20-Port GIGABIT MANAGED PoE SWITCH QUICK INSTALLATION GUIDE

TE connectivity

INTRODUCTION

The 2352903 series is a managed redundant PoE Ethernet switch with 16x 10/100/1000 Base-T(X) P.S.E. and 4x 10/100/1000Base-T(X) ports, specifically designed for the toughest environment and fully compliant with EN50155. The -2 version of this switch supports a bypass function over the non PoE ports to ensure constant network connectivity when power outage or node failue occurs. The switch supports various Ethernet Redundancy protocols such as TE-Ring (recovery time < 30ms over 250 units), Open-Ring, TE-Chain, MRP and MSTP (RSTP/STP compatible to protect your mission critical applications from network interruptions or temporary malfunctions.

PACKAGE CONTENTS

The device is shipped with the following items. If any of these items is missing or damaged, please contact your customer service representative for assistance.

• 2352903 series Ethernet switch
• CD Containing software
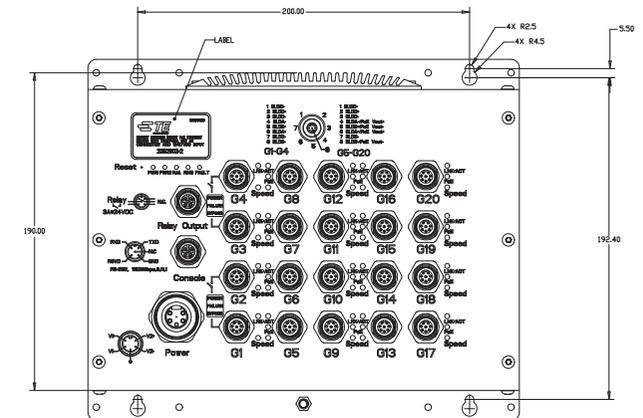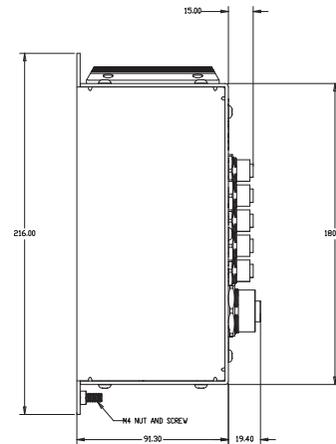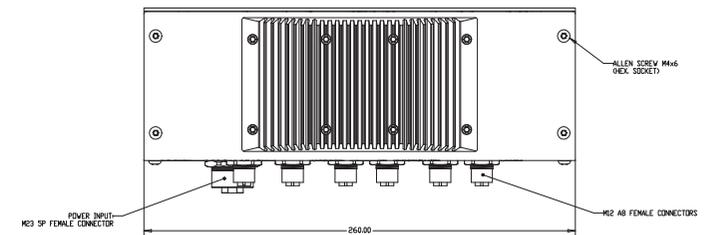• Quick Installation Guide

PREPARATION

Before you begin installing the device, make sure you have all of the package contents available and a PC with Microsoft Internet Explorer 6.0 or later, for using web-based system management tools.

Safety & Warnings

⚠️ **Elevated Operating Ambient**: If installed in a closed environment, make sure the operating ambient temperature is compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

⚠️ **Reduced Air Flow**: Make sure the amount of air flow required for safe operation of the equipment is not compromised during installation.

⚠️ **Mechanical Loading**: Make sure the mounting of the equipment is not in a hazardous condition due to uneven mechanical loading.

⚠️ **Circuit Overloading**: Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
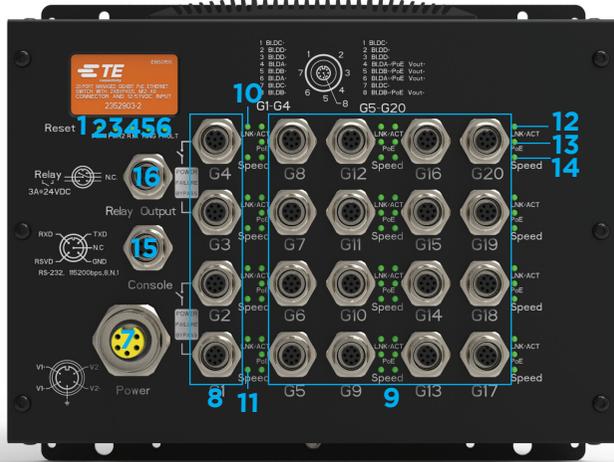
DIMENSIONS (in mm)

EN 50155 SWITCH

PANEL LAYOUTS

1	Reset Button
2	Power1 status LED
3	Power2 status LED
4	R.M. Status LED
5	Ring Status LED
6	Fault LED
7	Power Connector
8	Non-PoE Gigabit Ethernet ports (with bypass)
9	PoE enabled Gigabit ethernet ports
10	Link/ACT LED for non-PoE enabled Gigabit ports
11	Speed LED for non-PoE Gigabit ports
12	Link/ACT LED for PoE enabled Gigabit ports
13	PoE Indicator for PoE enabled Gigabit ports
14	Speed LED for PoE enabled Gigabit ports
15	Console port
16	Relay output port

INSTALLATION

The device can be fixed to the wall. Follow the steps below to install the device on the wall.

