INJ-102GT-24V

➤ *Industrial 2-port Gigabit High Power PoE Injector, 12V~57V Input Support*

Features

- PoE+Injector for 1x10/100/1000 Base-T(X)

- Fully compliant with IEEE802.3at/802.3af standard

- Auto protection for Over Voltage Power Input and over current output

- Supports Power Output up to 30Watts per port

- Supports Wide Power Input range from 12Vdc to 57VDC

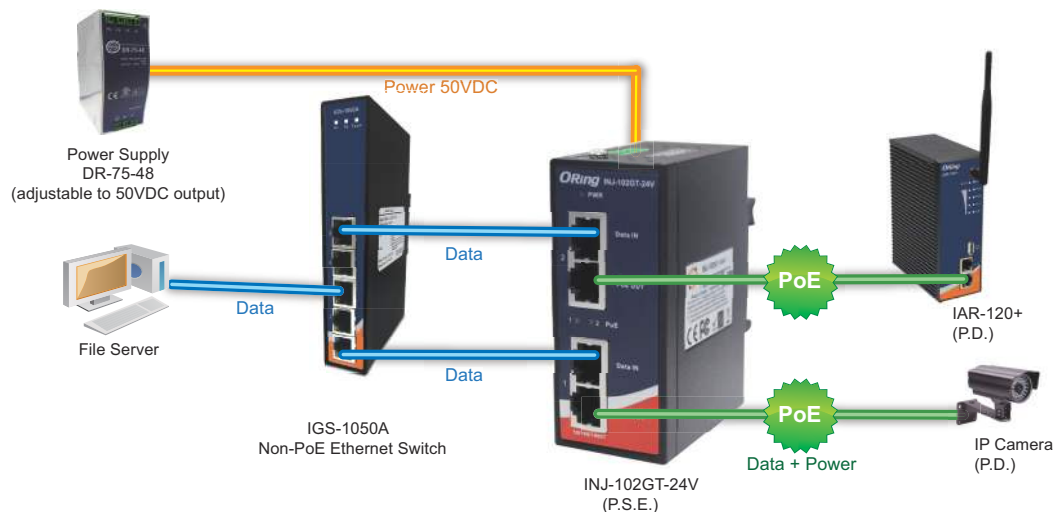- IP-30 Rugged Case Design

- DIN-Rail and Wall Mount Design

Introduction

The INJ-102GT-24V PoE Injector is an advanced IEEE802.3at compliant device with intelligent detection that provided 2-ports 10/100/1000Base-T (X) PoE outputs. The device does not turn on power until it detects a valid PoE signature from the PoE devices attached downstream on the Ethernet cable. This protection against damage to non-PoE compliant equipment which may be connected to the Ethernet cable. Because of this intelligent detection, only an IEEE 802.3at/802.3af compliant device can be powered with the INJ-102GT-24V PoE Injector. Typically in gigabit networks the maximum allowable CAT5 cable length is about 100 meters, due to the limitation of the Ethernet standards. The INJ-102GT-24V PoE Injector can function with any PoE P.D. equipment which is fully compliant with the IEEE 802.3at/802.3af PoE standards.
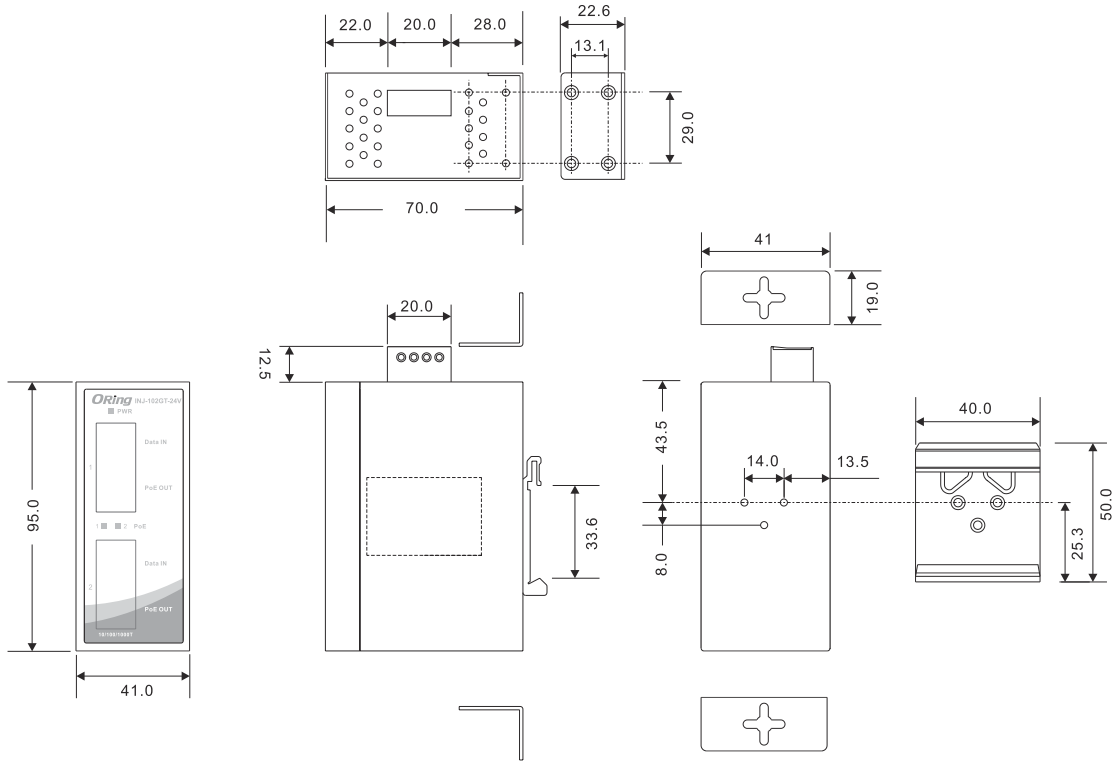
Note: The equipment being powered must be fully IEEE 802.3at/802.3af compliant in order for the power supply to be able to sense the PoE devices signature and apply power. Power is supplied on Ethernet pins 1/2 (V+) and 3/6 (V-).

