## 12-Port GIGABIT MANAGED PoE SWITCH QUICK INSTALLATION GUIDE

## INTRODUCTION

The 2352901 series is a managed redundant PoE Ethernet switch with $8 \times 10 / 100 / 1000$ Base-T(X) P.S.E. and $4 \times 10 / 100 / 1000 B a s e-T(X)$ ports, specifically designed for the toughest environment and fully compliant with EN50155. The switch supports the Ethernet Redundancy protocol, TE-Ring (recovery time < 30ms over 250 units), TEChain, MSTP/RSTP/STP (IEEE 802.1s/w/D), can protect your mission critical applications from network interruptions or temporary malfunctions with its fast recovery technology. 2352901 also supports Power over Ethernet a system to transmit electrical power up to 30 watts, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. Each switch has 8x10/100/1000Base-T(X) P.S.E. (PowerSourcing Equipment) ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE connection. The series supports wide operating temperature from $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$ and can also be managed centralized by TE-Vision, Telnet and console (CLI) configuration. Therefore, the switch is one of the most reliable choices for EN50155 highly-managed Ethernet applications.

## 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.

- 2352901 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

$\triangle$
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.

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

$\triangle$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



## NSTALLATION

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 2352901 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- |

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M12 X-Code Ethernet ports

| Pin <br> No. | Description | Pin <br> No. | Description |
| :---: | :--- | :---: | :--- |
| 1 | BI_DA+/Vout+ | 5 | BI_DD+ |
| 2 | BI_DA-/Vout+ | 6 | BI_DD- |
| 3 | BI_DB+/Vout- | 7 | BI_DC- |
| 4 | BI_DB-/Vout- | 8 | BI_DC+ |

## PoE power budget

| Partnumber | Input power | PoE power budget |
| :--- | :---: | :---: |
| $2352901-1,-2$ and -3 | $12-36 \mathrm{~V}$ | 90 W |
| $2352901-4$ | $72-110 \mathrm{~V}$ | 90 W |

## 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, $5100 \Omega$ | UTP 100m | M12 A/X-Coding Connector |
| 100BASE-T | Cat. 5100 1 UTP | UTP 100m | M12 A/X-Coding Connector |
| 1000BASE-T | Cat. 5/5e $100 \Omega$ 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

## 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 |  |  |  |
| Speed | Green | On | Port is running at 1000 Mbps |
|  | Amber | On | Port is running at 100 Mb |
|  | - | Off | Port is running at 10Mbps |

## 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.

