

# EDS-P308 Series

## 8-port PoE unmanaged Ethernet switches



- > 4 IEEE 802.3af compliant PoE and Ethernet combo ports
- > Up to 15.4 watts at 48 VDC per PoE port
- > Intelligent power consumption detection and classification
- > Redundant dual VDC power inputs
- > -40 to 75°C operating temperature range (T models)



### Introduction

The EDS-P308 switches are smart, 8-port, unmanaged Ethernet switches supporting PoE (Power-over-Ethernet) on ports 1 to 4. The switches are classified as power source equipment (PSE), and when used in this way, the EDS-P308 switches enable centralization of the power supply and provide up to 15.4 watts of power per port. The switches can be used to power IEEE 802.3af compliant powered

devices (PD), eliminating the need for additional wiring, and support IEEE 802.3/802.3u/802.3x with 10/100M, full/half-duplex, MDI/MDI-X auto-sensing to provide an economical solution for your industrial Ethernet network. In addition, the built-in relay warning function alerts network engineers when power failures or port breaks occur.

### Specifications

#### Technology

##### Standards:

IEEE 802.3af for Power-over-Ethernet  
 IEEE 802.3 for 10BaseT  
 IEEE 802.3u for 100BaseT(X)  
 IEEE 802.3x for Flow Control

**Processing Type:** Store and Forward

**Flow Control:** IEEE 802.3x flow control, back pressure flow control

#### Switch Properties

**MAC Table Size:** 1 K

**Packet Buffer Size:** 512 Kbit

#### Interface

**Fiber Ports:** 100BaseFX ports (SC connector)

**RJ45 Ports:** 10/100BaseT(X) auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection

**DIP Switches:** Port break alarm mask

**LED Indicators:** PWR1, PWR2, FAULT, 10/100M, PoE

**Alarm Contact:** 1 relay output with current carrying capacity of 0.5 A @ 48 VDC

#### Optical Fiber

	100BaseFX	
	Multi-mode	Single-mode
Wavelength	1300 nm	1310 nm
Max. TX	-10 dBm	0 dBm
Min. TX	-20 dBm	-5 dBm
RX Sensitivity	-32 dBm	-34 dBm
Link Budget	12 dB	29 dB
Typical Distance	5 km <sup>a</sup> 4 km <sup>b</sup>	40 km <sup>c</sup>
Saturation	-6 dBm	-3 dBm

a. 50/125 μm, 800 MHz\*km fiber optic cable  
 b. 62.5/125 μm, 500 MHz\*km fiber optic cable  
 c. 9/125 μm single-mode fiber optic cable

#### Power Requirements

**Input Voltage:** 48 (46 to 50 V) VDC, redundant inputs

**Input Current:** Max. 1.6 A @ 48 V (supports up to 4 ports at 15.4 W per PoE port)

**Overload Current Protection:** 2.5 A @ 48 VDC

**Connection:** 1 removable 6-contact terminal block

**Reverse Polarity Protection:** Present

#### Physical Characteristics

**Housing:** Metal, IP30 protection

**Dimensions:** 53.6 × 135 × 105 mm (2.11 × 5.31 × 4.13 in)

**Weight:** 840 g

**Installation:** DIN-Rail mounting, wall mounting (with optional kit)

## Environmental Limits

### Operating Temperature:

Standard Models: 0 to 60°C (32 to 140°F)

Wide Temp. Models: -40 to 75°C (-40 to 167°F)

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

## Standards and Certifications

Safety: UL 508

EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A

EMS:

EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3,

EN 61000-4-4 (EFT) Level 4, EN 61000-4-5 (Surge) Level 4,

EN 61000-4-6 (CS) Level 3, EN61000-4-8

Marine: DNV, GL, LR, ABS, NK

Shock: IEC 60068-2-27

Freefall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Note: Please check Moxa's website for the most up-to-date certification status.

