**INJ-102GT-24V** 



# Industrial Ethernet Switch



# Support Features • PoE+Injector for 1x10/100/1000 Base-T(X) • Fully compliant with IEEE802.3at/802.3af standard • Auto protection for Over Voltage Power Input and over current output • Supports Power Output up to 30Watts per port • Supports Wide Power Input range from 12Vdc to 57VDC • IP-30 Rugged Case Design • DIN-Rail and Wall Mount Design

### Introduction

The INJ-102GT-24V PoE Injector is an advanced IEEE802.3at compliant device with 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. Because of this intelligent detection, only an IEEE 802.3at/802.3af compliant device can be powered with the INJ-102GT-24V 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-102GT-24V PoE Injector can function with any PoE P.D. equipment which is fully compliant with the IEEE 802.3at/802.3af PoE standards.

## Note: 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-).



### Dimensions



(Unit=mm)

### **Connectors and Pin Definitions**

### 1000 Base-T

	R	J-45 Output (Data and Power)	RJ-45 Input (Data Only)	
Pin No.	Symbol	Description	Symbol	Description
1	BI_DA+(Vdc+)	Data BI_DA+ and Feeding Power(+)	BI_DA+	Data BI_DA+
2	BI_DA-(Vdc+)	Data BI_DA- and Feeding Power(+)	BI_DA-	Data BI_DA-
3	BI_DB+(Vdc-)	Data BI_DB+ and Feeding Power(-)	BI_DB+	Data BI_DB+
4	BI_DC+	Data BI_DC+	BI_DC+	Data BI_DC+
5	BI_DC-	Data BI_DC-	BI_DC-	Data BI_DC-
6	BI_DB-(Vdc-)	Data BI_DB- and Feeding Power(-)	BI_DB-	Data BI_DB-
7	BI_DD+	Data BI_DD+	BI_DD+	Data BI_DD+
8	BI_DD-	Data BI_DD-	BI_DD-	Data BI_DD-

### 10/100 Base-T

	R	J-45 Output (Data and Power)	RJ-45 Input (Data Only)	
Pin No.	Symbol	Description	Symbol	Description
1	Rx+ (VDC+)	Data Receive and Feeding power(+)	Rx+	Data Receive
2	Rx- (VDC+)	Data Receive and Feeding power(+)	Rx-	Data Receive
3	Tx+ (VDC-)	Data Transmit and Feeding power(-)	Tx+	Data Transmit
4	NC	Not Connected	NC	Not Connected
5	NC	Not Connected	NC	Not Connected
6	Tx- (VDC-)	Data Transmit and Feeding power(-)	Tx-	Data Transmit
7	NC	Not Connected	NC	Not Connected
8	NC	Not Connected	NC	Not Connected

Note: pins 3 and 6 (-Vdc) should not be shorted to ground

### Specifications

ORing Injector Model	INJ-102GT-24V		
Physical Ports			
RJ-45 Ethernet Port Input	2		
RJ-45 Ethernet Port with P.S.E. Output	2		
Operating Voltage			
Input Voltage	12 ~ 57 Vdc on 4-pin terminal block		
Output Power	50V / 600mA, 30 Watts max. Per port		
LED Indicator			
Power Indicator	PWR / Ready: 1 x LED Green On: Power is on and functioning Normally.		
PoE Indicators	2 x LED Blue On: PoE Device Link Blue Blinking: Detecting PoE Device Blue Off : None PoE Device Detected		
Protection			
Short Circuit Protection	Present		
Over Load Protection	Present		
High Voltage Protection	Present		
Physical Characteristics			
Enclosure	IP-30		
Dimension (W x D x H)	41(W)x70(D)x95(H) mm (1.61 x 2.75 x 3.74 inch.)		
Weight (g)	370g		
Environmental			
Storage Temperature	-40 to 80°C (-40 to 176°F)		
Operating Temperature	-20 to 70°C (-4 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	IEC60068-2-27		
Free Fall	IEC60068-2-32		
Vibration	IEC60068-2-6		
Safety	EN60950-1		
Warranty	2 years		

### INJ-102GT-24V

Available	Model Name	Description	
Model	INJ-102GT-24V	Industrial 2-port Gigabit High Power PoE Injector, 12V~57V Input Support	
Packing List <ul> <li>INJ-102GT-24V</li> <li>DIN-Rail Kit</li> <li>Wall-mount Kit</li> <li>Quick Installation Guide</li> </ul>		<ul> <li>Optional Accessories (Can be purchased separately)</li> <li>DR-75-48 : 75 Watts DIN-Rail power supply</li> <li>DR-120-48 : 120 Watts DIN-Rail power supply</li> </ul>	