



# GIGABIT EN50155 POE INJECTOR

EN 50155

## INTRODUCTION

TE's EN50155 compliant PoE Injectors are designed for industrial applications, such as rolling stock, vehicle, and railway applications. The PoE Injector is an advanced IEEE802.3at compliant device with Intelligent Detection that provides 1-port 10/100/1000 Base-T(X) PoE output which is compliant with EN50155. It is specifically designed for the toughest industrial environments. The EN50155 PoE Injector uses M12 connectors to ensure tight, robust connections, and guarantee reliable operation during environmental disturbances, such as vibration and shock. The device does not turn on power until it detects a valid PoE signature from the PoE devices attached downstream in the network. This provides protection against damage to non-PoE compliant devices which may be connected to the Ethernet cable.

## 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.

- 2355174 series PoE Injector
- Quick Installation Guide

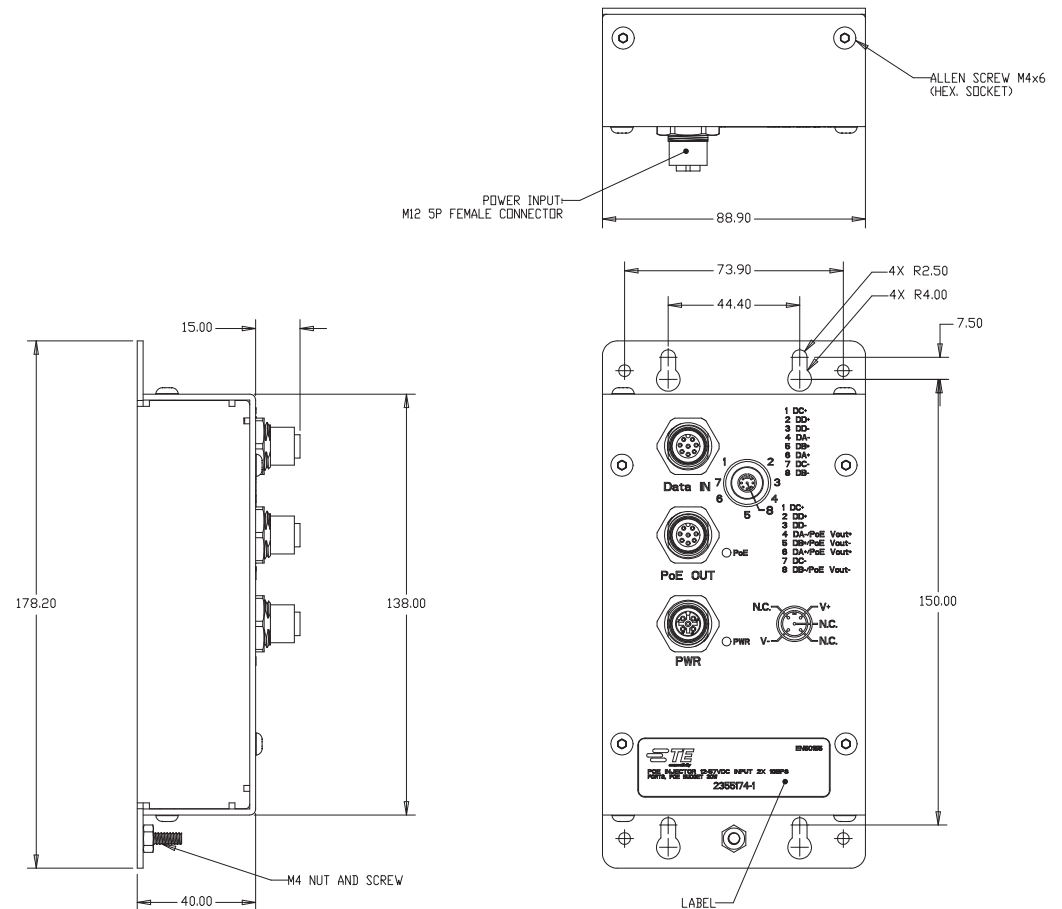
## PREPARATION

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

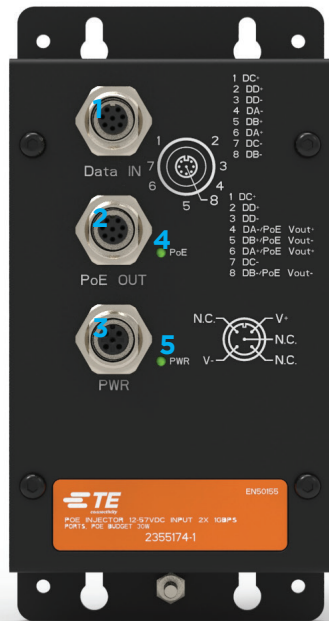
-  **Elevated Operating Ambient:** If installed in a closed environment, make sure the operating ambient temperature is compatible with the maximum ambient temperature (T<sub>ma</sub>) specified by the manufacturer.
-  **Reduced Air Flow:** Make sure the amount of air flow required for safe operation 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)



# GIGABIT EN50155 POE INJECTOR

## PANEL LAYOUTS



1	Data input port
2	PoE Port
3	Power input port
4	PoE status LED
5	Power status LED

## 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

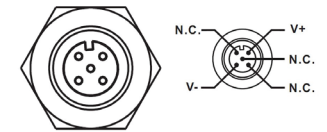
Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the grounding pin on the power connector to the grounding surface prior to connecting devices.

### Power inputs

The device provides one set of power supply using M12 5 pin female connector on the connector on the front panel. Please refer to the following figure for pin assignments.

**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.



## NETWORK CONNECTION

The device provides Ethernet ports in M12 connector type. According to the link type, the switch uses 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.

Cable types and specifications

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

For Pin assignments of the LAN ports, pls refer to the following tables

# GIGABIT EN50155 POE INJECTOR

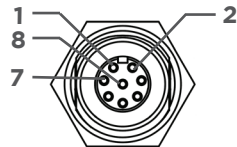
## M12 A-Code Ethernet ports

### 10/100 Base-T(X)

Pin No.	M12 Input (Data Only)		M12 Output (Data and power)	
	Symbol	Description	Symbol	Description
1	NC	NC	NC	NC
2	NC	NC	NC	NC
3	NC	NC	NC	NC
4	Rx-	Data Receive	Rx- (Vdc+)	Data + power
5	Tx+	Data Transmit	Tx+ (Vdc-)	Data + power
6	Rx+	Data Receive	Rx+ (Vdc+)	Data + power
7	NC	NC	NC	NC
8	Tx-	Data Transmit	Tx- (Vdc-)	Data + power

### 1000 Base-T

Pin No.	M12 Input (Data Only)		M12 Output (Data and power)	
	Symbol	Description	Symbol	Description
1	BI_DC+	Data	BI_DC+	Data
2	BI_DD+	Data	BI_DD+	Data
3	BI_DD-	Data	BI_DD-	Data
4	BI_DA-	Data	BI_DA-(Vdc+)	Data + power
5	BI_DB+	Data	BI_DB+(Vdc-)	Data + power
6	BI_DA+	Data	BI_DA+(Vdc+)	Data + Power
7	BI_DC-	Data	BI_DC-	Data
8	BI_DB-	Data	BI_DB-(Vdc-)	Data + power



## CONFIGURATIONS

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

LED	Color	Status	Description
Power	Green	On	Power is on
PoE	Blue	On	PoE device is detected
		Blink	Detecting PoE device
		Off	No PoE device is detected