OttoE PoE 10 GE

Industrial 10-Port 90W Gigabit PoE Unmanaged Switches

Overview

OttoE PoE 10 GE are designed for easy deployment in harsh environments where extensive temperature tolerance, resistance to vibrations and shocks, and compliance with stringent safety standards are required. This low-cost, easy-to-use device combines essential industrial Ethernet networking functionality, real-time deterministic network operation, and advanced rugged performance.

A built-in **Watchdog** feature supports the OttoE PoE 10 GE switches 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. The switch offers multiple Gigabit Ethernet ports, with models available that include both copper and 100/1000Mbps dual rate **SFP ports** for extended-distance connections.

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.

Deployment scenarios: Automation, Smart Grid, Intelligent Intersection with Surveillance required.

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

Highlight

+ PoE Features

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

+ PoE Watchdog (Patented)

- Remotely detect and reboot unresponsive equipment by port

+ SFP Connectivity

- Up to two 100/1000BASE SFP option

+ Rugged Design

- Industrial Fanless Design
- 6Kv surge protection

+ QoS Prioritized Messages

- EtherNet/IP (UDP 2222)
- PROFINET (Ether type 0x8892)

Specifications

➕ Interface

Ethernet

- 10/100/1000BASE-TX: 8 ports
- 100/1000BASE-SFP: 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 Switch

- No.1 - 8: Port 1 to 8 Watchdog ON/OFF
- EXT: The 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
- Auto MDI/MDIX

➕ Environmental

Operating Temp.

- -10 to 60°C (14 to 140°F)

Storage Temp.

- -40 to 85°C (-40 to 185°F)

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)
- IEC 60068-2-31 (Free fall w/package)

Industrial

- EN 50121-4

✚ 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
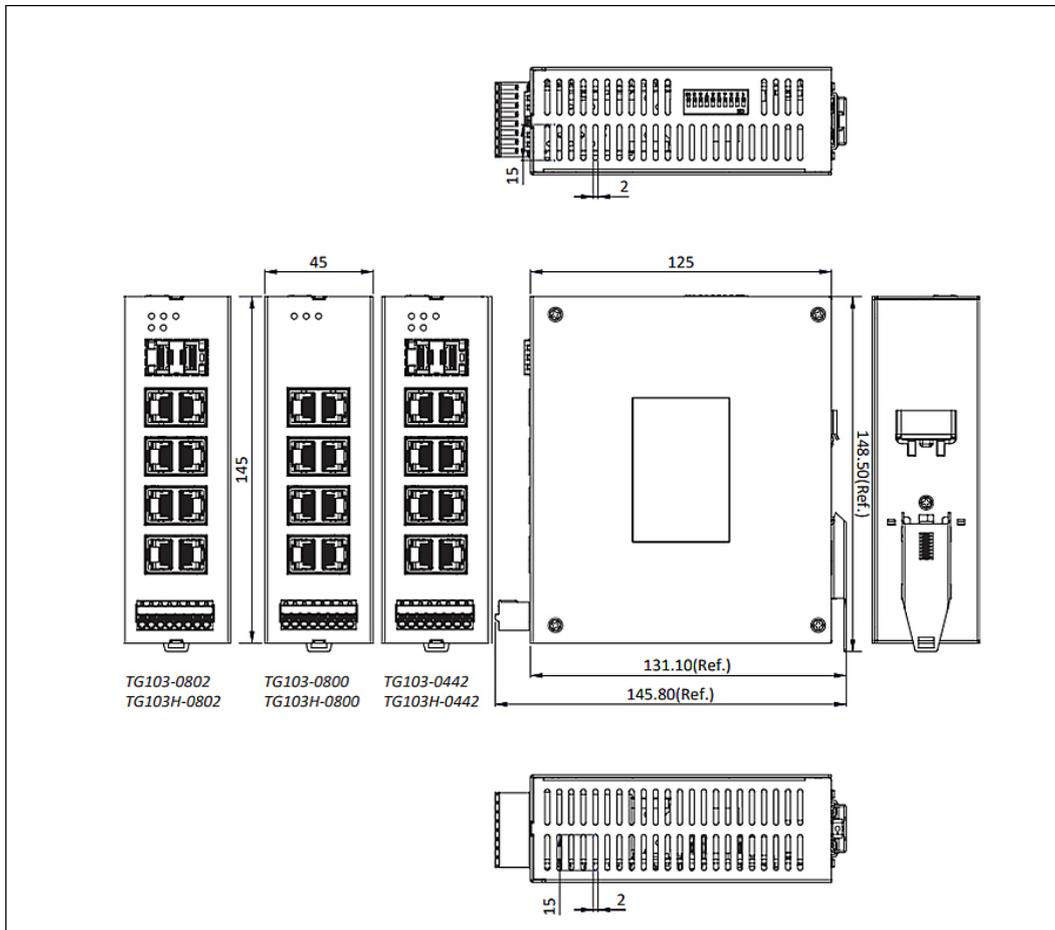
✚ Warranty

