TG103H Series

Hardened Unmanaged PoE 8-port Gigabit Ethernet Switch



Overview

EtherWAN's TG103H is a hardened unmanaged Gigabit Ethernet switching platform, designed for easy deployment in harsh environments with limited space. Its operating temperature is ranging from - 40°F to 167°F. It is a low-cost, easy-to-use device that combines essential industrial Ethernet networking functionality with rugged performance.

This versatile switch features 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 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.

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

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

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

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

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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

45x125x145mm (W x D x H) (1.77"x4.92"x5.71")

Weight

577g (1.27lbs)

Installation Type

DIN-Rail (Top hat type 35mm) mounting

Environmental

Operating Temp.

-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 ISO-9001 facility

EMI

FCC Part 15 Class A

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)

Safety

UL 61010

Environmental Test Compliance

IEC 60068-2-6 Fc (Vibration)

IEC 60068-2-27 Ea (Shock)

FED STD 101C Method 5007.1 (Free fall w/package)

Industrial

EN 50121-4

Warranty

Length

Limited Lifetime

Details

www.etherwan.com/us/support/warranty-policy

What's Included

Device

Ethernet switch

Documentation

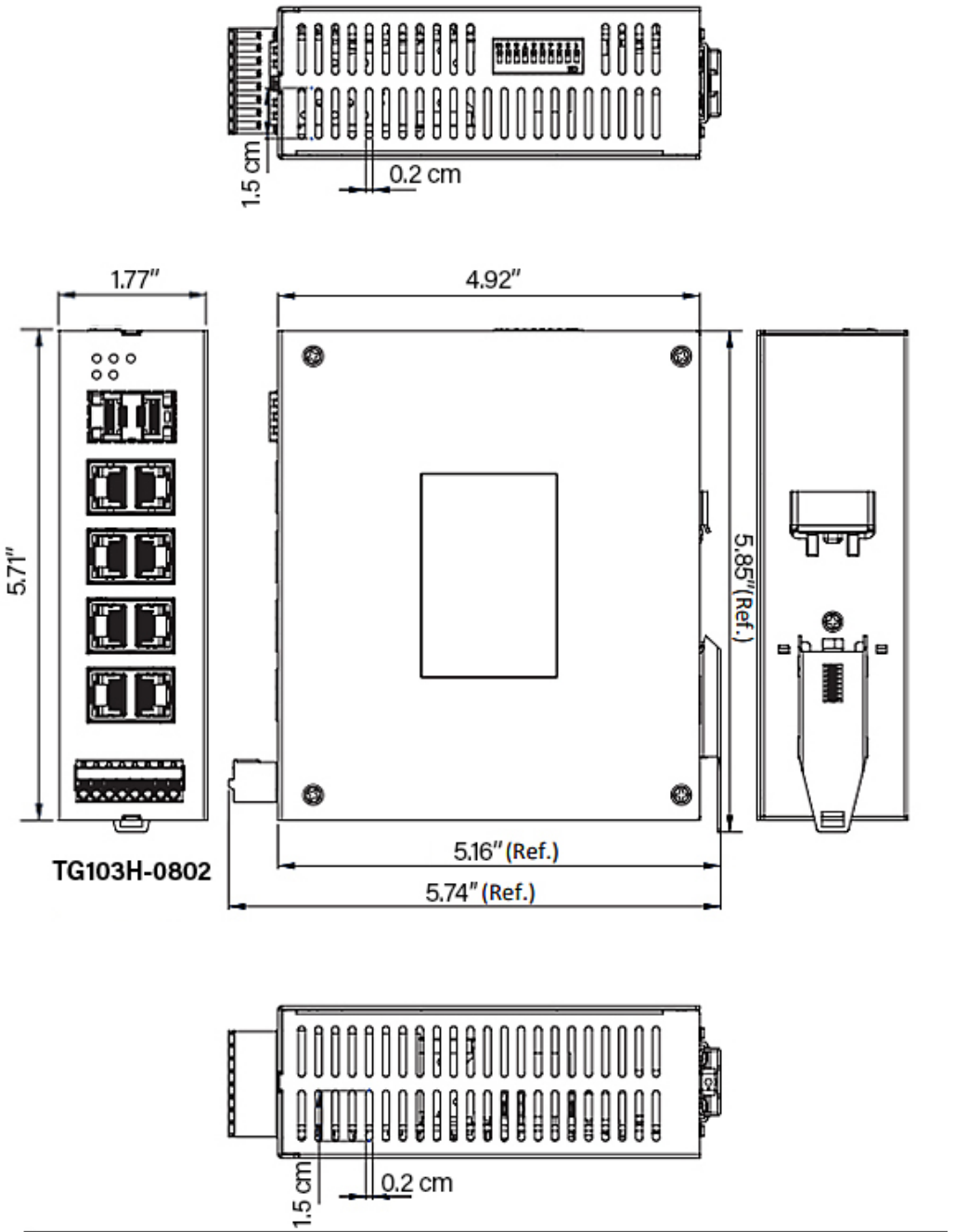
Quick install guide

MPN

TG103H-0802

1645628

Dimensions


1.5 cm
0.2 cm
1.77"
4.92"
5.71"
5.85"(Ref.)
TG103H-0802
5.16" (Ref.)
5.74" (Ref.)
1.5 cm
0.2 cm

Ordering Info

Model

Gigabit Ethernet Models

TG103H-0802	8-port 10/100/1000BASE-TX PoE + 2-port 100/1000BASE SFP Hardened (-40 to 167°F) Unmanaged Switch
TG103H-0800	8-port 10/100/1000BASE-TX PoE Hardened (-40 to 167°F) Unmanaged Switch

Accessories

SFP Modules

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

Power Supplies

EPOW-54-240	Power Supply, Hardened (-40°C - +75°C) External 100-277 VAC Input; NEMA-TS2 rated; 240W, 54VDC, 0-11.1A with Open Wire (US Plug) - No Deration at High Temps
EPOW-54-400	Hardened Power Supply, 100-277 VAC Input; NEMA-TS2 Rated; 54VDC, 400W/7.4A, with Open Wire (US Plug) - No Deration at High Temps
EPOW-54-600	Power Supply, Hardened (-40°C - +75°C) External 100-277 VAC Input; NEMA-TS2 rated; 600W, 54VDC, 0-11.1A with Open Wire (US Plug) - No Deration at High Temps
EPHX-48-240	240W/5A DIN-Rail 48VDC (42-56VDC Adjustable) Industrial Power Supply - No Deration at High Temps
EPHX-48-480	480W/10A DIN-Rail 48VDC (36-55VDC Adjustable) Industrial Power Supply - No Deration at High Temps

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