# OttoE PoE Series



Hardened/Industrial Unmanaged PoE 8 to 10-port Gigabit Ethernet Switch























## **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 OttoE PoE series is a hardened/industriel unmanaged Gigabit Ethernet switching platform, designed for easy deployment in harsh environments with limited space. 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 OttoE PoE 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.

EtherWAN – "When Connectivity is Crucial."

## **Ordering Information**

### **Gigabit Ethernet Models**

| TG103-0800  | 8-port 10/100/1000BASE-TX PoE Industrial (-10 to 60°C) Unmanaged Switch   |
|-------------|---|
| TG103-0802  | 8-port 10/100/1000BASE-TX PoE + 2-port 100/1000BASE SFP Industrial (-10 to 60°C) Unmanaged Switch                                       |
| TG103-0442  | 4-port 10/100/1000BASE-TX PoE + 4-port 10/100/1000BASE-TX + 2-port 100/1000BASE SFP Industrial (-10 to $60^{\circ}$ C) Unmanaged Switch |
| TG103H-0800 | 8-port 10/100/1000BASE-TX PoE Hardened (-40 to 75°C) Unmanaged Switch   |
| TG103H-0802 | 8-port 10/100/1000BASE-TX PoE + 2-port 100/1000BASE SFP Hardened (-40 to 75°C) Unmanaged Switch   |
| TG103H-0442 | 4-port $10/100/1000$ BASE-TX PoE + 4-port $10/100/1000$ BASE-TX + 2-port $100/1000$ BASE SFP Hardened (-40 to 75°C) Unmanaged Switch    |
|             |   |

# **Hardware Specifications**

| Interface                 | +   |  |  |  |
|---------------------------|---|--|--|--|
| Ethernet                  | 10/100/1000BASE-TX: 8 ports<br>100/1000BASE-SFP: 0 or 2 ports   |  |  |  |
| LED Indicators            | Per Unit: Power 1 (Green), Power 2<br>(Green), Fault (Red)<br>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 Etherne |  |  |  |
| Forward/Filtering<br>Rate | 14,880pps for 10Mbps<br>148,810pps for 100Mbps<br>1,488,100pps for 1000Mbps   |  |  |  |
| Packet Buffer<br>Memory   | 1.5M bits   |  |  |  |
| Processing Type           | Store-and-Forward<br>Auto Negotiation<br>Half-duplex back-pressure and IEEE<br>802.3x full-duplex flow control<br>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<br>Power Budget: 270W  |  |  |  |

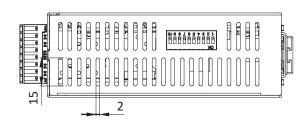
**<sup>\*\*</sup>** 46-57VDC for IEEE 802.3af type 1, ≤15.4W PD devices. 52-57VDC for IEEE 802.3at/bt type 2/3, 30W, 60W PD devices. 54-57VDC for IEEE 802.3bt, type 4, 90W PD devices.

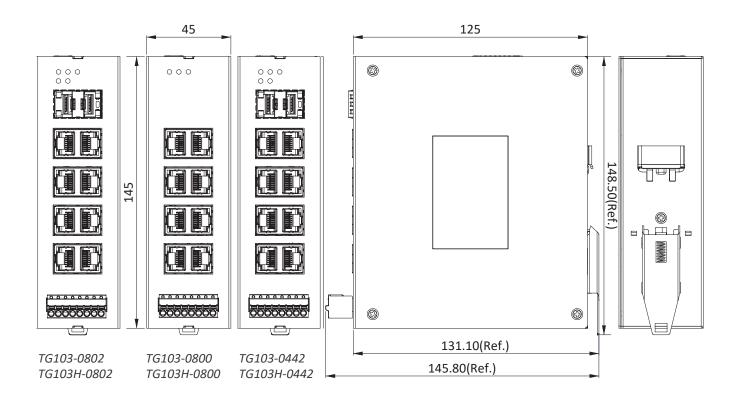
| Physical                         |  | +  |  |  |
|----------------------------------|--|----|--|--|
| Casing Material                  | Metal  |    |  |  |
| IP Rating                        | IP30   |    |  |  |
| Dimensions                       | 45x125x145mm (W x D x H)<br>(1.77"x4.92"x5.71")  |    |  |  |
| Weight                           | 577g (1.27lbs)   |    |  |  |
| Installation                     | DIN-Rail (Top hat type 35mm) mount   | in |  |  |
| Environmental                    | ·  | _  |  |  |
| Operating Temp.                  | TG103: -10 to 60°C (14 to 140°F)<br>TG103H: -40 to 75°C (-40 to 167°F)   |    |  |  |
| Storage Temp.                    | -40 to 85°C (-40 to 185°F)   |    |  |  |
| Relative Humidity                | 5% to 95% (non-condensing)   |    |  |  |
| Regulatory                       |  | -  |  |  |
| ISO                              | Manufactured in an ISO 9001 facility   |    |  |  |
| Safety                           | UL 61010   |    |  |  |
| EMI                              | FCC Part 15 B<br>VCCI Class A<br>EN 61000-6-4<br>ICES-003<br>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<br>Compliance | IEC 60068-2-6 Fc (Vibration)<br>IEC 60068-2-27 Ea (Shock)<br>IEC 60068-2-31<br>(Free fall w/package)   |    |  |  |
| Industrial                       | EN 50121-4   |    |  |  |
| Traffic                          | NEMA TS2 (TG103H)  |    |  |  |
| Warranty                         |  |    |  |  |
| Length                           | Limited Lifetime   |    |  |  |
| Details                          | www.etherwan.com/support/<br>warranty-policy   |    |  |  |
| What's Included                  |  | -  |  |  |
| Device                           | Ethernet switch  |    |  |  |

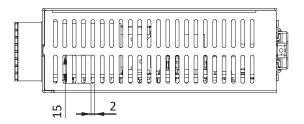
# Accessories

| 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     | ✓   |

## **Dimensions**







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