

# EDS-P206A-4PoE Series

## 6-port IEEE 802.3af/at PoE+ unmanaged Ethernet switches



- > IEEE 802.3af/at compliant PoE and Ethernet combo ports
- > Up to 30 watts per PoE port
- > 24/48 VDC wide range redundant power inputs
- > Intelligent power consumption detection and classification
- > Redundant dual VDC power inputs
- > -40 to 75°C operating temperature range (T models)



### Introduction

The EDS-P206A-4PoE switches are smart, 6-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-P206A-4PoE switches enable centralization of the power supply and provide up to 30 watts of power per port. The

switches can be used to power IEEE 802.3af/at 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.

### Specifications

#### Technology

##### Standards:

IEEE 802.3af/at 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 KB

#### Interface

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

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

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

#### 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:** 24/48 (20 to 60 V) VDC, redundant inputs

**Input Current:** Max 7.5 A @ 24 VDC (supports up to 4 ports at 30 watts per PoE port)

**Overload Current Protection:** Present

**Connection:** 1 removable 4-contact terminal block

**Reverse Polarity Protection:** Present

#### Physical Characteristics

**Housing:** Metal, IP30 protection

**Dimensions:** 50.3 × 115 × 70 mm (1.98 x 4.53 x 2.76 in)

**Weight:** 375 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 (Pending)

**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, 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:** 645,000 hrs

**Database:** Telcordia (Bellcore), GB

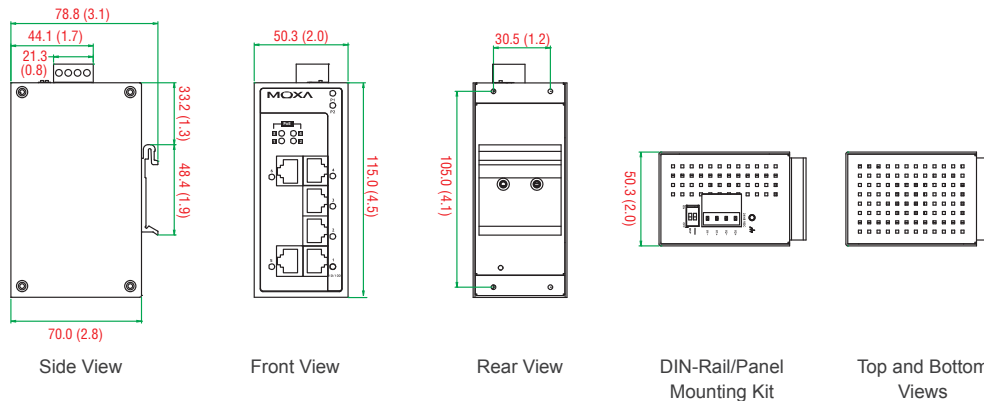
## Warranty

Warranty Period: 5 years

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

## Dimensions

Unit: mm (inch)



## Ordering Information

Available Models		Port Interface			
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 75°C)	10/100BaseT(X)	100BaseFX		
			Multit-mode, SC Connector	Multit-mode, ST Connector	Single-mode, SC Connector
EDS-P206A-4PoE	EDS-P206A-4PoE-T	6	–	–	–
EDS-P206A-4PoE-M-SC	EDS-P206A-4PoE-M-SC-T	5	1	–	–
EDS-P206A-4PoE-M-ST	EDS-P206A-4PoE-M-ST-T	5	–	1	–
EDS-P206A-4PoE-MM-SC	EDS-P206A-4PoE-MM-SC-T	4	2	–	–
EDS-P206A-4PoE-MM-ST	EDS-P206A-4PoE-MM-ST-T	4	–	2	–
EDS-P206A-4PoE-S-SC	EDS-P206A-4PoE-S-SC-T	5	–	–	1
EDS-P206A-4PoE-SS-SC	EDS-P206A-4PoE-SS-SC-T	4	–	–	2

### Optional Accessories (can be purchased separately)

**DR-75-24/120-24:** 75/120 W DIN-Rail 24 VDC power supplies

**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-P206A-4PoE 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.

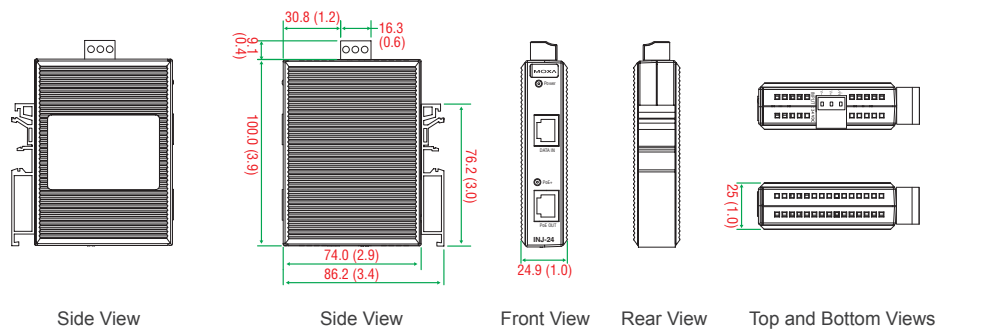
#### MTBF (mean time between failures)

- 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 x 3.93 x 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

**Safety:** UL 508 (Pending)

**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

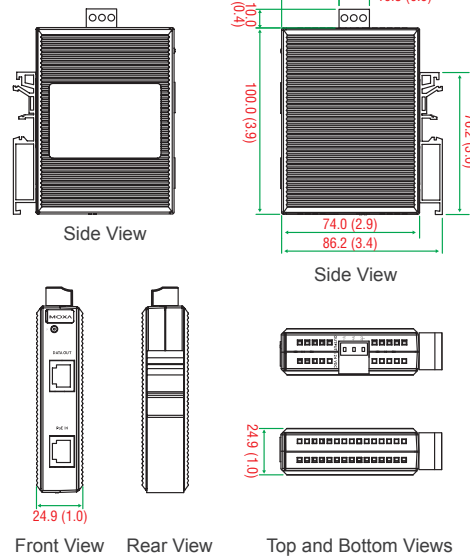
### Warranty

**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