EDS-P308 Series

8-port unmanaged Ethernet switches with 4 IEEE 802.3af PoE ports

> 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 [a] 4 km [b]	40 km [c]
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 dual 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 x 5.31 x 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
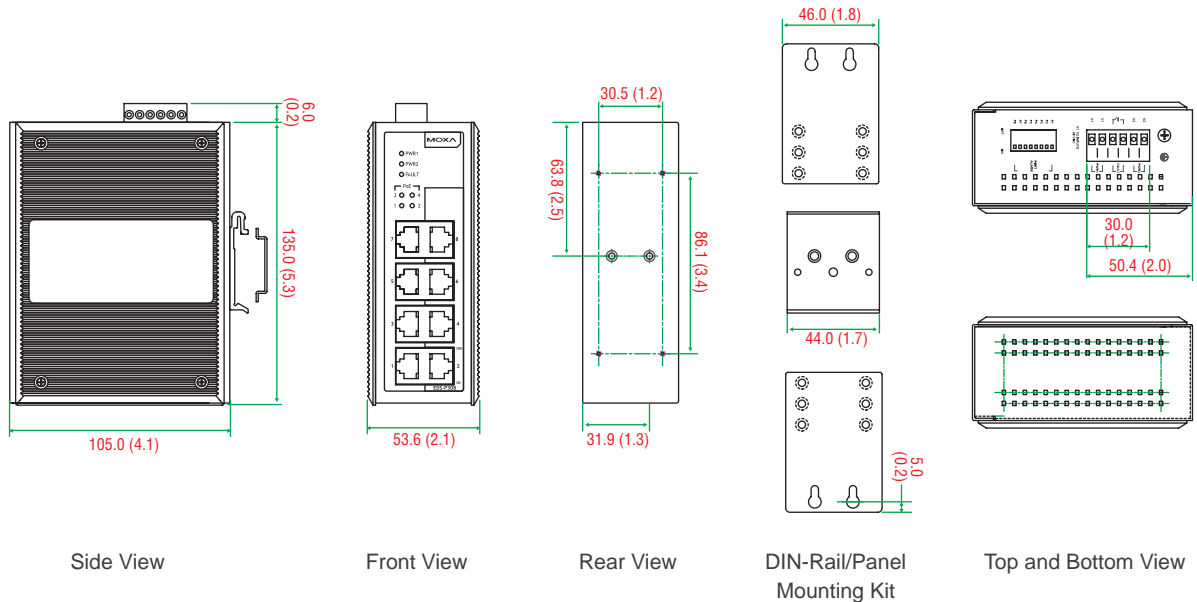**Database:** Telcordia (Bellcore), GB

Warranty

Warranty Period: 5 years
Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

Side View   Front View   Rear View   DIN-Rail/Panel Mounting Kit   Top and Bottom View

⁞ Ordering Information

Available Models		Port Interface			
				100BaseFX	
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 75°C)	10/100BaseT(X)	PoE, 10/100BaseT(X)	Mulit-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