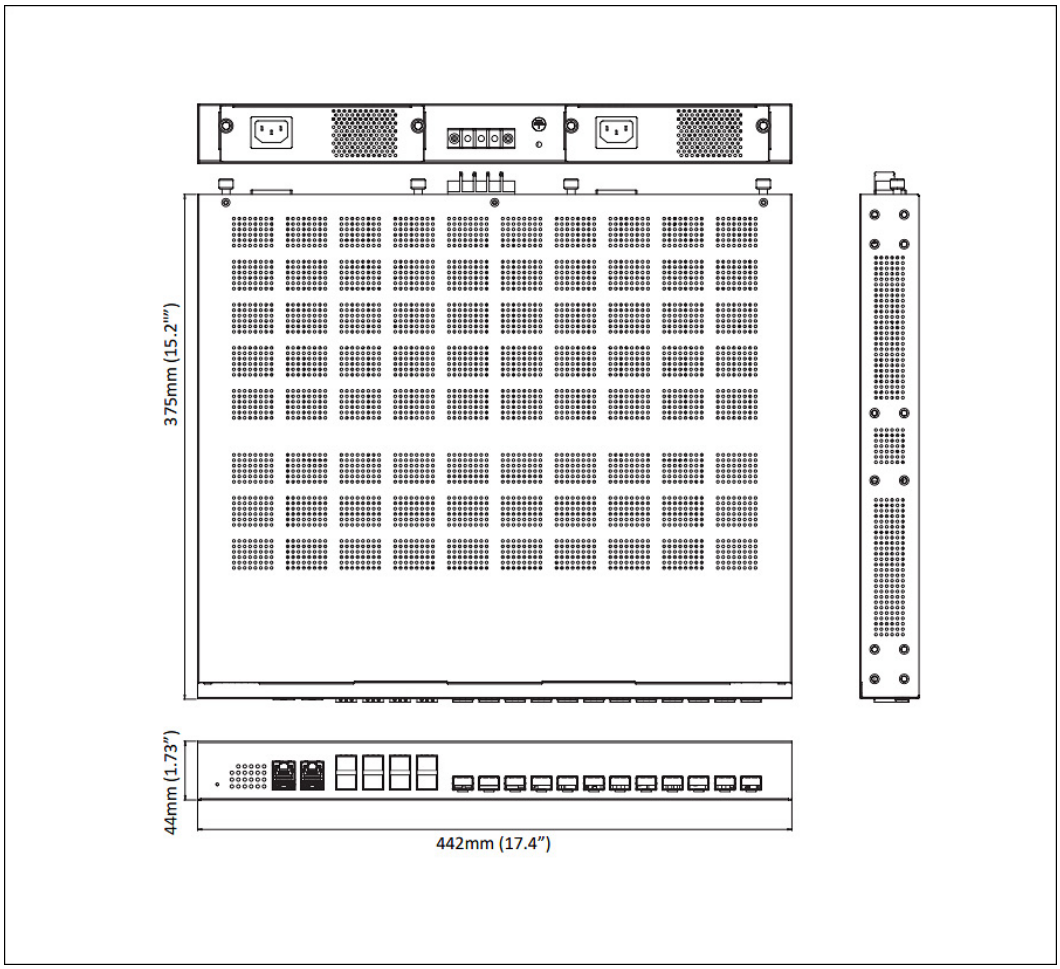
Length

Limited Lifetime

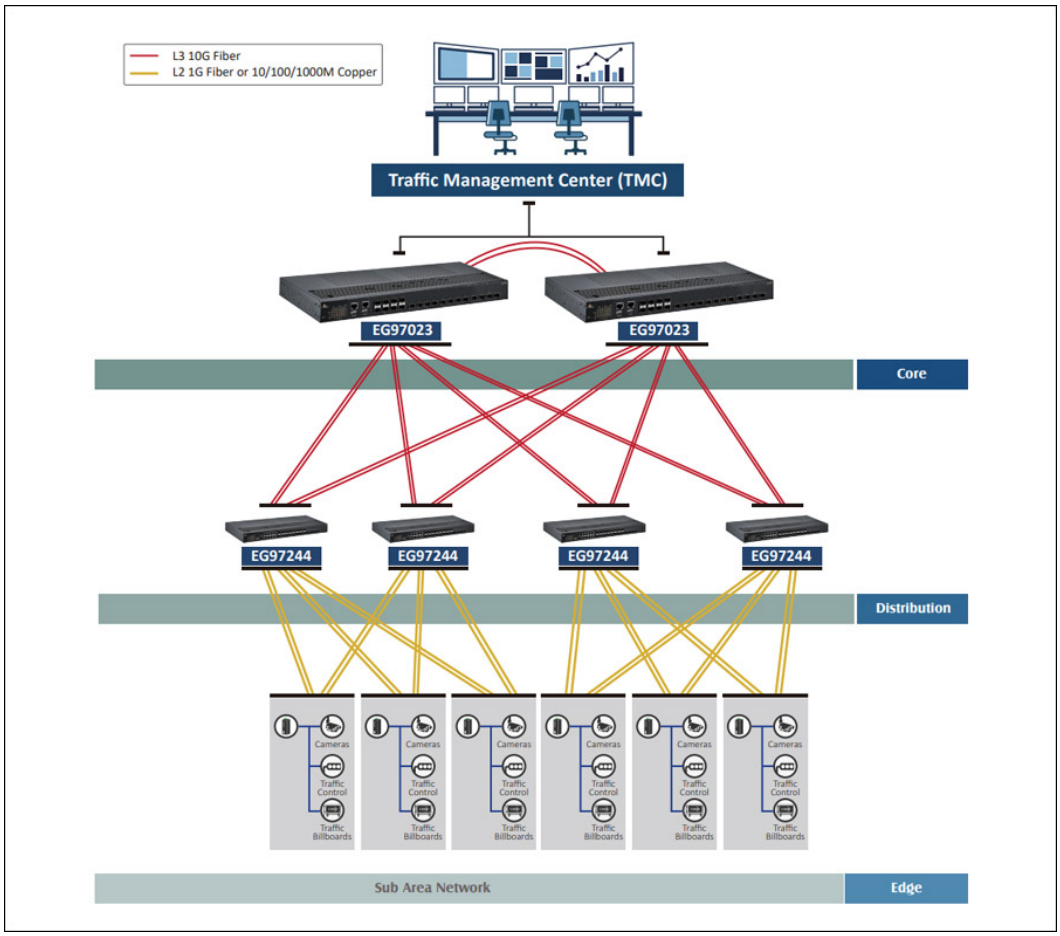
Details

www.etherwan.com/support/warranty-policy

Dimensions

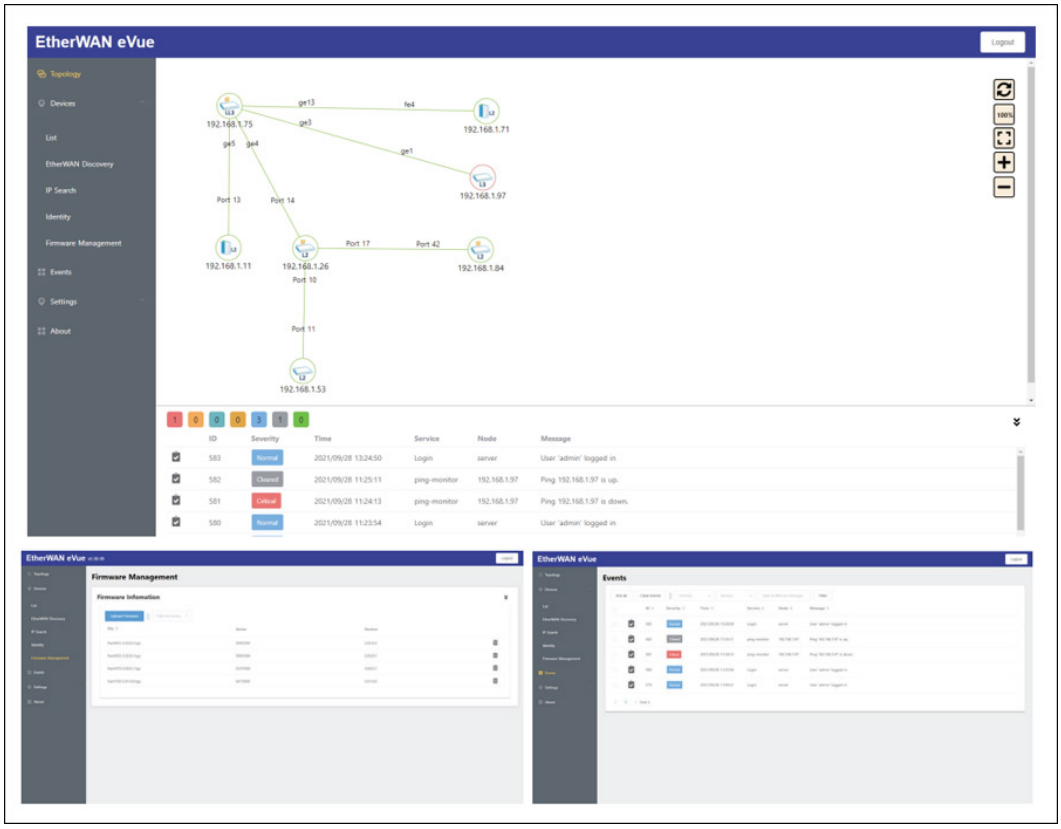


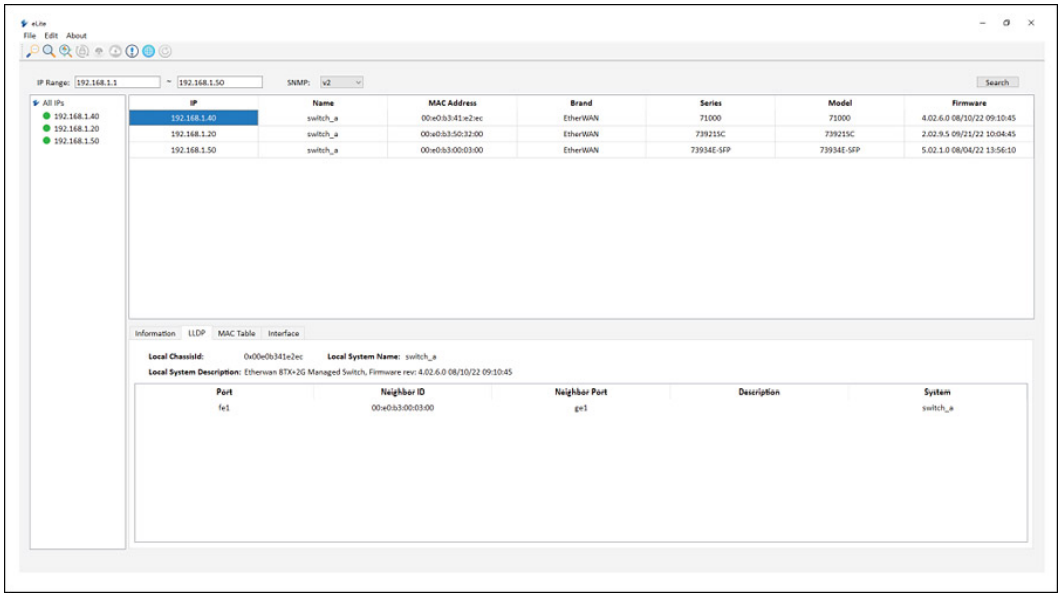
Application



Software

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





Ordering Info

Model

EG97023-2VZ	8-port 100/1000BASE SFP + 12-port 1/10G SFP+ Hardened Managed Layer 3 Ethernet Switch

Power Input Interface (Z)

WR	100-240VAC Redundant (Terminal Block)
CR	100-240VAC Redundant (AC Inlet)

Accessories

Hardened SFP Modules	www.etherwan.com/products/sfp-fiber-transceiver
Power Modules	Spare Power Module for EG97023 series, 100-240VAC PSU (85W), AC Inlet

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