V1.0 May, 2018



### INJ-101GT++-60W-24V

Industrial 1-port Gigabit High Power PoE++ Injector, 9 to 57VDC

### **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.
- Support wide range power input, 9 to 57VDC
- 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.

## **Application**



### **Connector and Pin Definition**

### 1000 Base-T

	RJ-45 Input (Data Only)		RJ-45 Output (Data and Power)	
Pin	Symbol	Description	Symbol	Description
-1	1 BI_DA+	Data BI_DA+	BI_DA+	Data BI_DA+ and
1			(Vdc1+)	Feeding Power(+)
2	2 BI_DA-	Data BI_DA-	BI_DA-	Data BI_DA- and
			(Vdc1+)	Feeding Power(+)
3 B	DI DD I	Data BI_DB+	BI_DB+	Data BI_DB+ and
3	BI_DB+		(Vdc1-)	Feeding Power(-)
4	BI DC+	Data BI_DC+	BI_DC+	Data BI_DC+
4	BI_DC+		(Vdc2+)	Feeding Power(+)
5	RI DC-	_DC- Data BI_DC-	BI_DC-	Data BI_DC-
3	DI_DC-		(Vdc2+)	Feeding Power(+)
6	DI DB	BI_DB- Data BI_DB-	BI_DB-	Data BI_DB- and
0	BI_DB-		(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(-)

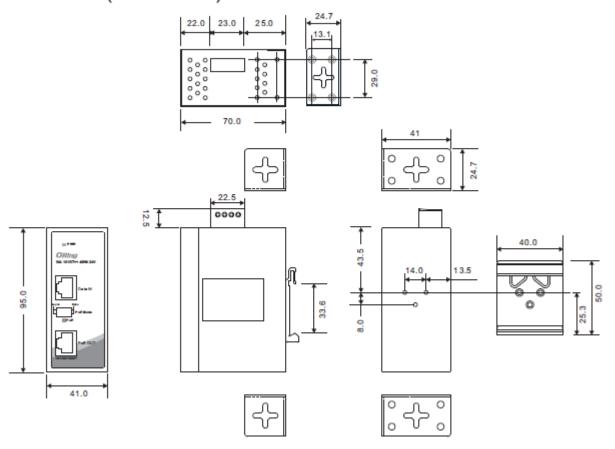
#### 10/100 Base-TX

	RJ-45 Input (Data Only)		RJ-45 Output (Data and Power)	
Pin	Symbol	Description	Symbol	Description
1	1 Rx+	Data Receive	Rx+	Data Receive and
1			(Vdc1+)	Feeding power(+)

2 Rx-	Dv-	Data Receive	Rx-	Data Receive and
	KX-		(Vdc1+)	Feeding power(+)
3	Tx+	Data Transmit	Tx+	Data Transmit and
3	IXT		(Vdc1-)	Feeding power(-)
4 1	NC	Not Connected	NC	Not Connected
4	NC		(Vdc2+)	Feeding power(+)
5	NC	Not Connected	NC	Not Connected
	3 NC		(Vdc2+)	Feeding power(+)
6	Tx-	Data Transmit	Tx-	Data Transmit and
0	0 12-		(Vdc1-)	Feeding power(-)
7	NC	Not Connected	NC	Not Connected
			(Vdc2-)	Feeding power(-)
8	NC	Not Connected	NC	Not Connected
			(Vdc2-)	Feeding power(-)

## **Dimension**

# Dimension (Unit =mm)



### **Specifications**

ORing Injector Model	INJ-101GT++-60W-24V	
Physical Ports		
RJ-45 Ethernet Port Input	í	
RJ-45 Ethernet Port with P.S.E.	1	
Output	1	
Operating Voltage		
Input Voltage	9 ~ 57 VDC on 4-pin terminal block	
LED Indicators		
Power Indicator	PWR: 1 x LED	
rower indicator	Green On: Power is on and functioning Normally.	
	1 x LED	
PoE Indicators	Blue On: PoE Device Link	
	Off: None PoE Device Detected	
DIP Switch	Blink (Blue) : Overload present	
DIP Switch 1/2	DIP Switch 1/2 (OFF): PoE P.S.E set to master and Asyncronize mode.	
*note1	DIP Switch 1/2 (ON): PoE P.S.E set to Master and Asyncronize mode.	
Power	Diff Smeet 1/2 (ON) 1102 11312 See to Syncholings model deliable)	
Input Power	9 ~ 57 VDC on 4-pin terminal block	
Power Consumption	1 Watts (Not include PD's device)	
PoE Power Budget	30Watt at 9~24VDC, 60Watt at 24~57VDC	
Protection	·	
Short Circuit Protection	Present	
Over Load Protection	Present	
Physical Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	41(W)x70(D)x95(H)mm (1.03 x 2.76 x 3.74 inch)	
Weight (g)	318g	
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	CE EMC (EN55024,EN 55032), FCC Part 15 B	
EMI	EN55032, CISPR 32, EN61000-3-2, EN61000-3-3, FCC Part 15 B class A	
FMC	EN55024 (IEC/EN 61000-4-2 (ESD), IEC/EN 61000-4-3 (RS), IEC/EN 61000-4-4 (EFT),	
EMS	IEC/EN61000-4-5 (Surge), IEC/EN 61000-4-6 (CS), IEC/EN 61000-4-8 (PFMF), IEC/EN 61000-4-11 (DIP))	
Shock	IEC60068-2-27	
Free Fall	IEC60068-2-31	
Vibration	IEC60068-2-6	
Safety	EN60950-1	
MTBF	2067004hrs	
Warranty	5 years	

<sup>\*</sup>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-24V

Available	Model Name	Description
Model	INJ-101GT++-60W-24V	Industrial 1-port Gigabit High Power PoE++ Injector, 9 to 57VDC

### **Packing List**

- INJ-101GT++-60W-24V x 1
- DIN-Rail Kit x 1

Wall-mount Kit x 1

QIG x 1

### **Optional Accessories**

DR/SDR/DRP series DIN-Rail power supply