**MTBF** (mean time between failures)

Time: 360,000 hrs

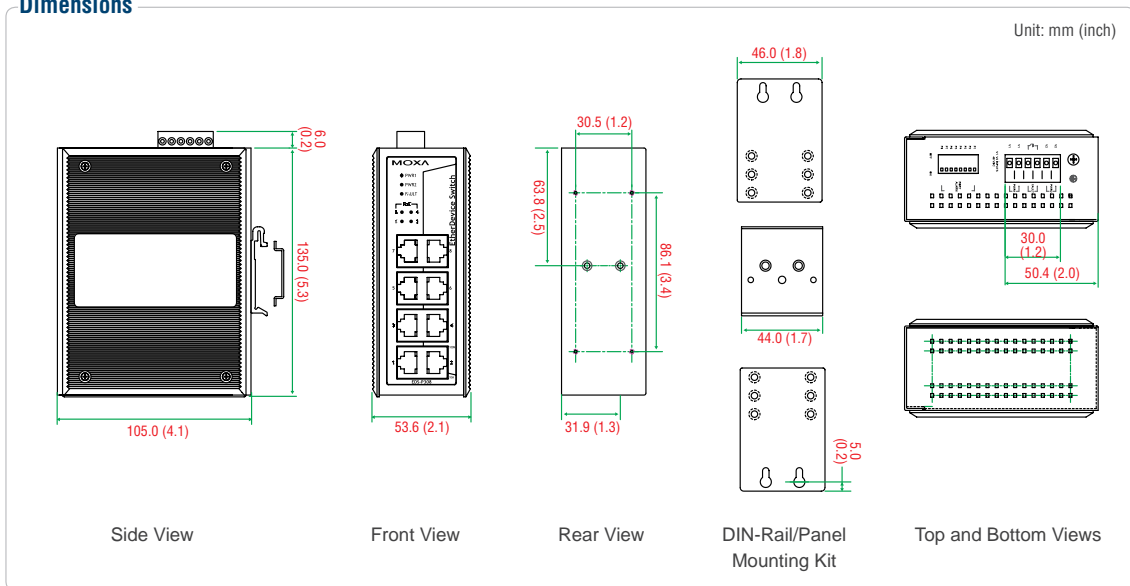
Database: Telcordia (Bellcore), GB

## Warranty

Warranty Period: 5 years

Details: See [www.moxa.com/warranty](http://www.moxa.com/warranty)

## Dimensions



## Ordering Information

Available Models		Port Interface			
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 75°C)	10/100BaseT(X)	PoE, 10/100BaseT(X)	100BaseFX	
				Multit-mode, SC Connector	Single-mode, SC Connector
EDS-P308	EDS-P308-T	4	4	-	-
EDS-P308-M-SC	EDS-P308-M-SC-T	3	4	1	-
EDS-P308-S-SC	EDS-P308-S-SC-T	3	4	-	1
EDS-P308-MM-SC	EDS-P308-MM-SC-T	2	4	2	-
EDS-P308-SS-SC	EDS-P308-SS-SC-T	2	4	-	2

### Optional Accessories (can be purchased separately)

**DR-75-48/120-48:** 75/120 W DIN-Rail 48 VDC power supplies

**WK-46:** Wall mounting kit

**RK-4U:** 4U-high 19" rack mounting kit

### Package Checklist

- EDS-P308 switch
- Protective caps for unused ports
- Hardware installation guide (printed)
- Warranty card

# INJ-24 Series

## IEEE 802.3af/at Gigabit PoE+ Injectors



- > PoE injector for 10/100/1000M networks; inject power and data to PD (Power Device) equipment
- > 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)



### Specifications

#### Technology

##### Standards:

IEEE 802.3af/at for Power-over-Ethernet  
 IEEE 802.3 for 10BaseT  
 IEEE 802.3u for 100BaseT(X)  
 IEEE 802.3ab for 1000BaseT(X)

##### Interface

**RJ45 Ports:** 10/100/1000BaseT(X) for PoE OUT and DATA IN  
**LED Indicators:** Power, PoE

##### Power Requirements

**Input Voltage:** 24/48 (20 to 60 V) VDC, redundant inputs  
**Input Current:** Max. 1.3 A @ 24 VDC (supports up to 4 ports at 30 watts per PoE port)  
**Overload Current Protection:** Present  
**Connection:** 1 removable 3-contact terminal block  
**Reverse Polarity Protection:** Present

##### Physical Characteristics

**Housing:** Plastic, IP30 protection  
**Dimensions:** 24.9 × 100 × 86.2 mm (0.98 × 3.93 × 3.39 in)  
**Weight:** 115 g  
**Installation:** DIN-Rail mounting

#### Environmental Limits

##### Operating Temperature:

Standard Models: 0 to 60°C (32 to 140°F)  
 Wide Temp. Models: -40 to 75°C (-40 to 167°F)  
**Storage Temperature:** -40 to 85°C (-40 to 185°F)  
**Ambient Relative Humidity:** 5 to 95% (non-condensing)

##### Standards and Certifications

**Safety:** UL 508  
**EMI:** FCC Part 15 Subpart B Class A, EN 55022 Class A  
**EMS:**  
 EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3,  
 EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3,  
 EN 61000-4-6 (CS) Level 3, EN 61000-4-8  
**Rail Traffic:** EN 50121-4 (Pending)  
**Shock:** IEC 60068-2-27  
**Freefall:** IEC 60068-2-32  
**Vibration:** IEC 60068-2-6  
 Note: Please check Moxa's website for the most up-to-date certification status.

