



# INJ-102GT++

## Industrial 2-port Gigabit High Power Plus PoE++ Injector

### Features

- Supports 2x10/100/1000Base-T(X) for power and data Output
- Fully compliant with IEEE802.3at/802.3af standard
- Auto protection for Over Voltage Power Input and over current output
- Supports totally **Power Output up to 180Watts** for all ports usage.
- Supports Power Input range from 24Vdc to 57Vdc
- High reliability and rigid IP-30 housing
- DIN-Rail and Wall Mount Design



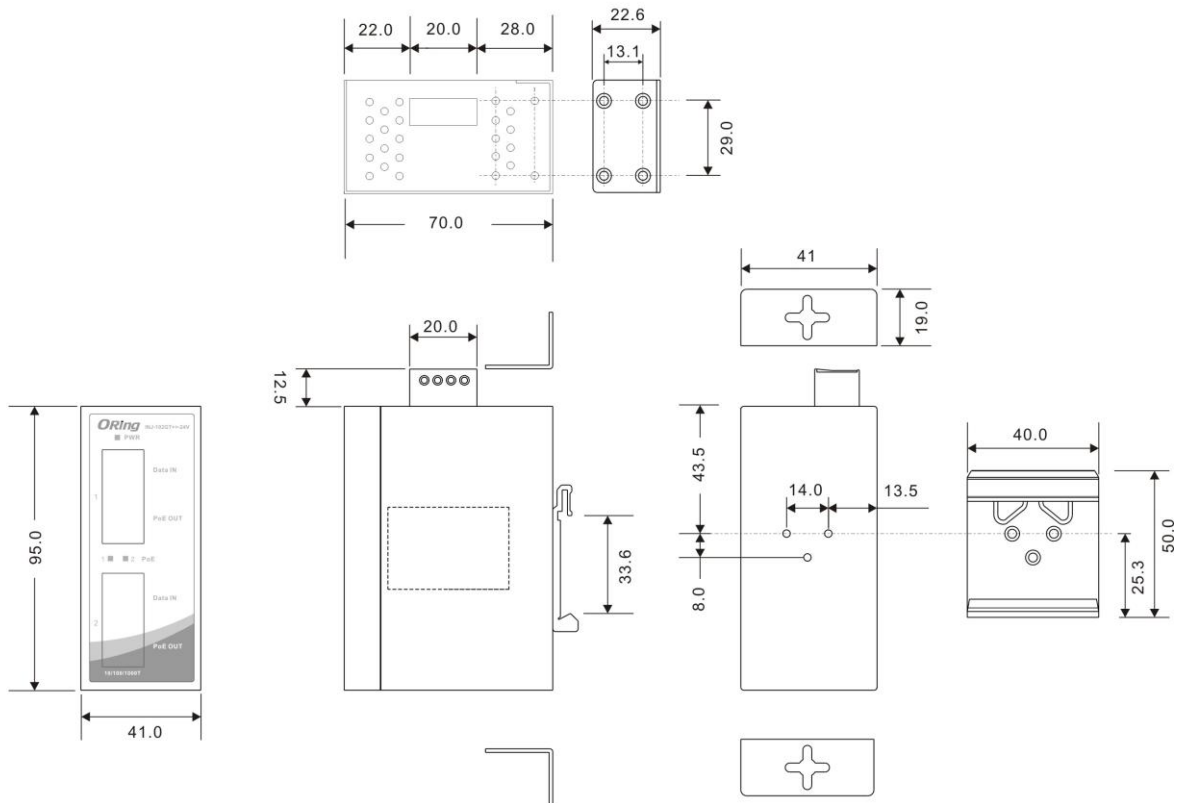
### Introduction

The INJ-102GT++ PoE Injector series is not only an IEEE802.3at compliant device but also an advanced high power PoE injector. It is 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. Therefore, only an IEEE 802.3at/802.3af compliant device can be powered with the INJ-102GT++ PoE Injector. Typically in gigabit networks the maximum allowable CAT5 cable length is about 100 meters, due to the limitation of the Ethernet standards. Because of its 24~57Vdc power input with boosting circuit, the total output power maximum can be up to 180Watts<sup>[Note2]</sup> for all ports usage. The installer doesn't need to worry about voltage drops caused by cable length. The INJ-102GT++ PoE Injector can function with any PoE P.D. equipment which is fully compliant with the IEEE 802.3at/802.3af PoE standards.

