

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 90Watts 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















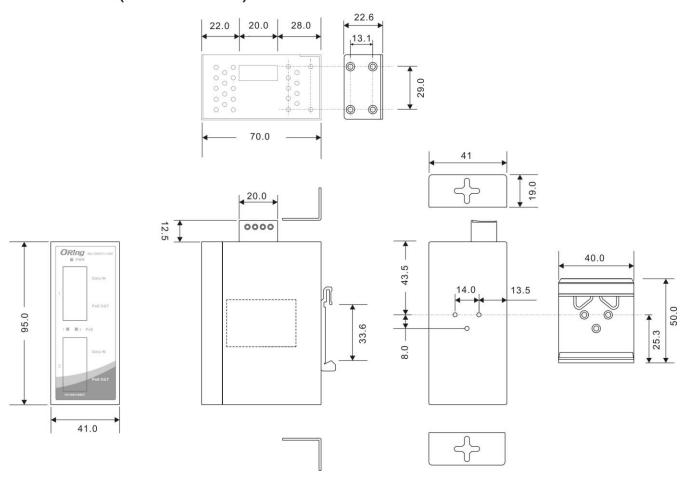
Introduction

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 $24 \sim 57 \text{Vdc}$ power input with boosting circuit, the total output power can be up to $90 \text{Watts}^{[\text{Note2}]}$ for all ports usage. Tthe 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.

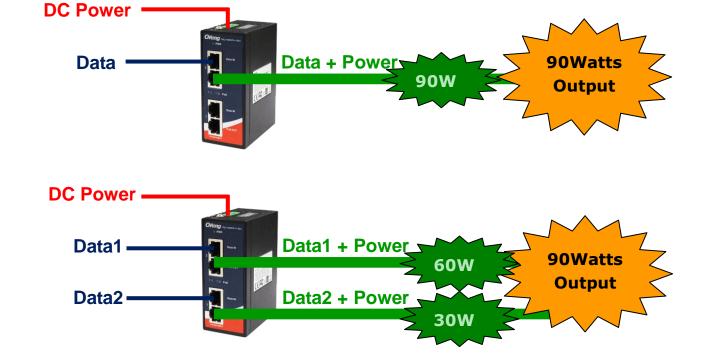
Note1: The equipment being powered must be fully IEEE 802.3at/802.3af compliant in order for the power supply to be able to sense the PoE devices signature and apply power. Power is supplied on Ethernet pins 1/2 (V+) and 3/6 (V-).

Dimension

Dimension (Unit =mm)



Application



Connector and Pin Definition

1000 Base-T

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

10/100 Base-TX

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

Specifications

ORing Injector Model	INJ-102GT++	INJ-102GT++-24V		
Physical Ports				
RJ-45 Ethernet Port Input	P.S.E. 2			
RJ-45 Ethernet Port with P.S.E. Output				
Operating Voltage				
Input Voltage	50 ~ 57 Vdc	24 ~ 50 Vdc		
Output Power	57V / 1579mA, 90 Watts max ^[Note2] . (Total of 2 ports)	50V / 1800mA, 90 Watts max ^(Note2) . (Total of 2 ports)		
LED Indicators				
Power Indicator	PWR: 1 x LED Green On: Power is on and functioning Normally. 2 x LED Blue On: PoE Device Link Blue Off: None PoE Device Detected			
PoE Indicators				
Protection				
Short Circuit Protection	Present			
Over Load Protection	Present			
Physical Characteristic				
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)	369g	300g		
Environmental				
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			
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	ock IEC60068-2-27			
Free Fall	Fall IEC60068-2-32			
Vibration	ation 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 Name	Description
	Model	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