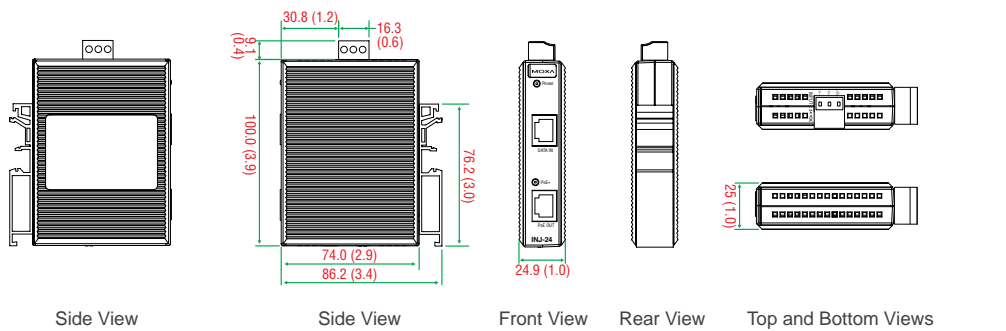
##### MTBF (mean time between failures)

**Time:** 2,500,000 hrs  
**Database:** Telcordia (Bellcore), GB

##### Warranty

**Warranty Period:** 5 years  
**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

### Dimensions



### Ordering Information

#### Available Models

**INJ-24:** PoE+ Injector, maximum output of 30 W at 24/48 VDC, 0 to 60°C operating temperature  
**INJ-24-T:** PoE+ Injector, maximum output of 30 W at 24/48 VDC, -40 to 75°C operating temperature

#### Package Checklist

- INJ-24 PoE+ injector
- Hardware installation guide (printed)
- Warranty card

# SPL-24 Series

## PoE splitters



- > IEEE 802.3af compliant; splits power and data from PoE equipment
- > Supports output power up to 12.95 W at 24 VDC
- > Short circuit protection for power output
- > -40 to 75°C operating temperature range (T model)
- > DIN-Rail mounting ability



## Specifications

### Technology

#### Standards:

IEEE 802.3af for Power-over-Ethernet  
 IEEE 802.3 for 10BaseT  
 IEEE 802.3u for 100BaseT(X)

#### Interface

**RJ45 Ports:** 10/100BaseT(X) for PoE IN and DATA OUT

**LED Indicators:** Power

#### Power Requirements

**Input Voltage:** 44 to 75 VDC (PoE)

**Output Voltage:** 24 VDC

**Overload Current Protection:** 400 mA @ 48 VDC input

**Connection:** 1 removable 3-contact terminal block for output

**Output Power:** Max. 12.95 watts (0.54 A @ 24 VDC)

#### Physical Characteristics

**Housing:** Plastic, IP30 protection

**Dimensions:** 24.9 × 100 × 86.2 mm (0.98 × 3.93 × 3.39 in)

**Weight:** 95 g

**Installation:** DIN-Rail mounting

#### Environmental Limits

##### Operating Temperature:

Standard Models: 0 to 60°C (32 to 140°F)

Wide Temp. Models: -40 to 75°C (-40 to 167°F)

**Storage Temperature:** -40 to 85°C (-40 to 185°F)

**Ambient Relative Humidity:** 5 to 95% (non-condensing)

#### Standards and Certifications

**EMI:** FCC Part 15 Subpart B Class B, EN 55022 Class A

#### EMS:

EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3,

EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3,

EN 61000-4-6 (CS) Level 3, EN 61000-4-8

**Marine:** DNV, GL, LR, ABS, NK

**Shock:** IEC 60068-2-27

**Freefall:** IEC 60068-2-32

**Vibration:** IEC 60068-2-6

Note: Please check Moxa's website for the most up-to-date certification status.

### MTBF (mean time between failures)

Time: 5,100,000 hrs

**Database:** MIL-HDBK-217F, GB 25°C

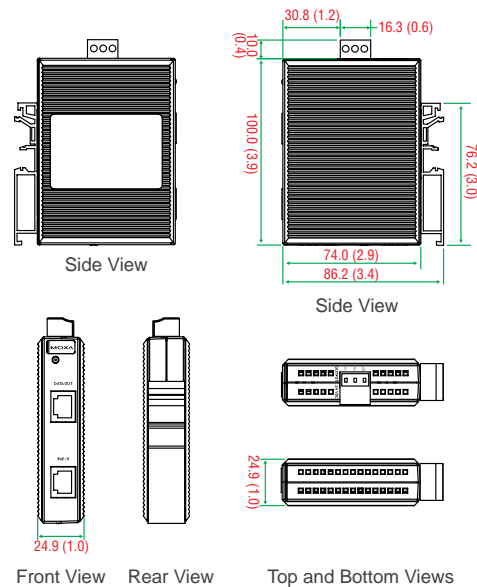
### Warranty

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

### Dimensions

Unit: mm (inch)



## Ordering Information

### Available Models

**SPL-24:** PoE splitter, maximum output of 12.95 W at 24 VDC, 0 to 60°C operating temperature

**SPL-24-T:** PoE splitter, maximum output of 12.95 W at 24 VDC, -40 to 75°C operating temperature

### Package Checklist

- SPL-24 PoE splitter
- Hardware installation guide (printed)
- Warranty card

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