

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 |

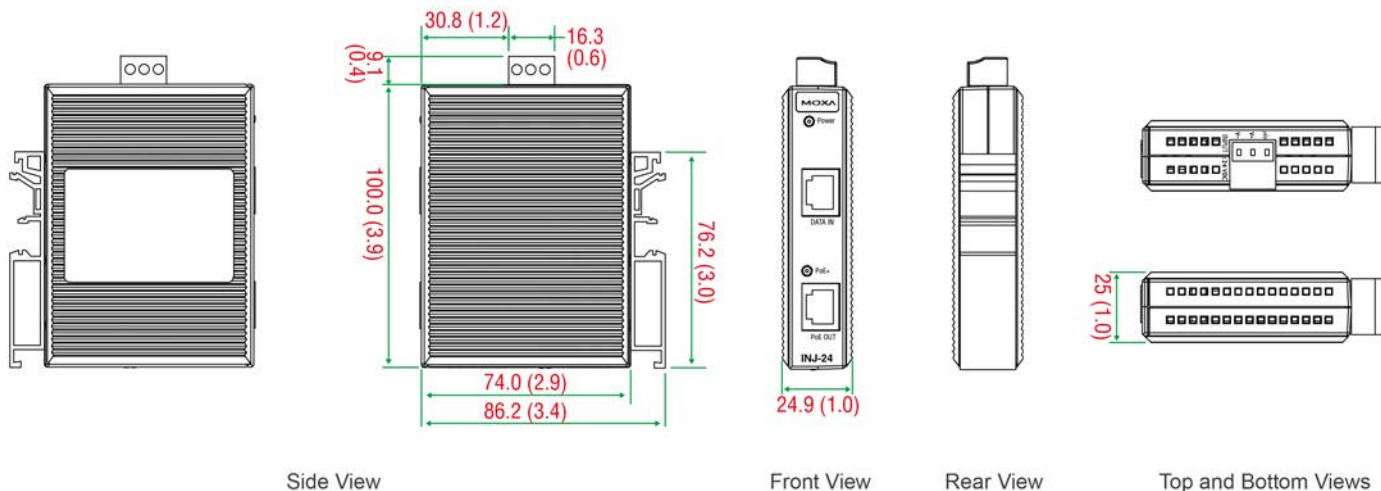
Power Parameters

| | |
|--------------------------|---|
| 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 |
|-------|---------------------------|