EN50155 Industrial 1-port 10/100/1000 PoE Injector with 30W output, M12 connector

Features

- ► 12~48VDC Power Input
- ► Fully compliant with IEEE802.3af/at
- ► Support 10/100/1000Base-TX for power and data output
- ► Support DIN-Rail & Wall-mount installation
- ► Use M12 connectors to ensure tight and robust connections
- ► Extensive LED indicators for PoE diagnostics
- ► Environmentally Hardened -40° C to 80° C (-40° F to 176° F) operating temperature

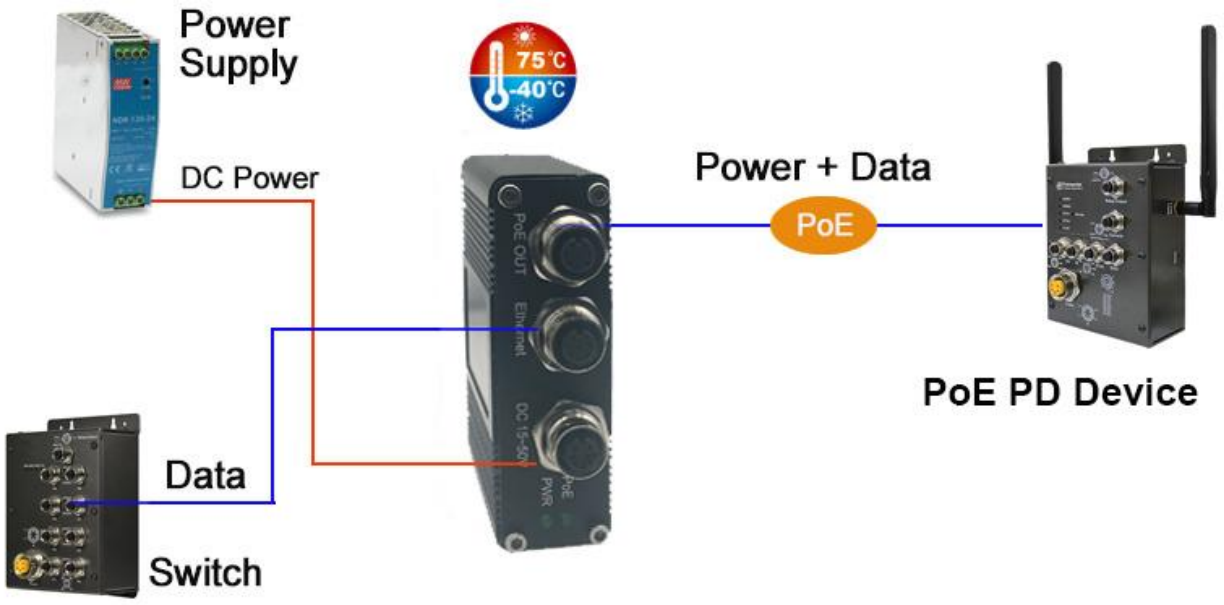


Overview

E-link 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.

LNK-INJ301-M12 provides an integrated power solution with a wide range voltage of 12~48VDC for high availability applications.

Application



Technical Indexes

Ethernet	
Standards:	IEEE802.3af Power over Ethernet
	IEEE802.3at Power over Ethernet
Processing Type:	Forward
	Half-duplex, Full-duplex
Forward Filter Rate:	1,488,000pps (1000Mbps)
Cabling:	10/100/1000Base-T
Connector:	2x M12 connector (8-pin female M12 A-coding)
Environmental	
Operating Temperature:	-40°C to 80°C (-40°F to 176°F)
Storage Temperature:	-40°C to 85°C (-40°F to 185°F)
Relative Humidity:	5% to 95% non-condensing
MTBF:	>200,000hrs
Electrical and Mechanical	
Input Power:	12~48VDC on 5-pin female M12 A-Coding
Power Consumption:	36W Max.
PoE (Power over Ethernet)	
Standard:	IEEE802.3af/at
Port:	M12 connector (8-pin female M12 A-coding)
Max. Power per Port:	30W Max
LED Indicators:	
Power:	Power Status
PoE:	PoE Status
Dimensions (WxDxH):	95 x 70 x 30 mm
Weight:	0.25Kg
Casing:	Aluminum Case

Mounting Options:	DIN-Rail / Wall-mount
Regulatory Approvals	
ISO9001	
FCC part 15, Class A, EN50155	
EN55022:2006+A1: 2007 Class A	
Surge Protection:	
RJ45: 1KV	
Power: 500V	
ESD: 4KV/8KV	

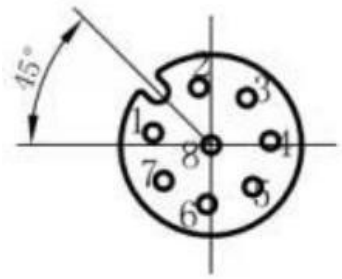
Ordering Information

Model	Description
LNK-INJ301-M12	EN50155 Industrial 1-port 10/100/1000M M12 PoE Injector 12~48VDC Power Input
Mounting Options	► Default DIN-Rail Bracket installed; Wall Mount Bracket is included.
Power Options	► Power Supply is to be purchased separately

M12 Pin Assignments:



RJ45



M12 Female Connector

Pin		Assignment	
RJ45	**M12**	**PoE**	**Ethernet**
1	**6**	TP0+	TP0+
2	**4**	TP0-	TP0-
3	**5**	TP1+	TP1+
4	**7**	TP2+(VCC+)	TP2+
5	**1**	TP2-(VCC+)	TP2-
6	**8**	TP1-	TP1-
7	**2**	TP3+(VCC-)	TP3+
8	**3**	TP3-(VCC-)	TP3-