

# Gigabit Ethernet PoE++ Injector, 802.3bt, 85 W



# User Manual

DN-95109 Rev. 2

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### Package content:

- Gigabit Ethernet PoE++ Injector, 802.3bt, 85 W
- Cable for non-heating appliances (safety plug / jack IEC 5)
- Quick reference guide

### 1. Introduction

The 802.3bt injector from DIGITUS® offers an 85 watt POE port as a midspan solution. Compact, cost-effective and fully IEEE802.3bt-compliant. The simple solution for remote power supply of wireless access points, IP security camera, VoIP phones, thin clients and other installations with POE functionality. PoE+/PoE++ compatible devices can be supplied with power and data using the network cable, a secure and reliable solution for expanding the existing network infrastructure. The injector detects various POE modes (A/B)- Plug & Play.

## 2. Features

Here are the features of 85W injector:

- Power over Ethernet Injector for 10/100/1000BaseT
- Full IEEE802.3at /bt compliant
- Automatically detects and protects PoE equipment from being damaged by incorrect installation
- Internal AC/DC converter. No need for external power brick
- Overload and short circuit protection
- Mixes Ethernet and power into RJ-45 port
- Remote power feeding Delivers
- Power up to 100 meters
- Light weight and compact size
- Wall-Mountable design
- Easy Plug-and-Play installation
- Power over Ethernet output power of 56V@1.5A

### 3. Hardware Description



#### 1. AC Power Input Connector:

This connector connects the AC power source to the PoE Injector.

2. Data IN:

This port is an RJ-45 Ethernet connector where data is received and transmitted through the PoE Injector.

3. PoE OUT:

This port is an RJ-45 Ethernet connector where data is received and transmitted through the PoE Injector and provides PoE power along with the Ethernet data to a PoE device.

4. Alt A LED:

This LED indicates the pins 1/2/3/6 is providing power to the PoE OUT port or not.

#### 5. Alt B LED:

This LED indicates the pins 4/5/7/8 is providing power to the PoE OUT port or not.

#### 6. Ground Wire:

Please connect the ground wire

### 4. Installation

Before placing the Unit:

- Do not to cover PoE Injector or block the airflow to the PoE with any foreign objects. Keep the PoE Injector away from excessive heat and humidity and free from vibration and dust.
- Ensure that the cable length from Ethernet network source to the terminal does not exceed 100 meters The PoE is not a repeater and does not amplify the Ethernet data signal.
- Use a splitter if desired; ensure that the splitter is connected close to the terminal and not on the PoE Injector.
- No "on-off" switch exists; simply plug the PoE Injector into an AC power source.

Installing the Unit:

- Connect the PoE Injector to an AC outlet (100-40VAC), using a standard power cord.
- Connect the Data IN jack (input) to the remote Ethernet network switch's Patch panel and the PoE OUT jack (output) to the terminal.

## 5. Troubleshooting

PoE Injector dos not power up:

- Verify that a reliable power cord is used.
- Verify that the voltage at the power inlet is between 100 and 240 VAC.
- Remove and re-apply power to the device and check the indicators during power up sequence

The PD does not operate:

- Verify that the PoE Injector detects a PD.
- Verify that the PD is designed for PoE operation.
- Verify that you are using a standard Category 5/5e/6, straight-wired cable, with four pairs.
- If an external power splitter is in use, replace it with a known-good splitter.
- Ensure input Ethernet cable is connected to the DATA IN port.
- Verify that the PD is connected to the Data & Power port.
- Try to reconnect the same PD into a different PoE Injector. If it works, there is probably a faulty port or RJ45 connection.
- Verify that there is no short over any of the twisted pair cables or over the RJ45 connectors.

The end device operates, but there is no data link:

- Verify that the port indicator on the front panel is continuously lit.
- If an external power splitter is in use, replace it with a known-good splitter.
- Verify that for this link, you are using standard UTP/FTP Category 5 straight (non-crossover) cabling, with all four pairs.
- Verify that the Ethernet cable length is less than 100 meters from the Ethernet source to the load/remote terminal.
- Try to reconnect the same PD into a different PoE Injector If it works, there is probably a faulty port or RJ45 connection

### 6. Specifications

Description			
Interfaces	1 x RJ-45 Connector for Data		
	1 x RJ-45 Connector for PoE out + Data		
Indicators	PoE: Alt A, Alt B		
Standard	IEEE802.3af, IEEE802.3at, IEEE802.3bt		
Power Method	100-240VAC, 50/60Hz		
Output Voltage	56VDC		
Power Supply	90W		
PoE Budget	85W		
Output PoE Pin Assignment	Alternative A:		
	V+ (RJ45 Pin3,6), V- (RJ45 Pin 1,2)		
	Alternative B:		
	V+ (RJ45 Pin4,5), V- (RJ45 Pin 7,8)		
Dimensions	180 x 65 x 40 mm		
Weight	0.6KG		
Operating Temperature	0 to 40°C		
Storage Temperature	-10 to 70°C		
Operating Humidity	5 to 95% Noncondensing		
Pack list			
PoE Injector	1 pcs		
User Manual	1 pcs		

This is a Class A product. In home environment, this product may cause radio interference. In this case, the user may be required to take appropriate measures.

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