Length

- Limited Lifetime

Details

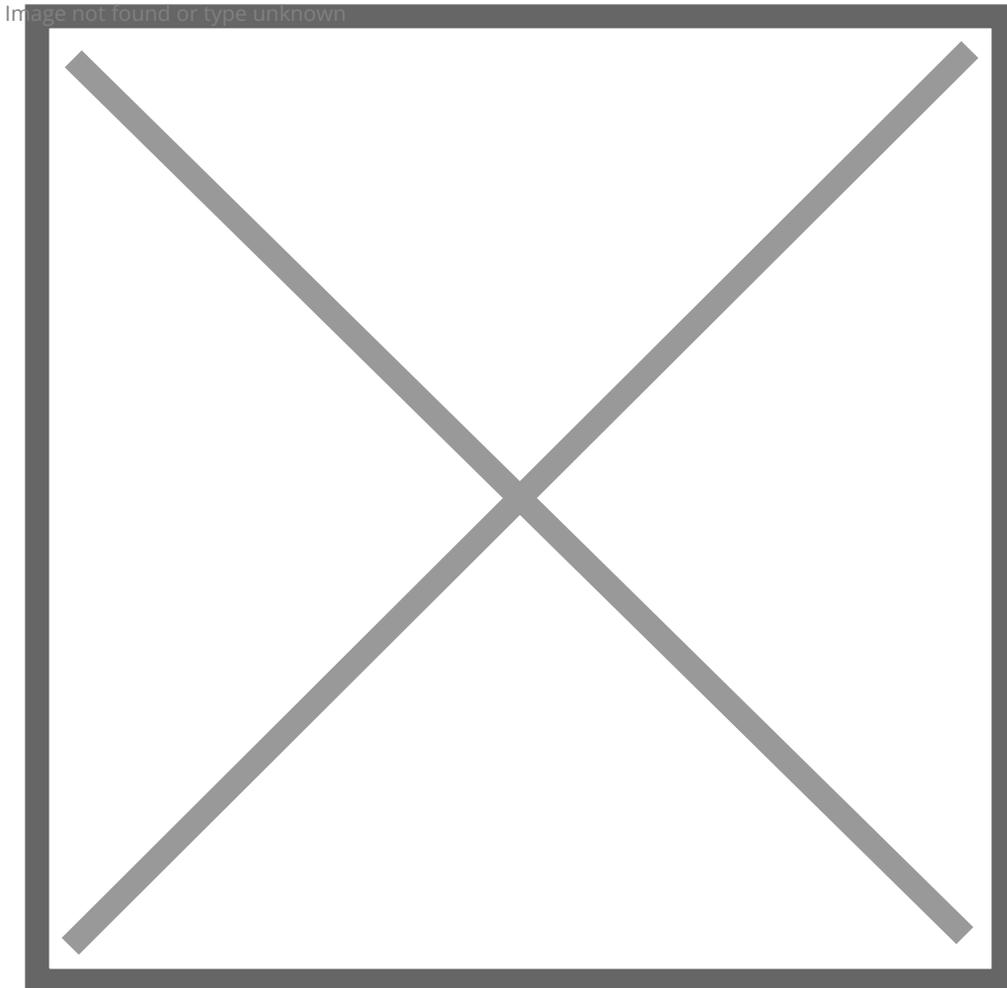- www.etherwan.com/support/warranty-policy

✚ What's Included

Device

- Ethernet switch

Dimensions

TG103-0802
TG103H-0802

TG103-0800
TG103H-0800

TG103-0442
TG103H-0442

Application

Ordering Info

+ Gigabit models

	TG103-0442	TG103-0802
10/100/1000BASE TX	8	8
PoE port	4	8
100/1000BASE SFP	2	2
Power Input	2 (46~57VDC) Push-in spring terminal block	
QoS	EtherNet/IP & Profinet	
Corrosion Resistant	IP30	
	Quote	Quote

+ Optional Accessories

NDR-480-48	480W 48VDC DIN-Rail Power Supply