Practical Operation

Power Supply
DR-75-48
(adjustable to 50VDC output)

Power 50VDC

Data

Data

File Server

IGS-1050A
Non-PoE Ethernet Switch

Data

Data

INJ-102GT-24V
(P.S.E.)

PoE

PoE

Data + Power

IAR-120+
(P.D.)

IP Camera
(P.D.)

PoE Injector Connections

Dimensions

(Unit=mm)

Connectors and Pin Definitions

1000 Base-T

	RJ-45 Output (Data and Power)		RJ-45 Input (Data Only)	
Pin No.	Symbol	Description	Symbol	Description
1	BI_DA+(Vdc+)	Data BI_DA+ and Feeding Power(+)	BI_DA+	Data BI_DA+
2	BI_DA-(Vdc+)	Data BI_DA- and Feeding Power(+)	BI_DA-	Data BI_DA-
3	BI_DB+(Vdc-)	Data BI_DB+ and Feeding Power(-)	BI_DB+	Data BI_DB+
4	BI_DC+	Data BI_DC+	BI_DC+	Data BI_DC+
5	BI_DC-	Data BI_DC-	BI_DC-	Data BI_DC-
6	BI_DB-(Vdc-)	Data BI_DB- and Feeding Power(-)	BI_DB-	Data BI_DB-
7	BI_DD+	Data BI_DD+	BI_DD+	Data BI_DD+
8	BI_DD-	Data BI_DD-	BI_DD-	Data BI_DD-

10/100 Base-T

Pin No.	RJ-45 Output (Data and Power)			RJ-45 Input (Data Only)	
	Symbol	Description		Symbol	Description
1	Rx+ (VDC+)	Data Receive and Feeding power(+)		Rx+	Data Receive
2	Rx- (VDC+)	Data Receive and Feeding power(+)		Rx-	Data Receive
3	Tx+ (VDC-)	Data Transmit and Feeding power(-)		Tx+	Data Transmit
4	NC	Not Connected		NC	Not Connected
5	NC	Not Connected		NC	Not Connected
6	Tx- (VDC-)	Data Transmit and Feeding power(-)		Tx-	Data Transmit
7	NC	Not Connected		NC	Not Connected
8	NC	Not Connected		NC	Not Connected

Note: pins 3 and 6 (-Vdc) should not be shorted to ground

Specifications

ORing Injector Model	INJ-102GT-24V
Physical Ports	
RJ-45 Ethernet Port Input	2
RJ-45 Ethernet Port with P.S.E. Output	2
Operating Voltage	
Input Voltage	12 ~ 57 Vdc on 4-pin terminal block
Output Power	50V / 600mA, 30 Watts max. Per port
LED Indicator	
Power Indicator	PWR / Ready: 1 x LED Green On: Power is on and functioning Normally.
PoE Indicators	2 x LED Blue On: PoE Device Link Blue Blinking: Detecting PoE Device Blue Off : None PoE Device Detected
Protection	
Short Circuit Protection	Present
Over Load Protection	Present
High Voltage Protection	Present
Physical Characteristics	
Enclosure	IP-30
Dimension (W x D x H)	41(W)x70(D)x95(H) mm (1.61 x 2.75 x 3.74 inch.)
Weight (g)	370g
Environmental	
Storage Temperature	-40 to 80°C (-40 to 176°F)
Operating Temperature	-20 to 70°C (-4 to 158°F)
Operating Humidity	5% to 90% Non-condensing
Regulatory Approvals	
EMI	FCC Part 15, CISPR (EN55022) class A
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	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1
Warranty	2 years

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

Industrial Cellular VPN Router

Industrial M2M Gateway

Accessories

Network Management Software

Ordering Information

INJ-102GT-24V

Available Model	Model Name	Description
	INJ-102GT-24V	Industrial 2-port Gigabit High Power PoE Injector, 12V~57V Input Support

Packing List
- INJ-102GT-24V
- DIN-Rail Kit
- Wall-mount Kit
- Quick Installation Guide

Optional Accessories (Can be purchased separately)
- DR-75-48 : 75 Watts DIN-Rail power supply
- DR-120-48 : 120 Watts DIN-Rail power supply