

# 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

**PoE Pinout:** V+, V+, V-, V- for pin 1, 2, 3, 6 (Endspan, MDI Alternative A)

**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:** 406,194 hrs

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

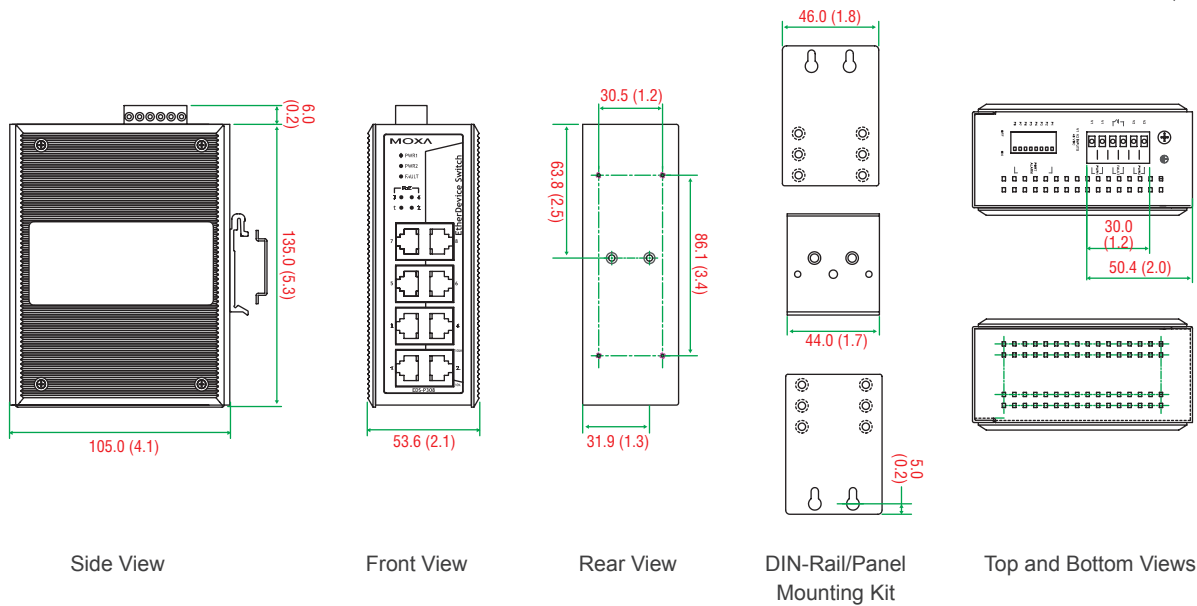
### Warranty

**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)	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

**DRP-240-48:** 240 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