

# INJ-IX01-PB & INJ-IX01-2PB

- ◀ 1x port Industrial 10M/100M/1G/2.5G/5G/10G IEEE802.3af/at/bt PoE type 4 Injector (90W/port)
- ▶ 2x port Industrial 10M/100M/1G/2.5G/5G/10G IEEE802.3af/at/bt PoE type 4 Injector (180W, 90W/port)

NEW



- PoE power budget maximum 90W/port
- Compliant with 10/100/1G/2.5G/5G/10GBase-T(X) & IEEE802.3af/at/bt type 4 PoE
- Railway EN50121-4, Heavy industrial EN61000-6-2, EN61000-6-4, CE, FCC certified



Ver.2022 Jan

These industrial grade PoE injectors, the INJ-IX01-PB and INJ-IX01-2PB, feature 1/2x port(s) PoE PSE over 10M/100M/1G/2.5G/5G/10G Ethernet. PoE describes a system to pass electrical power safely, along with data, on Ethernet cabling. These injectors support the IEEE802.3bt PoE standard, provides up to 90W of DC power to each PD device, while still maintaining backward compatibility with 802.3af/at PoE standards. Housed in a rugged DIN rail or wall mountable enclosure, this product is designed for harsh environments, such as industrial networking, security, intelligent transportation systems (ITS) and is also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications. Standard operating temperature range models (-10 to 60°C) and wide operating temperature range models (-40 to 75°C) fulfill the special needs of industrial automation applications.

## Features

- Provides 1x port IEEE 802.3at/af/bt type 4 PoE Injector (INJ-IX01-PB)
- Provides 2x port IEEE 802.3at/af/bt type 4 PoE Injector (INJ-IX01-2PB)
- Wide operating temperature -40 ~ 75°C
- IP30 rugged metal housing and fanless

## Specifications

<b>IEEE Standard</b>	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3bz 2.5GBase-T, 5GBase-T IEEE 802.3an 10GBase-T															
<b>PoE Standard</b>	IEEE802.3bt, IEEE 802.3at, IEEE802.3af															
<b>PoE &amp; RJ-45 Pin Assignment</b>	Provides 2/4 pairs PoE Positive (V+): RJ-45 pin 1, 2, 4, 5 Negative (V-): RJ-45 pin 3, 6, 7, 8 Ethernet Data (1, 2, 3, 6, 4, 5, 7, 8)															
<b>Network Connector</b>	Per port provide 1 RJ-45 for Ethernet data, and 1 RJ-45 for Ethernet data with PoE Output power															
<b>Network Cable</b>	Supports 100 meter for below cable, please see Figure: Above Cat.5e UTP/STP cable for 10/100/1G/2.5GBase-T Above Cat.6 UTP/STP cable for 5GBase-T Above Cat.6A UTP/STP cable for 10GBase-T															
<b>LED</b>	Per unit: PWR1, PWR2 (Green) for Power status PoE (Green) per port ON : PoE on Blinking : PoE off															
<b>Reverse Polarity Protection</b>	Supported for power input															
<b>Overload Current Protection</b>	Supported															
<b>Power Supply</b>	Redundant Dual 48V (44~57VDC) Input Power (Removable Terminal Block) Below recommended is for different PoE application 54~57VDC VDC for 90W (4 Pairs) PoE application 52~57VDC for 60W (4 Pairs) PoE application 52~57VDC for 30W (2 Pairs) PoE application 44~57VDC for 15.4W (2 Pairs) PoE application															
<b>PoE Power Budget</b>	90W/port ,total 90W (INJ-IX01-PB) 90W/port ,total 180W (INJ-IX01-2PB)															
<b>Power Consumption</b>	<table border="1"> <thead> <tr> <th>Model</th> <th>Input Voltage</th> <th>Total Power Consumption</th> <th>Device Power Consumption</th> <th>PoE Power Budget</th> </tr> </thead> <tbody> <tr> <td>INJ-IX01-PB</td> <td>54 VDC</td> <td>94.5W</td> <td>1.5W</td> <td>90W</td> </tr> <tr> <td>INJ-IX01-2PB</td> <td>54 VDC</td> <td>188W</td> <td>1.6W</td> <td>180W</td> </tr> </tbody> </table>	Model	Input Voltage	Total Power Consumption	Device Power Consumption	PoE Power Budget	INJ-IX01-PB	54 VDC	94.5W	1.5W	90W	INJ-IX01-2PB	54 VDC	188W	1.6W	180W
Model	Input Voltage	Total Power Consumption	Device Power Consumption	PoE Power Budget												
INJ-IX01-PB	54 VDC	94.5W	1.5W	90W												
INJ-IX01-2PB	54 VDC	188W	1.6W	180W												
<b>Removable Terminal Block</b>	Provides 4 Pin for redundant power 1 and Power 2 input connection															

