TG103H

Hardened/Industrial Unmanaged PoE 8-port Gigabit Ethernet Switch

EtherWAN

C **UL** US LISTED

PoE Watchdog · 15W PoE · 30W PoE · 60W PoE · 90W PoE

NEMA TS2 · EN50121-4 · UL 61010 · Fanless

Product Highlights

➔ PoE Features
- IEEE 802.3bt 90W per port
- Total power budget up to 270W

➔ PoE Watchdog (Patented)
- Data streaming monitoring for connected PD

➔ SFP Connectivity
- Up to two 100/1000BASE SFP option

➔ High Reliability
- Industrial Fanless Design
- 6Kv surge protection

➔ Quality of Service
- PROFINET , EtherNet/IP

Overview

EtherWAN's TG103H is a hardened/industrial unmanaged Gigabit Ethernet switching platform, designed for easy deployment in harsh environments with limited space. Our easy-to-use device combines essential industrial Ethernet networking functionality with rugged performance.

Features include full/half-duplex auto-negotiation and auto MDI/MDIX operation, allowing for convenient connection of a variety of network devices. QoS (Quality of Service) support allows for traffic prioritization and effective management of resources. A built-in watchdog feature supports the TG103H switch as an intelligent device to prevent packet loss from powered devices in the network. The feature can be enabled per port via DIP switch to enhance the feature flexibility.

Ordering Information

Gigabit Ethernet Models

TG103H-0802	8-port 10/100/1000BASE-TX PoE + 2-port 100/1000BASE SFP Hardened (-40 to 167°F) Unmanaged Switch

Hardware Specifications

Interface +

Ethernet	10/100/1000BASE-TX: 8 ports 100/1000BASE-SFP: 0 or 2 ports
LED Indicators	Per Unit: Power 1 (Green), Power 2 (Green), Fault (Red) Per Port: Link/Activity (Green)
Alarm Contact	One relay output with current 0.5A@48VDC
Dip Switches	No.1-8: Port 1-8 Watchdog ON/OFF EXT: Timer enables Watchdog (ON: 5 min. / OFF: 10 Min.)

Technology +

Standards	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/FX IEEE 802.3az Energy Efficient Ethernet IEEE 802.1p Quality of Service (QoS) IEEE 802.3ab 1000BASE-T IEEE 802.3z 1000BASE-SX/1000BASE-LX IEEE 802.3af/at/bt Power over Ethernet
Forward/Filtering Rate	14,880pps for 10Mbps 148,810pps for 100Mbps 1,488,100pps for 1000Mbps
Packet Buffer Memory	1.5M bits
Processing Type	Store-and-Forward Auto Negotiation Half-duplex back-pressure and IEEE 802.3x full-duplex flow control Auto MDI/MDIX
Address Table Size	4K MAC

Power +

Input	46-57VDC (Terminal Block)
Power Consumption	9.72W (without PoE)
Protection	Reverse Polarity Protection
PoE Power Output	Up to 90W/port Power Budget: 270W

** 46-57VDC for IEEE 802.3af type 1, ≤15.4W PD devices.
52-57VDC for IEEE 802.3at/bt type 2/3, 30W, 60W PD devices.
54-57VDC for IEEE 802.3bt, type 4, 90W PD devices.

Physical +

Casing Material	Metal
IP Rating	IP30
Dimensions	1.77"x4.92"x5.71" (W x D x H) (45x125x145mm)
Weight	1.27lbs
Installation	DIN-Rail (Top hat type 35mm) mounting

Environmental +

Operating Temp.	TG103H: -40 to 167°F (-40 to 75°C)
Storage Temp.	-40 to 185°F (-40 to 85°C)
Relative Humidity	5% to 95% (non-condensing)

Regulatory +

ISO	Manufactured in an ISO 9001 facility
Safety	UL 61010
EMI	FCC Part 15 B VCCI Class A EN 61000-6-4 ICES-003 EN 55032
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)
Environmental Test Compliance	IEC 60068-2-6 Fc (Vibration) IEC 60068-2-27 Ea (Shock) IEC 60068-2-31 (Free fall w/package)
Industrial	EN 50121-4
Traffic	NEMA TS2 (TG103H)

Warranty +

Length	Limited Lifetime
Details	www.etherwan.com/us/support/warranty-policy

What's Included +

Device	Ethernet switch

Accessories

Part Number	Speed Info	Mode	Distance	Opterating Temperature	Wavelength	DDM
EX-0155NSP-MB2L-A	100Mbps	Multi	2km	-40 to 85°C	1310nm	
SFPMIS20M	100Mbps	Single	20km	-40 to 85°C	1310nm	✓
SFPGIM5AM	1000Mbps	Multi	275m/550m	-40 to 85°C	850nm	✓
SFPGIM02M	1000Mbps	Multi	2km	-40 to 85°C	1310nm	✓
SFPGIS10M	1000Mbps	Single	10km	-40 to 85°C	1310nm	✓

Optional Accessories

EPOW-54-240   240W 54VDC DIN-Rail Power Supply

Dimensions

TG103H-0802