

1 Unpacking

Open the carton and unpack the items. Your package should include:

- One OttoE TG103(H) Switch. Note that the (H) indicates hardened models. If any items are missing or damaged, notify your EtherWAN representative. If possible, save the carton and packing material in case you need to ship or store the switch in the future.

2 Equipment Needed

- Appropriate cables for data ports. To prevent damage to the switch from electrical surges, it is recommended to use STP (Shielded twisted pair) cabling.
- Appropriate SFP modules for SFP ports

3 Select a Location

- Installation: Place the device on the DIN rail from above using the slot. Push the front of the device toward the mounting surface until it audibly snaps into place.
- Choose a dry area with an ambient temperature between -10 and 60°C (-14 and 140°F).
- Choose a dry area with an ambient temperature between -40°C to 75°C (-40°F to 167°F) for H models.
- Keep away from heat sources, sunlight, warm air exhausts, hot-air vents, and heaters.
- Be sure there is adequate airflow.
- The product is indoor use only.
- Pollution degree 2.

4 Connect to the Data Ports

Depending on the model, your switch can have the following ports:

TG103(H)-0800	8 Gigabit PoE ports
TG103(H)-0802	8 Gigabit PoE ports + 2 100/1G SFP ports
TG103(H)-0442	4 Gigabit PoE ports + 4 Gigabit TX ports + 2 100/1G SFP ports

5 Connect Power

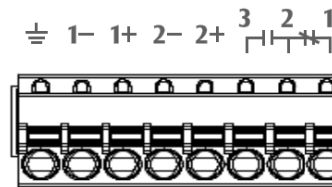
The switch has two pairs of power inputs. Only one power input is required to operate the switch. Connect the supply voltage to start up the device via the terminal block.

Power rating:

- PoE 30 Watts per port: 52-57 VDC, 5.47-4.99 A
- PoE 90 Watts per port: 54-57 VDC, 5.17-4.99 A
- Total PoE max.270W.
- The power input specification complies with the requirements of SELV (Safety Extra Low Voltage), and the power supply should comply with UL 61010-1 and UL 61010-2-201.

Terminal Block

The switch provides two power inputs on a 52-57VDC terminal block.



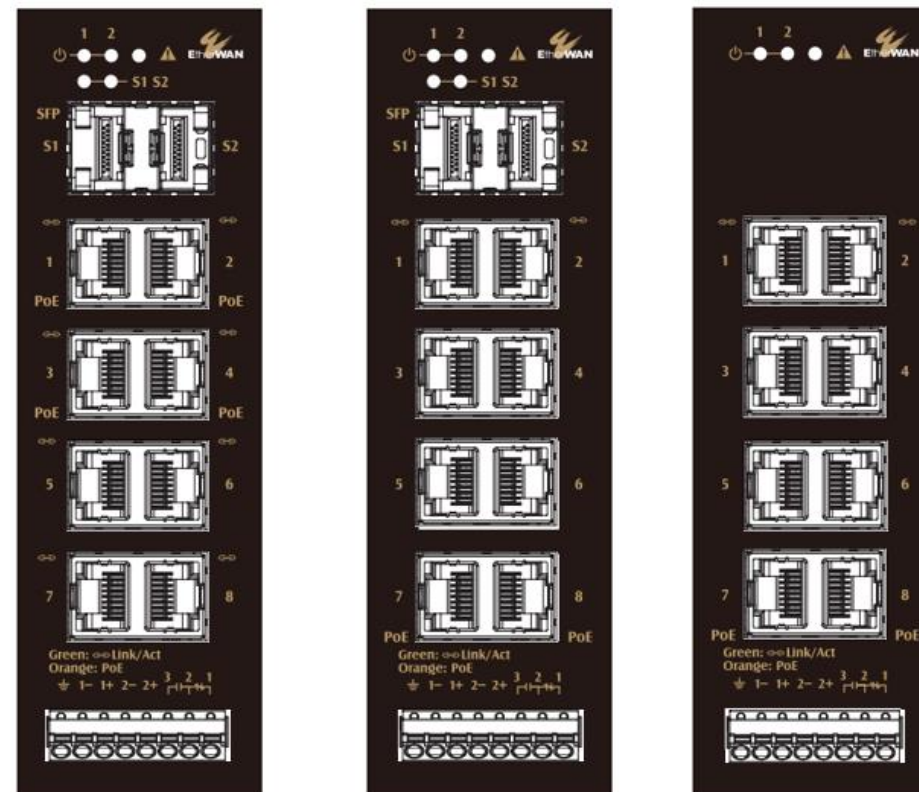
Pin	State	Description
Power 1	+	52-57VDC
	-	Power Ground
Power 2	+	52-57VDC
	-	Power Ground
		Earth Terminal
Relay Output Rating		0.5A @ 48VDC

Relay Output Alarm

The switch provides a relay output contact. The relay is used to indicate a user-defined power redundancy failure. The current is 0.5A@48VDC at Normal Open or Normal Close.