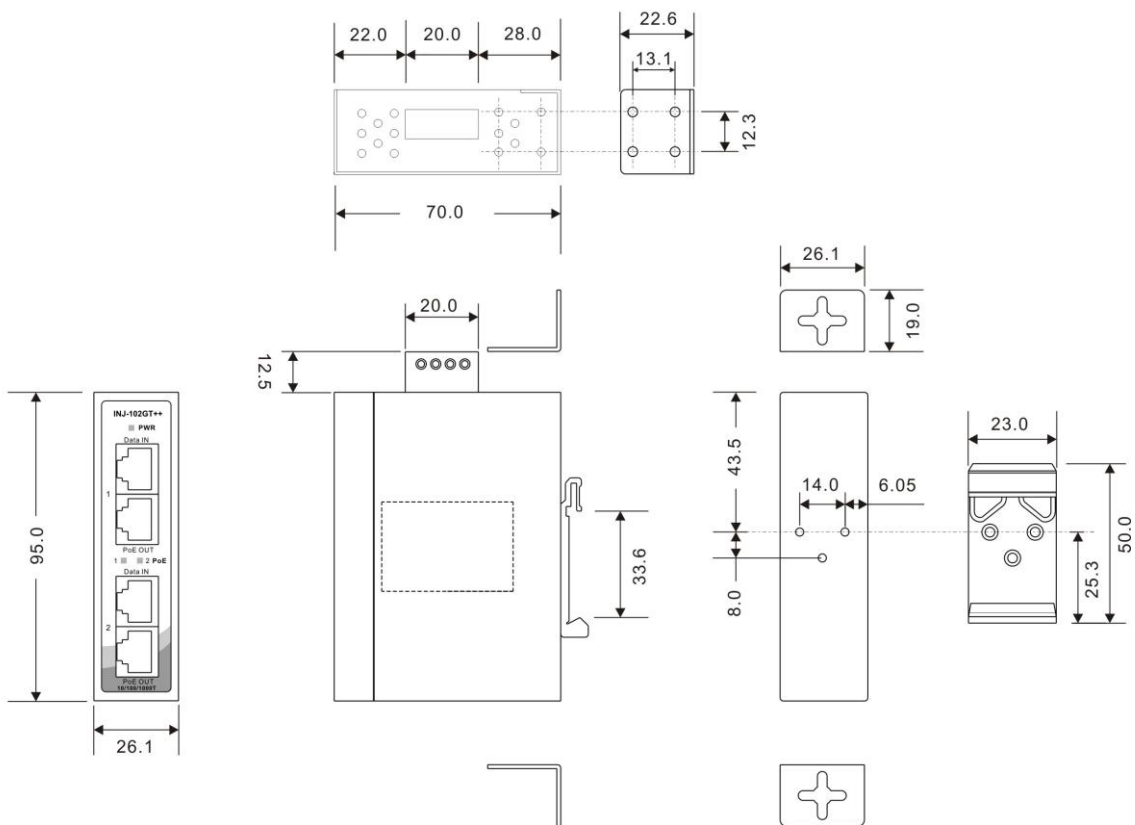
**Note1: The equipment being powered must be fully IEEE 802.3at/802.3af compliant in order for the power supply to be able to sense the PoE devices signature and apply power. Power is supplied on Ethernet pins 1/2 (V+) and 3/6 (V-).**

**Dimension**

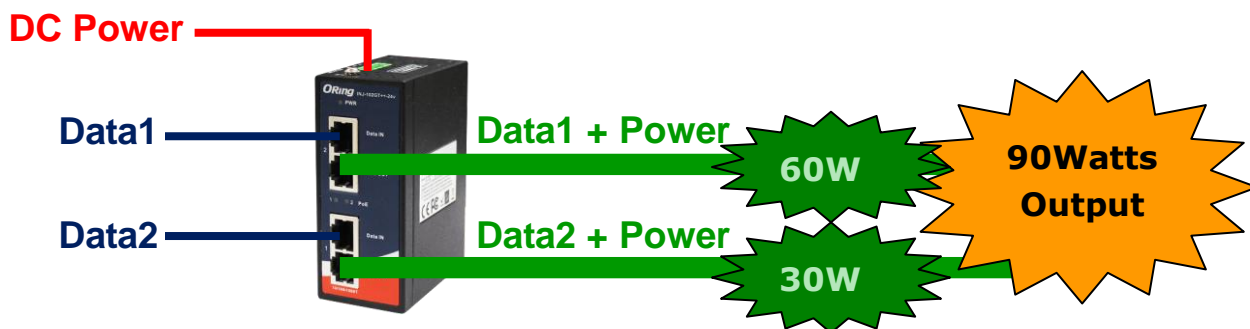
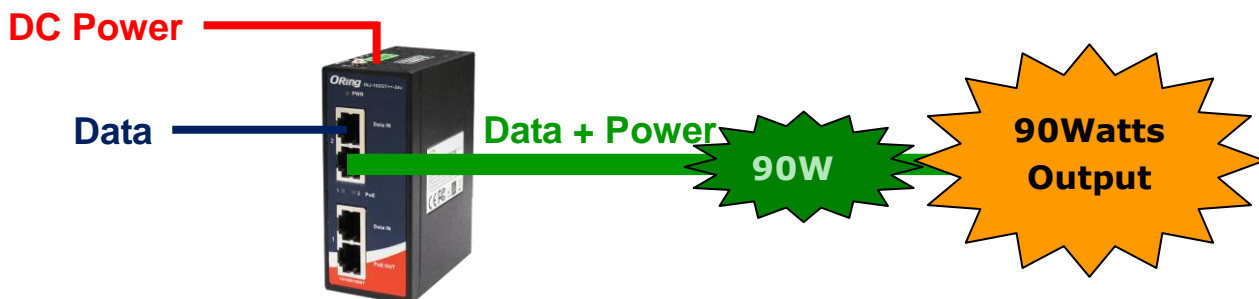
Dimension (Unit =mm)