Step 1: Hold the device upright against the wall

Step 2: Insert four screws through the large opening of the keyhole-shaped apertures at the top and bottom of the unit and fasten the screw to the wall with a screw driver.

Step 3: Slide the device downwards and tighten the four screws for added stability.

WIRING

For pin assignments please refer to the instructions below:

Grounding
Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the grounding pin on the power connector to the grounding surface prior to connecting devices.
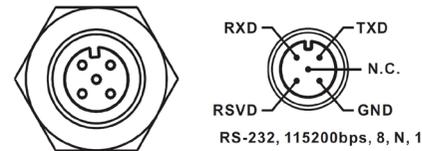
Power port pinouts
The 2352903 series uses the M23 5-pin female connector on the front panel for the dual power inputs.

Step 1: Insert a power cable to the power connector on the device.

Step 2: Rotate the outer ring of the cable connector until a snug fit is achieved. Make sure the connection is tight.
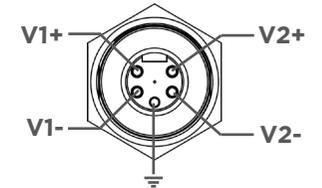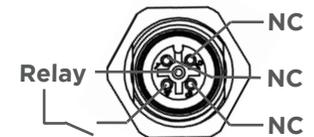

### Console port pinout

RS-232, 115200bps, 8, N, 1

Relay output ports pinouts
The switch uses the M12 A-coded 5-pin female connector on the front panel for relay output. Use a cable with an M12 A-coded 5-pin male connector to connect the relay. The relay contacts will detect user-configured events and form an open circuit when an event is triggered.

M12 A-Code Ethernet ports

Pin No.	Description	Pin No.	Description
1	BI_DC+	5	BI_DB+ / PoE Vout-
2	BI_DD+	6	BI_DA+ / PoE Vout+
3	BI_DD-	7	BI_DC-
4	BI_DA- /POE Vout+	8	BI_DB- / PoE Vout-
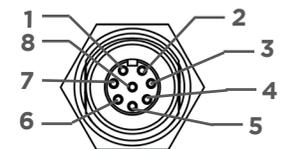
20-Port GIGABIT MANAGED PoE SWITCH QUICK INSTALLATION GUIDE

PoE power budget

Partnumber	Input power	PoE power budget
2352903-1 or -2	12-36VDC	90W

NETWORK CONNECTION

The device provides Ethernet ports in M12 connector type. According to the link type, the switchuses CAT 3, 4, 5,5e UTP cables to connect to any other network devices (PCs, servers, switches,routers, or hubs). Please refer to the following table for cable specifications

Pin No.	Type	Max Length	Connector
10BASE-T	Cat. 3, 4, 5 100Ω	UTP 100m	M12 A/X-Coding Connector
100BASE-T	Cat. 5 100Ω UTP	UTP 100m	M12 A/X-Coding Connector
1000BASE-T	Cat. 5/5e 100Ω UTP	UTP 100m	M12 A/X-Coding Connector

LOGIN

Default IP adress: 192.168.10.1

Default username: admin

Default password: admin

Refer to the user manual for further instructions

RESET

To restore the device configurations back to the factory defaults, press the Reset button for 5 seconds. Once the power indicator starts to flash, release the button. The device will then reboot and return to factory defaults.

LED INDICATORS

After installing the switch and connecting cables, the green power LED should turn on. Please refer to the following table for LED indication.

LED	Color	Status	Description
PW1	Green	On	DC power module 1 activated
PW2	Green	On	DC power module 2 activated
R.M	Green	On	Device operating in Ring master mode
Ring	Green	On	Ring enabled
		Blink	Ring structure is broken
Fault	Amber	On	Errors occur (i.e. power failure or port malfunction)
10/100/1000Base-T(X) P.S.E. Ethernet ports			
LNK/ACT	Green	On	Port is linked
		Blink	Transmitting data
PoE	Green	On	Power supplied over Ethernet
Speed	Green	On	Port is running at 1Gbps
	Amber	On	Port is running at 100 Mbps
	-	Off	Port is running at 10Mbps
10/100/1000Base-T(X) Ethernet ports			
LNK/ACT	Green	On	Port is linked
		Blink	Transmitting data
Speed	Green	On	Port is running at 1000 Mbps
	Amber	On	Port is running at 100Mb
	-	Off	Port is running at 10Mbps