EDS-P308 Series

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

PoE
Power over Ethernet

> 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

Switch Properties
MAC Table Size: 1 K
Packet Buffer Size: 512 kbit

Interface
RJ45 Ports: 10/100BaseT(X) auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection
Fiber Ports: 100BaseFX ports (SC connector)
PoE Pinout: V+, V+, V-, V- for pin 1, 2, 3, 6 (Endspan, MDI Alternative A)
DIP Switches: Port break alarm mask
Alarm Contact: 1 relay output with current carrying capacity of 0.5 A @ 48 VDC

Optical Fiber

		100BaseFX	
		Multi-Mode	**Single-Mode**
Fiber Cable Type		OM1	**50/125 µm** **800 MHz*km**	G.652
Typical Distance		4 km	5 km	40 km
Wave-length	Typical (nm)	1300		1310
	TX Range (nm)	1260 to 1360		1280 to 1340
	RX Range (nm)	1100 to 1600		1100 to 1600
Optical Power	TX Range (dBm)	-10 to -20		0 to -5
	RX Range (dBm)	-3 to -32		-3 to -34
	Link Budget (dB)	12		29
	Dispersion Penalty (dB)	3		1

Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power.
Note: Compute the "typical distance" of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).

Power Requirements
Input Voltage: 48 VDC, redundant dual inputs
Operating Voltage: 44 to 57 VDC
Input Current: 1.47 A @ 48 VDC
Overload Current Protection: 2.5 A @ 48 VDC
Connection: 1 removable 6-contact terminal block
Reverse Polarity Protection: Present
Power Consumption: Max. 8.96 W full loading without PDs' consumption
Power Budget:
Max. 61.6 W for total PDs' consumption
Max. 15.4 W for each PoE port

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Physical Characteristics

Housing: Metal
IP Rating: IP30 protection
Dimensions: 53.6 × 135 × 105 mm (2.11 x 5.31 x 4.13 in)
Weight: 840 g (1.86 lb)
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

Note: Please check Moxa's website for the most up-to-date certification status.
Safety: UL 508
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: 4 kV; Signal: 2 kV
IEC 61000-4-5 Surge: Power: 1 kV; Signal: 1 kV
IEC 61000-4-6 CS: Signal: 10 V
IEC 61000-4-8
Marine: DNV, GL, LR, ABS, NK
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6

MTBF (mean time between failures)

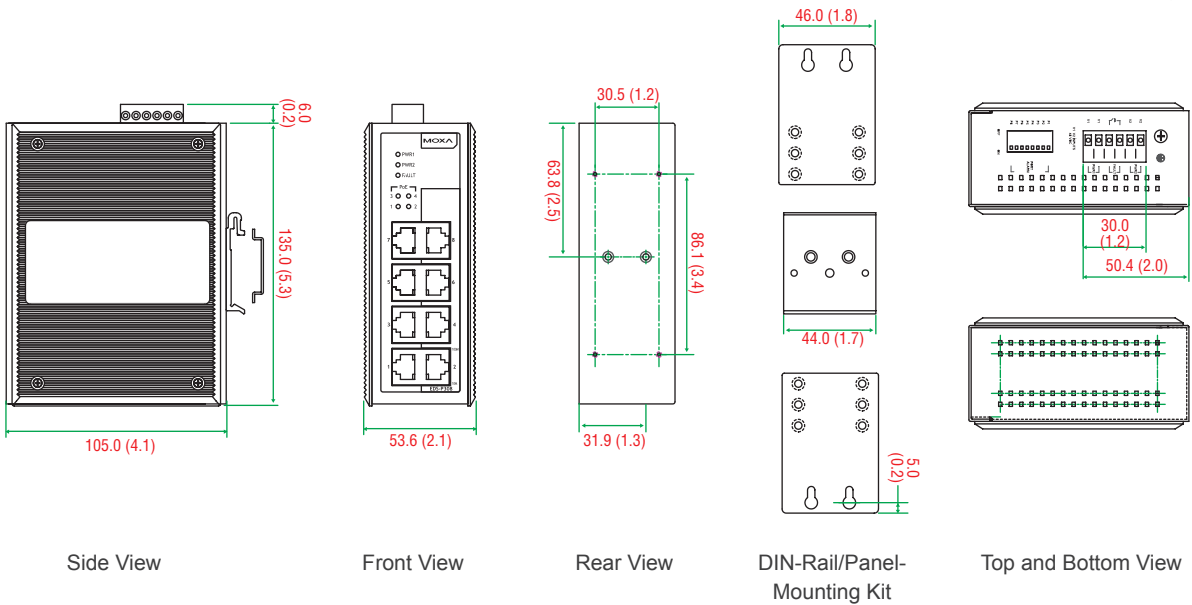**Time:** 406,194 hrs
Standard: Telcordia (Bellcore), GB

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 | | | |
| Standard Temperature (0 to 60°C) | Wide Temperature (-40 to 75°C) | 10/100BaseT(X) | PoE, 10/100BaseT(X) | 100BaseFX | |
				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
RK-4U: 4U-high 19-inch rack-mounting kit
WK-46: Wall-mounting kit, 2 plates with 8 screws

Package Checklist

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

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