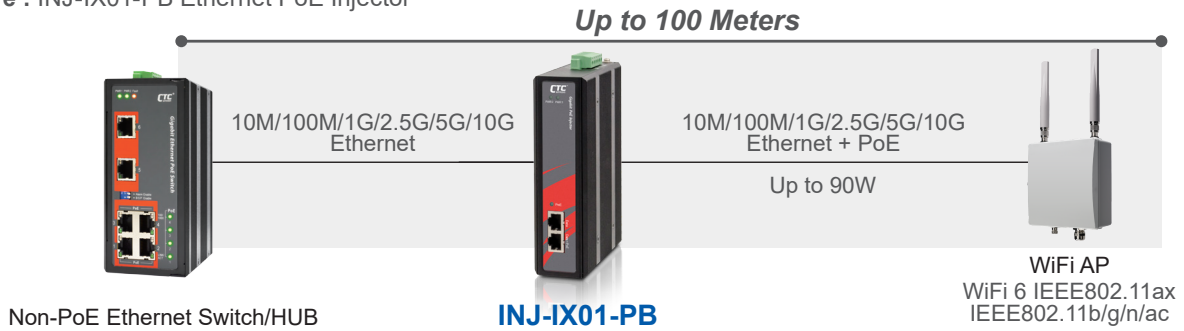
<b>Operating Temperature</b>	-10 ~ 60°C (INJ-IX01-PB, INJ-IX01-2PB) -40 ~ 75°C (INJ-IX01-PBE, INJ-IX01-2PBE)
<b>Operating Humidity</b>	5% to 95% (Non-condensing)
<b>Storage Temperature</b>	-40 ~ 85°C
<b>Housing</b>	Rugged Metal, IP30 Protection and fanless
<b>Dimensions</b>	106 x 38.6 x 152 mm (D x W x H)
<b>Weight</b>	555g (INJ-IX01-PB(E)), 565g (INJ-IX01-2PB(E))
<b>Installation Mounting</b>	DIN Rail mounting, and Wall Mounting (Optional)
<b>MTBF</b>	3,150,660 Hours (INJ-IX01-PB), 2,165,510 Hours (INJ-IX01-2PB) (MIL-HDBK-217)
<b>Warranty</b>	5 years
<b>Certification</b>	
<b>EMC</b>	CE (EN55032, EN55035)
<b>EMI</b>	FCC Part 15 Subpart B Class A, CE
<b>Railway Traffic</b>	EN50121-4
<b>Immunity for Heavy Industrial environment</b>	EN 61000-6-2
<b>Emission for Heavy industrial environment</b>	EN 61000-6-4
<b>EMS (Electromagnetic Susceptibility) Protection Level</b>	EN61000-4-2 (ESD) Level 3, Criteria B EN61000-4-3 (RS) Level 3, Criteria A EN61000-4-4 (EFT) Level 3, Criteria A EN 61000-4-5 (Surge) Level 3, Criteria B EN 61000-4-6 (CS) Level 3, Criteria A EN61000-4-8 (PFMF) Field strength 300A/m Criteria A
<b>Safety</b>	EN62368-1 (Pending)
<b>Surge Protection</b>	4KV for PoE and UTP
<b>Shock</b>	IEC 60068-2-27
<b>Freefall</b>	IEC 60068-2-31
<b>Vibration</b>	IEC 60068-2-6

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Industrial 10G PoE Injector INJ-IX01-PB & INJ-IX01-2PB

