

## **1-PORT EN50155 POE INJECTOR** 1-PORT GIGABIT POWER OVER ETHERNET INJECTOR

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.

## Dimensions





## Characteristics

Part Number							
	2355174-1						
Physical ports							
10/100/1000 Base-T(X) with P.S.E. Ports in M12 Auto MDI/MDIX	1 x M12 connector (8-pin female M12 A-coding)						
10/100/1000 Base-T(X) Port in M12 Auto MDI/MDIX	1 x M12 connector (8-pin female M12 A-coding)						
Operating voltage							
Input Voltage	24VDC (12~57VDC) on 5-pin female M12 A-Coding						
Output Voltage	50V / 600mA, 30 Watts max.						
LED Indicator							
Power Indicator	PWR/Ready: 1x LED Blue On: PoE Device Link						
	Blue Blinking: Detecting PoE Device						
	Blue Off: No PoE Device Detected						
Protection							
Short circuit Protection	Present						
Overload Protection	Present						
Physical Characteristics							
Enclosure	IP-40						
Dimensions (WxDxH)	88.9 x 40 x 178.2mm (3.5 x 1.57 x 7")						
Weight (g)	446 gram						
Environmental							
Storage Temperature	-40 to 80°C (-40 to 176°F)						
Operating Temperature	-40 to 75°C (-40 to 167°F)						
Operating Humidity	5% to 90% non condensing						
Regulatory approvals							
EMI	FCC Part 15, CISPR (EN55022) class A, EN50155 (EN50121-3-2, EN55011, EN50121-4)						
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000- 4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11						
Shock, freefall, vibration	IEC 60068-2-27, IEC 60068-2-31, IEC 60068-2-6						
Safety	IEC/ EN 60950-1						

## Pin Assignments

1000 Base-T						
	M12 Input (data only)		M12 Ouput (Data and Power)			
Pin	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	-I_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(-)		

10/100 Base-T(X)						
	RJ-45 Input (Data and Power)		RJ-45 Output (Data Only)			
Pin	Symbol	Description	Symbol	Description		
1	NC	Not Connected	NC	Not Connected		
2	NC	Not Connected	NC	Not Connected		
3	NC	Not Connected	NC	Not Connected		
4	Rx-	Data	Rx- (Vdc+)	Data + Power(+)		
5	Tx+	Data	Tx+ (Vdc-)	Data + Power(-)		
6	Rx+	Data	R+ (Vdc+)	Data + Power(+)		
7	NC	Not Connected	NC	Not Connected		
8	Tx-	Data	Tx- (Vdc-)	Data + Power(-)		

Pins 5 and 8 (-Vdc) should not be shorted to ground

1 BI\_DC + 2 BI\_DD + 3 BI\_DD -4 BI\_DA - / PoE Vout+ 5 BI\_DB + / PoE Vout-6 BI\_DA + / PoE Vout+ 7 BI\_DC -8 BI\_DB - / PoE Vout-





