

INJ-24 Series

Gigabit IEEE 802.3af/at PoE+ injectors



Features and Benefits

- PoE+ injector for 10/100/1000M networks; injects power and sends data to PDs (power devices)
- IEEE 802.3af/at compliant; supports a full 30 watt output
- 24/48 VDC wide range power input
- -40 to 75°C operating temperature range (-T model)

Certifications



Introduction

The INJ-24 is a Gigabit IEEE 802.3at PoE+ injector that combines power and data and delivers them to a powered device over one Ethernet cable. Designed for use with power-hungry devices, the INJ-24 injector provides PoE of up to 30 watts. The -40 to 75°C (-40 to 167°F) operating temperature capability makes the INJ-24 ideally suited to operating in harsh industrial environments.

Specifications

Ethernet Interface

10/100/1000BaseT(X) Ports (RJ45 connector)	1 Full/Half duplex mode Auto MDI/MDI-X connection Auto negotiation speed
PoE Ports (10/100/1000BaseT(X), RJ45 connector)	1 Full/Half duplex mode Auto MDI/MDI-X connection Auto negotiation speed
PoE Pinout	V+, V+, V-, V-, for pins 4, 5, 7, 8 (Midspan, MDI, Mode B)
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT(X) IEEE 802.3af/at for PoE/PoE+ output

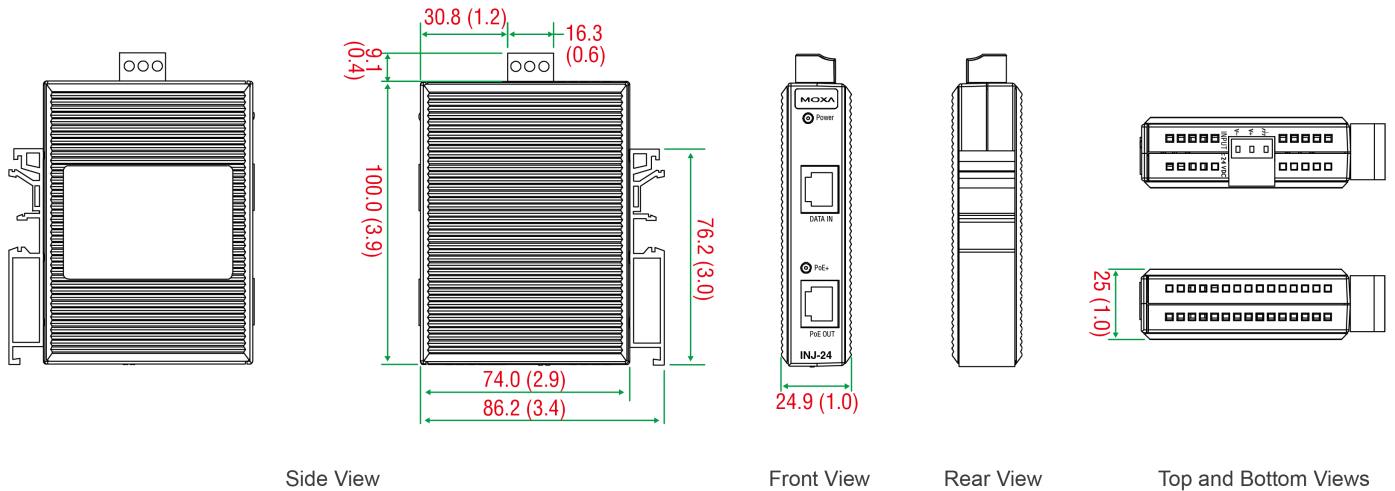
Power Parameters

Input Voltage	24/48 VDC
Operating Voltage	22 to 57 VDC
Input Current	1.42 A @ 24 VDC
Power Consumption (Max.)	Max. 4.08 W full loading without PDs' consumption
Power Budget	Max. 30 W for total PD consumption Max. 30 W for each PoE port
Connection	1 removable 3-contact terminal block(s)

Overload Current Protection	Supported
Reverse Polarity Protection	Supported
Physical Characteristics	
Housing	Plastic
IP Rating	IP30
Dimensions	24.9 x 100 x 86.2 mm (0.98 x 3.93 x 3.39 in)
Weight	115 g (0.26 lb)
Installation	DIN-rail mounting
Environmental Limits	
Operating Temperature	INJ-24: 0 to 60°C (32 to 140°F) INJ-24-T: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Standards and Certifications	
Safety	UL 508, EN 60950-1
EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Freefall	IEC 60068-2-31
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6
MTBF	
Time	2,525,278 hrs
Standards	Telcordia (Bellcore), GB
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x INJ-24 Series PoE+ injector
Documentation	1 x quick installation guide 1 x product certificates of quality inspection, Simplified Chinese 1 x product notice, Simplified Chinese 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	10/100/1000BaseT(X) Ports RJ45 Connector	PoE Ports, 10/100/1000BaseT(X) RJ45 Connector	Operating Temp.
INJ-24	1	1	0 to 60°C
INJ-24-T	1	1	-40 to 75°C

Accessories (sold separately)

Power Supplies

DR-120-24	120W/2.5A DIN-rail 24 VDC power supply with universal 88 to 132 VAC or 176 to 264 VAC input by switch, or 248 to 370 VDC input, -10 to 60°C operating temperature
DR-4524	45W/2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 50°C operating temperature
DR-75-24	75W/3.2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 60°C operating temperature
DR-120-48	120W/2.5A DIN-rail 48 VDC power supply with universal 88 to 132 VAC or 176 to 264 VAC input by switch, or 248 to 370 VDC input, -10 to 60°C operating temperature
DR-75-48	75W/1.6A DIN-rail 48 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 60°C operating temperature
MDR-40-24	DIN-rail 24 VDC power supply with 40W/1.7A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
MDR-60-24	DIN-rail 24 VDC power supply with 60W/2.5A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
DRP-240-48	DIN-rail 48 VDC power supply with 240W/5A, 85 to 264 VAC, or 120 to 370 VDC input, -10 to 70°C operating temperature
SDR-480P-48	DIN-rail 48 VDC power supply with 480W/10A, 90 to 264 VAC, or 127 to 370 VDC input, (current sharing up to 3840 W), -25 to 70°C operating temperature

Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit
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