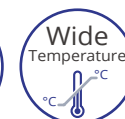


EG97023 Series

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



Product 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

Full Layer 3 Functionality

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

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™

Lifetime Warranty

- Complimentary Technical Support
- Free Firmware Upgrades

Overview

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.

Ordering Information

Model

EG97023-2VZ	8-port 100/1000BASE SFP + 12-port 1/10G SFP+ Hardened Managed Layer 3 Ethernet Switch
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Power Input Interface (Z)

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

Software 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)	

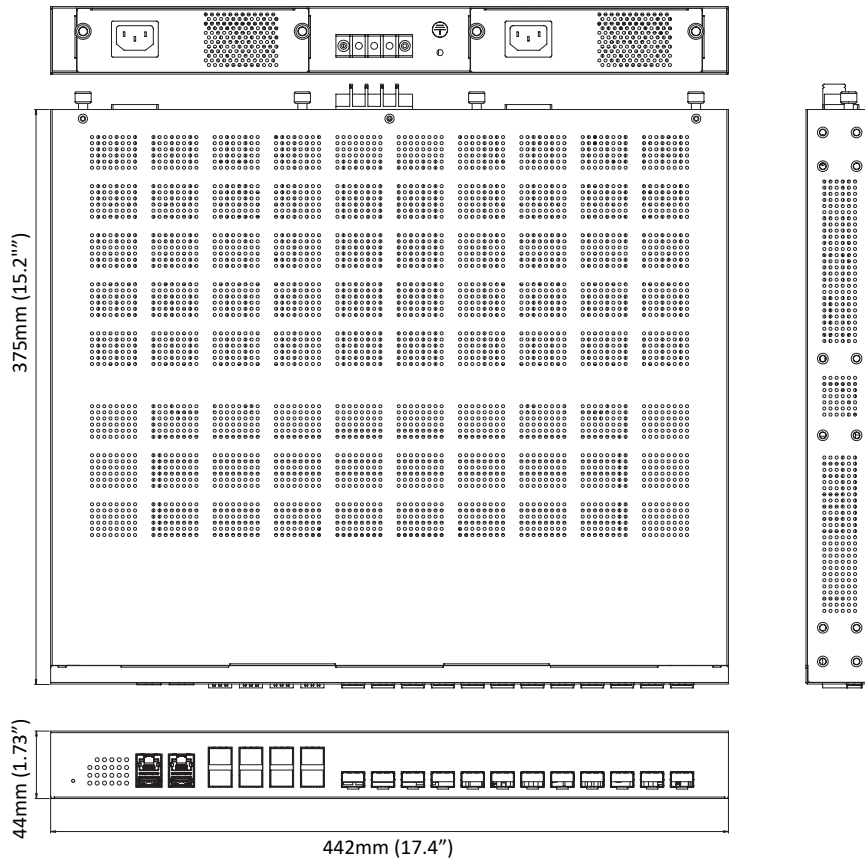
Layer 2 Features	+
Auto-negotiation for port speed and duplex	Flow Control IEEE 802.3x full duplex mode Back-pressure half duplex mode
Redundant Protocols	IEEE 802.1D STP IEEE 802.1w RSTP IEEE 802.1s MSTP
VLANs	IEEE 802.1Q Tag VLANs GVRP GMRP
Link Aggregation	Static Trunk IEEE 802.3ad LACP
IGMP Snooping v1/v2/v3	
Layer 3 Features IPv4	+
Unicast Routing	Static Routing (1K) RIP v1/v2 OSPF v2
Multicast Routing	PIM-DM PIM-SM
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

