

# INJ-101GT++-60W



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## Industrial 1-port Gigabit High Power PoE++ Injector

### Features

- PoE++ Injector for 1x10/100/1000Base-T(X)
- 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 60 Watts for all ports usage.
- Provided DIP switch configurator for PoE mode management
- High reliability and rigid IP-30 housing
- DIN-Rail and Wall Mount Design



### Introduction

The INJ-101GT++ 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 1-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-101GT++ 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-101GT++ PoE Injector can function with any PoE P.D. equipment which is fully compliant with the IEEE 802.3af/at PoE standards, and provide the DIP switch configurator for High power PoE management.

**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+), 3/6 (V-)**

### Application



Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

Industrial Cellular VPN Router

Industrial M2M Gateway

Accessories

Network Management Software

## Connectors and Pin Definitions

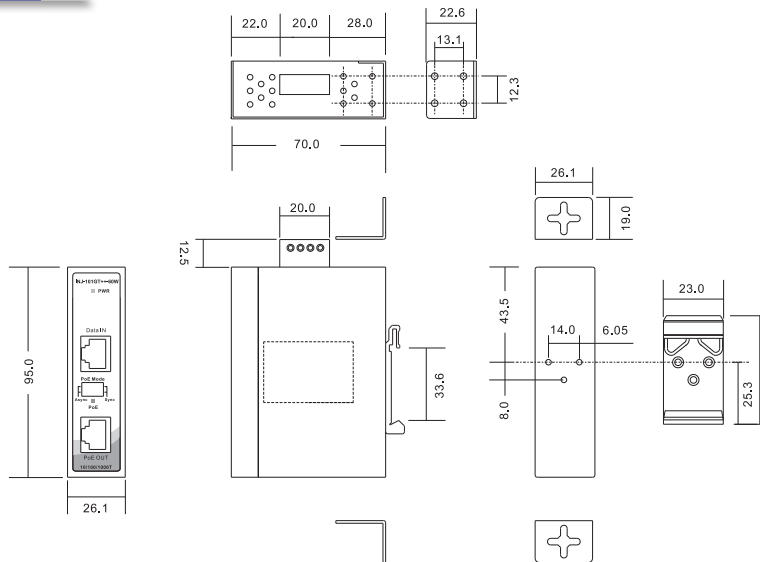
### 1000 Base-T

Pin No.	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 No.	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(-)

## Dimensions



(Unit=mm)

## Specifications

ORing Injector Model	INJ-101GT++-60W
<b>Physical Ports</b>	
RJ-45 Ethernet Port Input	1
RJ-45 Ethernet Port with P.S.E. Output	1

Operating Voltage	
Input Voltage	50 ~ 57 VDC on 4-pin terminal block
LED Indicators	
Power Indicator	PWR: 1 x LED Green On: Power is on and functioning Normally.
PoE Indicators	1 x LED Blue On: PoE Device Link Off : None PoE Device Detected Blink (Blue) : Overload present
PoE Mode	
DIP Switch 1/2 <sup>[Note1]</sup>	DIP Switch 1/2 (OFF): PoE P.S.E set to master and Asynchronize mode. DIP Switch 1/2 (ON) : PoE P.S.E set to Synchronize mode (default)
Power	
Input Power	50 ~ 57 VDC on 4-pin terminal block
Power Consumption	1 Watts (Not include PD's device)
PoE Power Budget	60 Watts max
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)
Weight (g)	188g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 75°C (-40 to 167°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMC	EN55032, EN55024(CE EMC), FCC Part 15B, EN61000-3-2, EN61000-3-3
EMI	CISPR 32, EN55032, FCC Part 15B 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 (PFMF), EN61000-4-11 (DIP)
Shock	IEC60068-2-27
Free Fall	IEC60068-2-31
Vibration	IEC60068-2-6
Safety	EN60950-1
MTBF	3923869 hrs
Warranty	5 years

**Note1:** (1) By default, the output value of the high power PoE++ is in Sync mode which supports PoE af/at-compliant P.D. devices.  
 (2) If you cannot enable the 60W PTZ camera, please set the DIP switch to Async mode and reconnect power. This mode only supports Dual P.D mode. You may not connect to an af/at-compliant P.D. device with this mode.

## Ordering Information

### INJ-101GT++-60W

Available Model	Model Name	Description
	INJ-101GT++-60W	Industrial 1-port Gigabit High Power PoE++ Injector
<b>Packing List</b>		<b>Optional Accessories (Can be purchased separately)</b>
<ul style="list-style-type: none"> <li>INJ-101GT++-60W x 1</li> <li>QIG x 1</li> <li>DIN-Rail Kit x 1</li> <li>Wall-mount Kit x 1</li> </ul>		<ul style="list-style-type: none"> <li>DR/SDR/DRP series DIN-Rail power supply</li> </ul>