

INJ-24A Series

Gigabit high-power IEEE 802.3af/at PoE+ injectors



Features and Benefits

- High-power mode provides up to 60 W
- DIP switch configurator and LED indicator for PoE management
- 3 kV surge resistance for harsh environments
- Mode A and Mode B selectable for flexible installation
- Built-in 24/48 VDC booster for redundant dual power inputs
- -40 to 75°C operating temperature range (-T model)

Certifications



Introduction

The INJ-24A is a Gigabit high-power PoE+ injector that combines power and data and delivers them to a powered device over one Ethernet cable. Designed for power-hungry devices, the INJ-24A injector provides up to 60 watts, which is twice as much power as conventional PoE+ injectors. The injector also includes features such as a DIP switch configurator and LED indicator for PoE management, and it can also support 24/48 VDC power inputs for power redundancy and operational flexibility. The -40 to 75°C (-40 to 167°F) operating temperature capability makes the INJ-24A 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	Default: V+, V+, V-, V- for pins 4, 5, 7, 8 (Midspan, MDI, Mode B) Custom DIP switch setting: V+, V+, V-, V- for pins 1, 2, 3, 6 (Endspan, MDI, Mode A)
Standards	IEEE 802.3 for 10BaseT IEEE 802.3ab for 1000BaseT(X) IEEE 802.3af/at for PoE/PoE+ output IEEE 802.3u for 100BaseT(X)

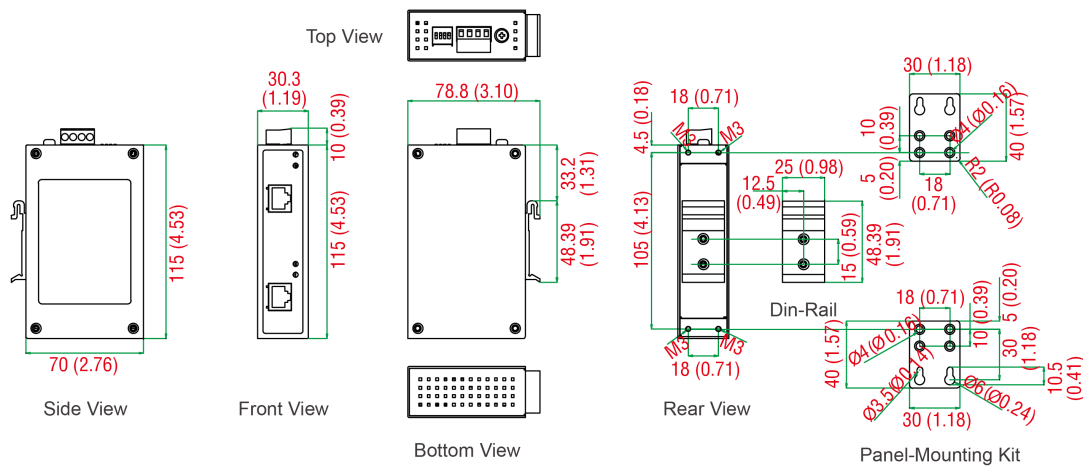
Power Parameters

Input Voltage	24/48 VDC
Operating Voltage	22 to 57 VDC
Input Current	2.71 A @ 24 VDC
Power Consumption (Max.)	Max. 5.29 W full loading without PDs' consumption
Power Budget	Max. 60 W for total PD consumption Max. 60 W for each PoE port

Connection	1 removable 4-contact terminal block(s)
Overload Current Protection	Supported
Reverse Polarity Protection	Supported
Physical Characteristics	
Housing	Metal
IP Rating	IP30
Dimensions	30 x 115 x 78.8 mm (1.19 x 4.53 x 3.10 in)
Weight	245 g (0.54 lb)
Installation	DIN-rail mounting, Wall mounting (with optional kit)
Environmental Limits	
Operating Temperature	INJ-24A: 0 to 60°C (32 to 140°F) INJ-24A-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: 20 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 3 kV; Signal: 3 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	2,407,739 hrs
Standards	Telcordia (Bellcore), GB
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x INJ-24A 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-24A	1	1	0 to 60°C
INJ-24A-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

Wall-Mounting Kits

WK-30	Wall-mounting kit, 2 plates, 4 screws, 40 x 30 x 1 mm
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Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit
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