	Relay Contact	
	Normal Open	Normal Close
No power	Open	Closed
Normal	Closed	Open
Abnormal	Open	Closed

6 LED Indicators



TG103(H)-0442

TG103(H)-0802

TG103(H)-0800

LED	Color	Status
L/A (Link/Active)	Green	On: Link active Off: No link Flashing: Data transmission
PWR 1 & 2	Green	On: Power on Off: Power off
Alarm	Red	On: Error - power redundancy failure Off: No power error condition
PoE	Amber	On: Powered Device connected Off: Powered Device disconnected

Power-Up Sequence

When the switch is powered up:

- All Link/ACT LEDs blink momentarily.
- The Power 1, 2 LEDs light up and stay lit.
- LEDs for every port connected to a device will flash, as the switch conducts a brief Power On Self-Test (POST).

7 Quality of Service (QoS)

The QoS feature is automatically activated when the switch is running. Priority mapping is handled according to the following tables:

CoS priority (802.1p)	7, 6	5, 4	3, 2	1, 0
DSCP priority	59, 55	47, 46, 43	27	Other
Queues	3	2	1	0
WFQ	Highest Priority	Secondary Priority	16	1

EtherNet/IP: UDP 2222 (Queue 2)

Profinet Ether type: 0x8892 (Queue 2)

8 DIP Switch Settings

There is a 10-pin DIP switch for enabling the Watchdog (WDG) function.

When the DIP switch for a port is set to ON, the WDG function will be enabled after the TG103(H) has been powered on for 10 minutes to give powered devices time to boot. Every 30 seconds WDG will detect whether the packets from a powered device are being received or not. If no packet is received after 30 seconds, the powered device will be restarted and only the connected port with the DIP switch set to ON will be restarted (other ports are not disturbed). If the packet is received in the 25th second, then the 30 seconds interval will be restarted.

If DIP switch 9 (EXT) is set to ON, the WDG function will be enabled after 5 minutes instead of 10 minutes after the switch powers on, to accommodate faster booting powered devices.

Each PoE port will calculate the 30 seconds intervals independently, without interfering with other ports' 30 seconds calculation; If port 1 is restarted and port 2 is not restarted, the 30 seconds starting values of the two ports will be different.

Note: If the PoE port WDG status is changed, you must also adjust the TG103(H) power cycle toggles (OFF-ON) for the configuration to take effect.

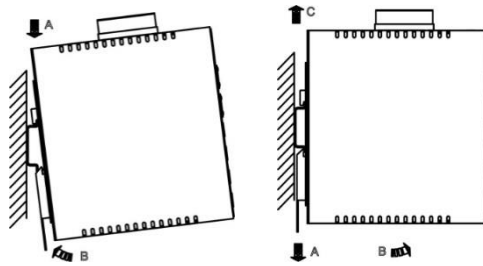


DIP No.	On	Off
1~8	Port 1~10 Watchdog Enable	Port 1~10 Watchdog Disable
9	Set WDG to run 5 minutes after start	Set WDG to run 10 minutes after start
10	Reserved	Reserved

9 Other Information

DIN-Rail Assembly, Startup, and Dismantling

- Assembly:** Place the switch on the DIN rail from above using the slot. Push the front of the switch toward the mounting surface until it audibly snaps into place. If you install two switch units at the same time, the gap in between the units must be ≥ 2 cm.
- Startup:** Connect the supply voltage to start up the Switch via the terminal block.
- Dismantling:** Pull out the lower edge and remove the Switch from the DIN rail.



“The device can get hot to the touch after running at full load for some time. Please use caution when handling the device.”

“L'appareil peut devenir chaud au toucher après avoir fonctionné à pleine charge pendant un certain temps. Veuillez faire preuve de prudence lors de la manipulation de l'appareil.”



Power wiring information:

Use cable type - AWG (American Wire Gauge) 18-22 and corresponding pin type cable terminals.
The rating of the power wire used must be at least 75°C.
Use Copper conductors only.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
For repair or maintenance needs, contact EtherWAN directly.



Informations de câblage d'alimentation:

Utilisez le type de câble - AWG (American Wire Gauge) 18-22.
Le calibre du fil d'alimentation utilisé doit être d'au moins 75°C.
Utilisez uniquement des conducteurs en cuivre.

DESTINÉ À ÊTRE UTILISÉ AVEC DES CONDUCTEURS EN CUIVRE SEULEMENT.
Si la méthode d'utilisation de l'équipement diffère de celle décrite par le fabricant, la protection assurée par l'équipement risque d'être altérée.
Contactez-nous pour l'entretien ou la réparation.

Label clean up:

Use a dry cloth to clean the labelling.
If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
The product is open type, intended to be installed in an industrial control panel or an enclosure.
SFP module specification requirement: Class 1 laser product. Complies with CDRH 21CFR 1040.10 and 1040.11. Rated 3.3 or 5 VDC.
The installation safety of any system incorporating the equipment is the responsibility of the assembler of the system.

Nettoyage de l'étiquette:

Nettoyez avec un chiffon doux et sec.
Si l'équipement est utilisé d'une façon non conforme aux directives du fabricant, il peut être endommagé.
Le produit est du type ouvert et doit être installé dans un coffret ou panneau de contrôles industriel.
Spécification pour le module SFP: Laser classe 1 conforme aux normes CDRH 21CFR 1040.11 Alimentation 3.3 ou 5 VDC.
La sécurité d'une l'installation d'un système incorporant l'équipement est la responsabilité de l'assembleur du système.

Manufacturer information:

EtherWAN Systems, Inc.

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The full product manual can be downloaded from:
<http://www.etherwan.com>

