

# INJ-101GT++-60W



INJ-101GT++-60W

## 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

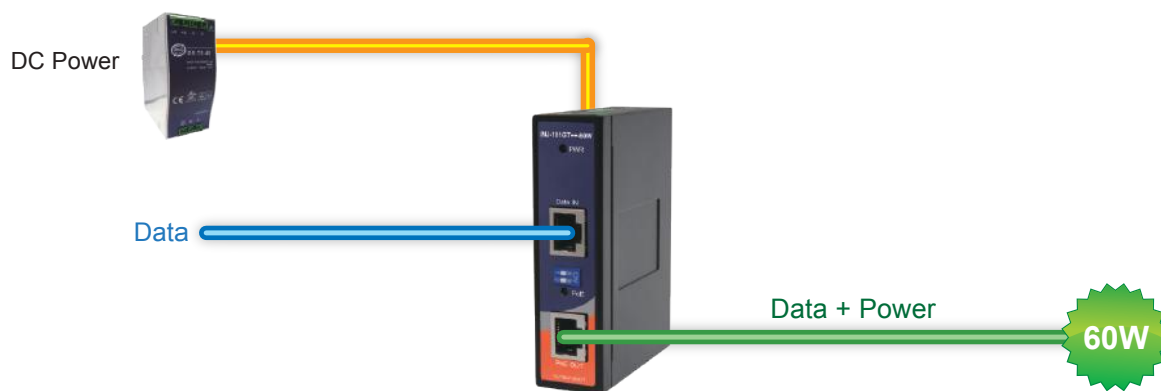


### Introduction

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



## Connectors and Pin Definitions

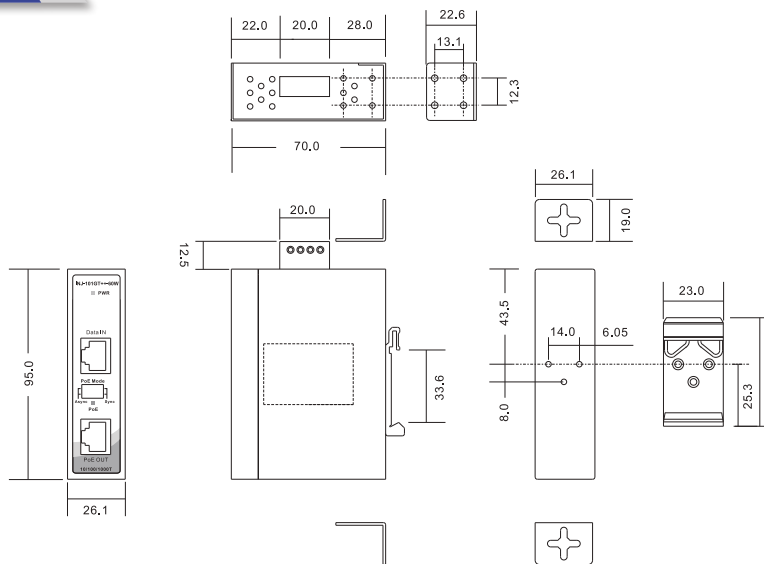
### 1000 Base-T

| 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 |
|--|-----------------|
| Physical Ports                         |                 |
| 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<br>Green On: Power is on and functioning Normally.   |
| PoE Indicators                    | 1 x LED<br>Blue On: PoE Device Link<br>Off : None PoE Device Detected<br>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.<br>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> |