

EDS-P308 Series

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



Features and Benefits

- 4 IEEE 802.3af-compliant PoE and Ethernet combo ports
- Up to 15.4 W output 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)

Certifications



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

Input/Output Interface

Alarm Contact Channels	1 relay output with current carrying capacity of 0.5A @ 48 VDC
Ethernet Interface	
10/100BaseT(X) Ports (RJ45 connector)	EDS-P308 Series: 4 EDS-P308-MM-SC/SS-SC Series: 2 EDS-P308-M-SC/S-SC Series: 3 All models support: Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
100BaseFX Ports (multi-mode SC connector)	EDS-P308-M-SC Series: 1 EDS-P308-MM-SC Series: 2
100BaseFX Ports (single-mode SC connector)	EDS-P308-S-SC Series: 1 EDS-P308-SS-SC Series: 2
PoE Ports (10/100BaseT(X), RJ45 connector)	4
Standards	IEEE 802.3 for 10BaseT IEEE 802.3x for flow control IEEE 802.3af for PoE IEEE 802.3u for 100BaseT(X)

PoE Pinout	V+, V+, V-, V- for pins 1, 2, 3, 6 (Endspan, MDI, Mode A)				
Optical Fiber			100BaseFX		
			Multi-Mode	Single-Mode	
	Fiber Cable Type	OM1	50/125 μ m	G.652	
			800 MHz x km		
	Typical Distance		4 km	5 km	40 km
	Wavelength	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
	<p>Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power.</p> <p>Note: Compute the "typical distance" of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).</p>				

Switch Properties

MAC Table Size	1 K
Packet Buffer Size	512 kbits
Processing Type	Store and Forward

DIP Switch Configuration

Ethernet Interface	Port break alarm
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Power Parameters

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

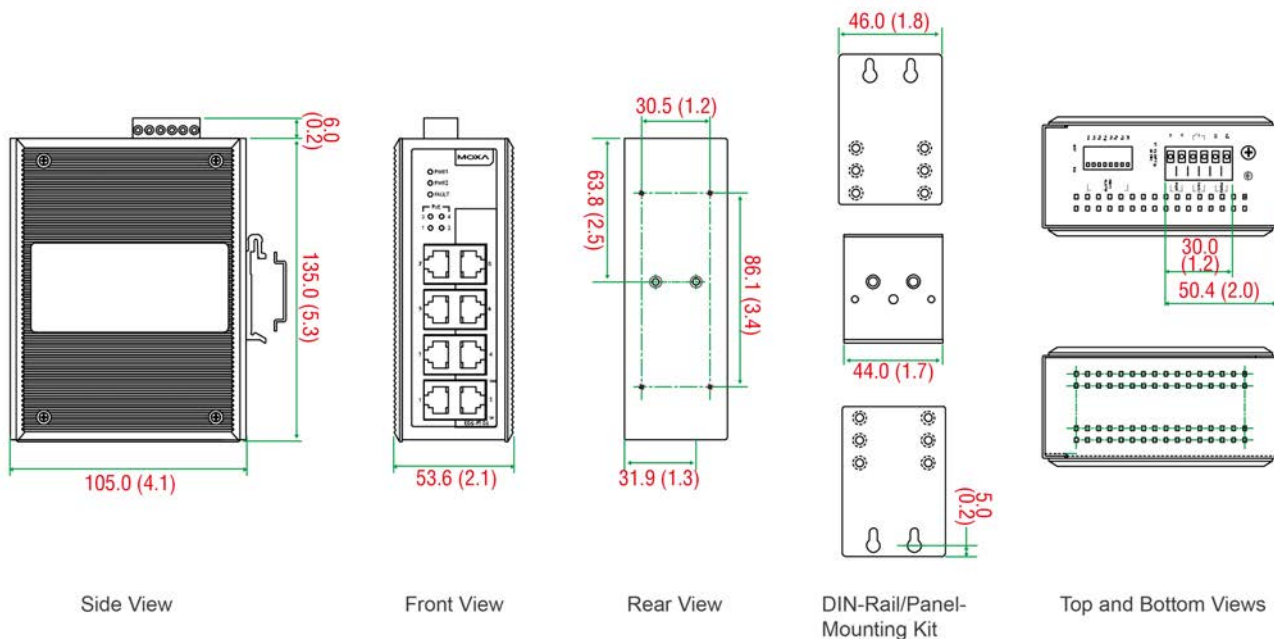
Physical Characteristics

Housing	Metal
IP Rating	IP30
Dimensions	53.6 x 135 x 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 (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Standards and Certifications	
Maritime	ABS, DNV-GL, LR, NK
EMI	CISPR 32, FCC Part 15B Class A
EMC	EN 55032/24
Vibration	IEC 60068-2-6
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: 10 V IEC 61000-4-8 PFMF
Safety	UL 508
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
MTBF	
Time	406,194 hrs
Standards	Telcordia (Bellcore), GB
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x EDS-P308 Series switch
Installation Kit	4 x cap, plastic, for RJ45 port 2 x cap, plastic, for SC fiber port (-MM/-SS models) 1 x cap, plastic, for SC fiber port (-M/S models)
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	10/100BaseT(X) Ports RJ45 Connector	PoE Ports, 10/100BaseT(X) RJ45 Connector	100BaseFX Ports Multi-Mode, SC Connector	100BaseFX Ports Single-Mode, SC Connector	Operating Temp.
EDS-P308	4	4	-	-	0 to 60°C
EDS-P308-T	4	4	-	-	-40 to 75°C
EDS-P308-M-SC	3	4	1	-	0 to 60°C
EDS-P308-M-SC-T	3	4	1	-	-40 to 75°C
EDS-P308-S-SC	3	4	-	1	0 to 60°C
EDS-P308-S-SC-T	3	4	-	1	-40 to 75°C
EDS-P308-MM-SC	2	4	2	-	0 to 60°C
EDS-P308-MM-SC-T	2	4	2	-	-40 to 75°C
EDS-P308-SS-SC	2	4	-	2	0 to 60°C
EDS-P308-SS-SC-T	2	4	-	2	-40 to 75°C

Accessories (sold separately)

Power Supplies

DR-120-48	120W/2.5A DIN-rail 48 VDC power supply with universal 88 to 132 VAC or 176 to 264 VAC input by switch, or 248 to 370 VDC input, -10 to 60°C operating temperature
DR-75-48	75W/1.6A DIN-rail 48 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 60°C operating temperature
DRP-240-48	DIN-rail 48 VDC power supply with 240W/5A, 85 to 264 VAC, or 120 to 370 VDC input, -10 to 70°C operating temperature

Wall-Mounting Kits

WK-46	Wall-mounting kit, 2 plates, 8 screws, 46.5 x 66.8 x 1 mm
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Rack-Mounting Kits

RK-4U

19-inch rack-mounting kit