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## Application



## Connector and Pin Definition

### 1000 Base-T

Pin	RJ-45 Input (Data Only)		RJ-45 Output (Data and Power)	
	Symbol	Description	Symbol	Description
1	BI_DA+	Data BI_DA+	BI_DA+ (Vdc1+)	Data BI_DA+ and Feeding Power(+)
2	BI_DA-	Data BI_DA-	BI_DA- (Vdc1+)	Data BI_DA- and Feeding Power(+)
3	BI_DB+	Data BI_DB+	BI_DB+ (Vdc1-)	Data BI_DB+ and Feeding Power(-)
4	BI_DC+	Data BI_DC+	BI_DC+ (Vdc2+)	Data BI_DC+ Feeding Power(+)
5	BI_DC-	Data BI_DC-	BI_DC- (Vdc2+)	Data BI_DC- Feeding Power(+)
6	BI_DB-	Data BI_DB-	BI_DB- (Vdc1-)	Data BI_DB- and Feeding Power(-)
7	BI_DD+	Data BI_DD+	BI_DD+ (Vdc2-)	Data BI_DD+ Feeding Power(-)
8	BI_DD-	Data BI_DD-	BI_DD- (Vdc2-)	Data BI_DD- Feeding Power(-)

### 10/100 Base-TX

Pin	RJ-45 Input (Data Only)		RJ-45 Output (Data and Power)	
	Symbol	Description	Symbol	Description
1	Rx+	Data Receive	Rx+ (Vdc1+)	Data Receive and Feeding power(+)
2	Rx-	Data Receive	Rx- (Vdc1+)	Data Receive and Feeding power(+)
3	Tx+	Data Transmit	Tx+ (Vdc1-)	Data Transmit and Feeding power(-)
4	NC	Not Connected	NC (Vdc2+)	Not Connected Feeding power(+)
5	NC	Not Connected	NC (Vdc2+)	Not Connected Feeding power(+)
6	Tx-	Data Transmit	Tx- (Vdc1-)	Data Transmit and Feeding power(-)
7	NC	Not Connected	NC (Vdc2-)	Not Connected Feeding power(-)
8	NC	Not Connected	NC (Vdc2-)	Not Connected Feeding power(-)

## Specifications

ORing Injector Model	INJ-102GT++	INJ-102GT++-24V
<b>Physical Ports</b>		
RJ-45 Ethernet Port Input		2
RJ-45 Ethernet Port with P.S.E. Output		2
<b>Operating Voltage</b>		
Input Voltage	50 ~ 57 Vdc	24 ~ 50 Vdc
Output Power	57V / 1579mA, 180 Watts max <sup>[Note2]</sup> . (Total of 2 ports)	50V / 1800mA, 90 Watts max <sup>[Note2]</sup> . (Total of 2 ports)
<b>LED Indicators</b>		
Power Indicator	PWR: 1 x LED Green On: Power is on and functioning Normally.	
PoE Indicators	2 x LED Blue On: PoE Device Link Blue Off : None PoE Device Detected	
<b>Protection</b>		
Short Circuit Protection	Present	
Over Load Protection	Present	
<b>Physical Characteristic</b>		
Enclosure	IP-30	
Dimension (W x D x H)	26.1(W)x70(D)x95(H)mm (1.03 x 2.76 x 3.74 inch)	41(W)x70(D)x95(H) mm (1.61 x 2.75 x 3.74 inch.)
Weight (g)	300g	369g
<b>Environmental</b>		
Storage Temperature	-40 to 80°C (-40 to 176°F)	
Operating Temperature	-25 to 70°C (-13 to 158°F)	
Operating Humidity	5% to 90% Non-condensing	
<b>Regulatory Approvals</b>		
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	IEC60068-2-31	
Vibration	IEC60068-2-6	
Safety	EN60950-1	
Warranty	5 years	

**Note 2: LTPoE+ +™ PSE technology is applied on this product. Only when an LTPoE+ +™ Powered Device (PD) is attached can the PSE port deliver up to 90W of output power.**

## Ordering Information

### INJ-102GT++

Available Model	Model Name	Description
	INJ-102GT++	Industrial 2-port Gigabit High Power PoE++ Injector
	INJ-102GT++-24V	Industrial 2-port Gigabit High Power PoE++ Injector, 24VDC Input

## Packing List

- INJ-102GT++ x 1
- DIN-Rail Kit x 1
- Wall-mount Kit x 1

## Optional Accessories

- DR-75-48 : 75 Watts DIN-Rail power supply
- DR-120-48 : 120 Watts DIN-Rail power supply