Hardware Specifications

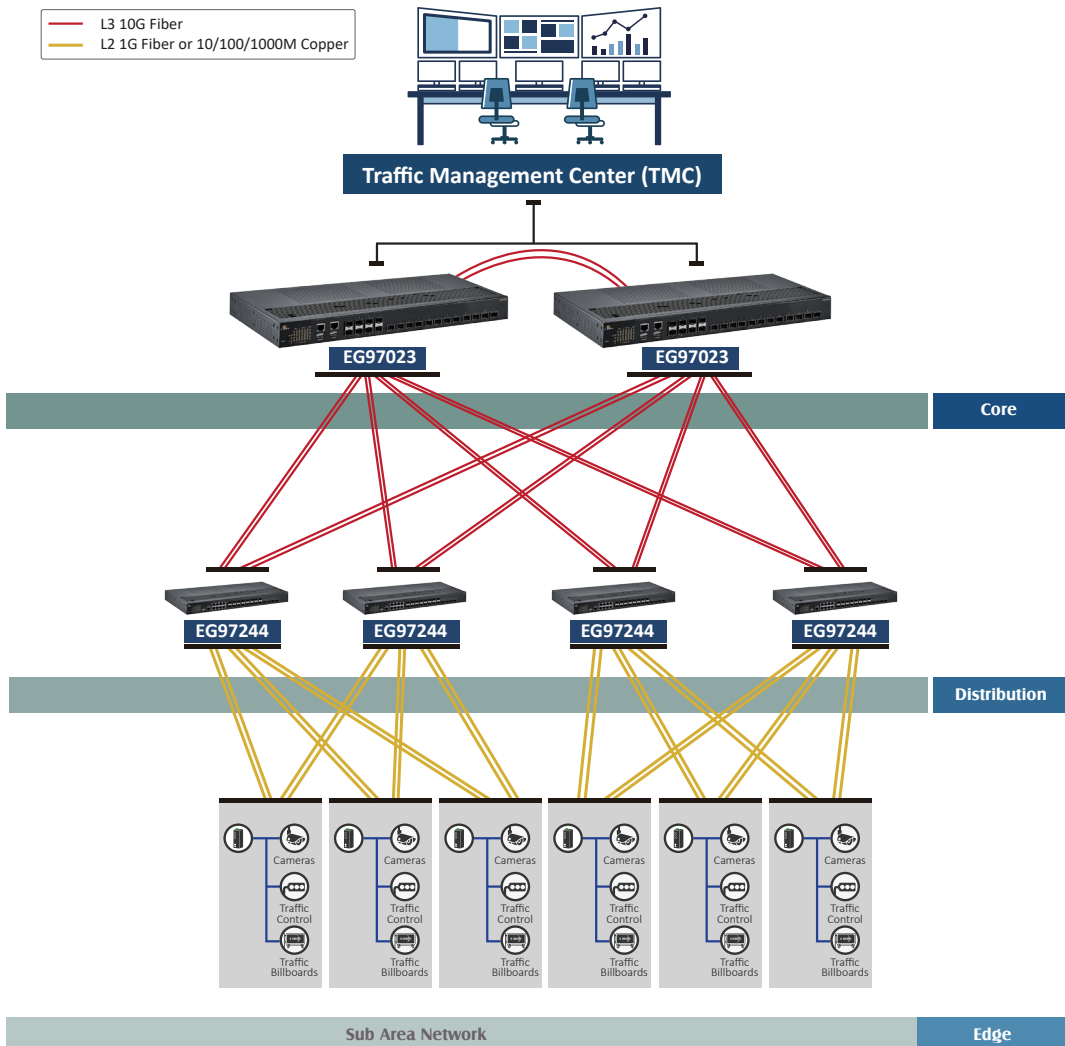
Interface		+
Ethernet	8 x 100/1000 BASE-SFP 12 x 1G/10G SFP+	
Console	1 x RJ45, 1 x USB	
Config Backup	1 x USB (Type A Connector)	
Alarm Contact	Relay output, current capacity 0.6A/30VDC	
LED Indicators	Per Unit: Power 1, Power 2, Alarm Per Port: Link/Activity	
Technology		+
Standards	IEEE 802.3u 100BASE-TX/100BASE-FX 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 802.3an 10GBASE-T Ethernet over copper twisted pair cable 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	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	VWR: 100-240VAC Redundant (Terminal block) VCR: 100-240VAC Redundant (AC Inlet)	
Power Consumption	75W Max	
Physical		+
Casing Material	Metal	
Dimensions	442 x 375 x 44mm (W x D x H) 17.4" x 15.2" x 1.73"	
Weight	6.2kg (13.7lbs)	
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	585224 Hours at 25°C	
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 62368-1	
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	
Warranty		+
Length	Limited Lifetime	
Details	www.etherwan.com/support/ warranty-policy	
What's Included		+
Device	Ethernet Switch	
Cables	1 Console Cable	
Power	2 AC power cords	
Installation	Mounting brackets, screws	
Documentation	Quick Install Guide	