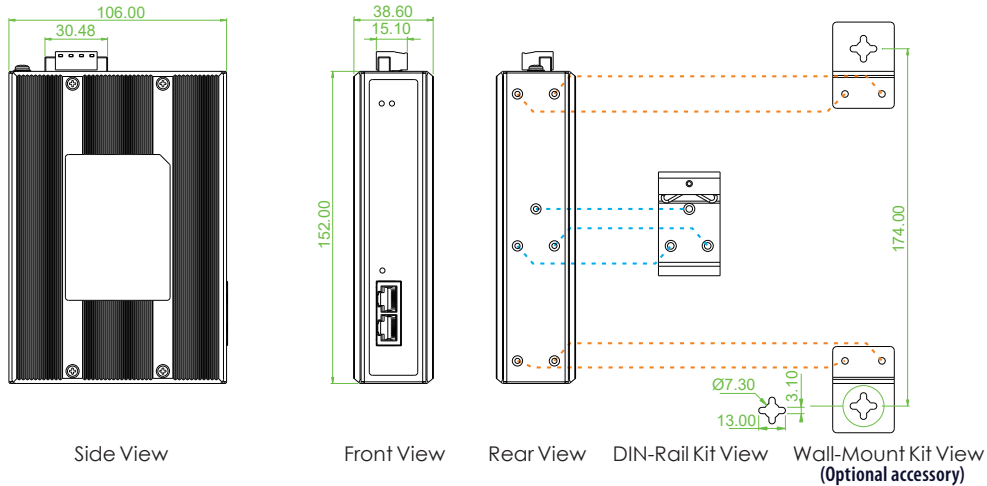
## Application

Figure : INJ-IX01-PB Ethernet PoE Injector

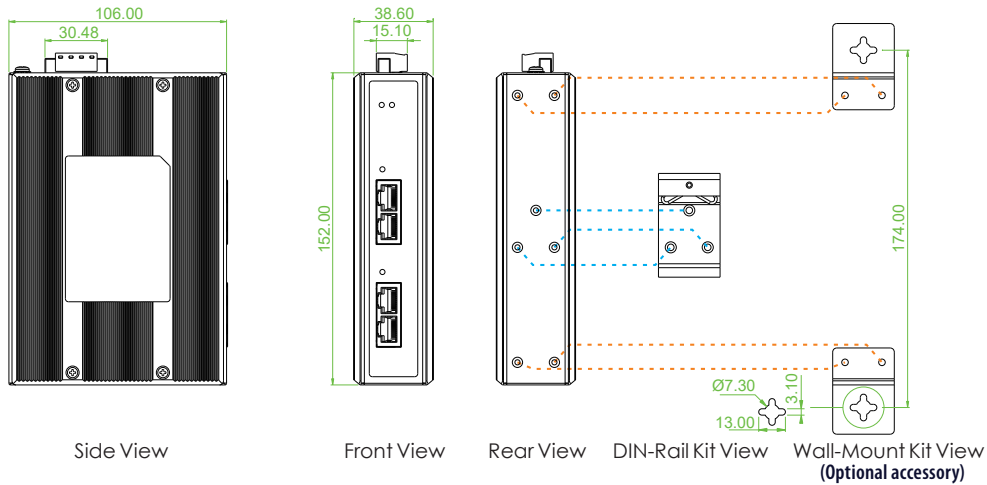


## Dimensions

INJ-IX01-PB



INJ-IX01-2PB



## Ordering Information

Model Name	Ethernet port		Ethernet with PoE port		Power Input		Certification			Operating Temperature
	10/100/1G/2.5G/5G/10G Base-T(X)	IEEE802.3af/at/bt (PSE)	Power Budget	Redundant	EN50121-4	EN61000-6-2 EN61000-6-4	CE/FCC			
INJ-IX01-PB	1	1	90W	48VDC	V	V	V	V	-10~60°C	
INJ-IX01-PBE	1	1	90W	48VDC	V	V	V	V	-40~75°C	
INJ-IX01-2PB	2	2	180W (90W/port)	48VDC	V	V	V	V	-10~60°C	
INJ-IX01-2PBE	2	2	180W (90W/port)	48VDC	V	V	V	V	-40~75°C	

### Package List

- PoE injector device
- Terminal block
- Din Rail with screws

## Optional Accessories

### Wall Mount Kit

IND-WMK05 Wall Mount kit for Industrial product (2pcs in 1 set, 42x30mm)

### Industrial Power Supply

NDR-240-48 Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 240W, -20 ~ +70°C (For INJ-IX01-2PB)  
 NDR-120-48 Industrial Power, Input 90 ~ 264VAC/127 ~ 370VDC, Output 48VDC, 120W, -20 ~ +70°C (For INJ-IX01-PB)

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