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 eVue interface. On the left is a navigation menu with options: Topology, Devices, List, EtherWAN Discovery, IP Search, Identity, Firmware Management, Events, Settings, and About. The main area displays a network topology diagram with several nodes (switches and servers) connected by lines representing network links. The nodes are labeled with IP addresses and interface names (e.g., ge13, fe4, ge2, ge1, ge5, ge4, Port 13, Port 14, Port 17, Port 42, Port 10, Port 11). Below the diagram is a status bar with colored indicators (1, 0, 0, 0, 3, 1, 0) and a table of events.

ID	Severity	Time	Service	Node	Message
583	Normal	2021/09/28 13:24:50	Login	server	User 'admin' logged in
582	Cleared	2021/09/28 11:25:11	ping-monitor	192.168.1.97	Ping 192.168.1.97 is up.
581	Critical	2021/09/28 11:24:13	ping-monitor	192.168.1.97	Ping 192.168.1.97 is down.
580	Normal	2021/09/28 11:23:54	Login	server	User 'admin' logged in

The screenshot shows the EtherWAN eVue Firmware Management interface. It features a 'Firmware Information' section with a table listing various firmware files. The table has columns for File, Series, and Version.

File	Series	Version
hsw03-2022-01.jpg	030304	20232
hsw03-2022-02.jpg	030304	20231
hsw03-2022-03.jpg	030304	20231
hsw03-2022-04.jpg	030304	20231

The screenshot shows the EtherWAN eVue Events interface. It displays a table of system events with columns for ID, Severity, Time, Service, Node, and Message. The events are filtered and sorted, showing a list of login and ping-related events.

ID	Severity	Time	Service	Node	Message
583	Normal	2021/09/28 13:24:50	login	server	User 'admin' logged in
582	Cleared	2021/09/28 11:25:11	ping-monitor	192.168.1.97	Ping 192.168.1.97 is up.
581	Critical	2021/09/28 11:24:13	ping-monitor	192.168.1.97	Ping 192.168.1.97 is down.
580	Normal	2021/09/28 11:23:54	login	server	User 'admin' logged in
579	Normal	2021/09/28 11:05:21	login	server	User 'admin' logged in

The screenshot shows the eLite Network Discovery and IP Configuration Tool interface. It displays a table of discovered devices with columns for IP, Name, MAC Address, Brand, Series, Model, and Firmware. Below the table, there are tabs for Information, LLDP, MAC Table, and Interface. The Information tab is active, showing details for a specific device.

IP	Name	MAC Address	Brand	Series	Model	Firmware
192.168.1.40	switch_a	00:e0:b3:41:e2:ec	EtherWAN	71000	71000	4.02.6.0 08/10/22 09:10:45
192.168.1.20	switch_a	00:e0:b3:50:32:00	EtherWAN	739215C	739215C	2.02.9.5 09/21/22 10:04:45
192.168.1.50	switch_a	00:e0:b3:00:03:00	EtherWAN	73934E-SFP	73934E-SFP	5.02.1.0 08/04/22 13:56:10

Information tab details:

Local ChassisId: 0x00e0b341e2ec Local System Name: switch_a
 Local System Description: Etherwan 8TX+2G Managed Switch, Firmware rev: 4.02.6.0 08/10/22 09:10:45

Port	Neighbor ID	Neighbor Port	Description	System
fe1	00:e0:b3:00:03:00	ge1		switch_a

Accessories

Hardened SFP Modules +

www.etherwan.com/products/sfp-fiber-transceiver

Power Modules +

EX41-2750A240	Spare Power Module for EG97023 series, 100-240VAC PSU (85W), AC Inlet
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