

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 μm	G.652
				800 MHz x km	
	Typical Distance		4 km	5 km	40 km
	Wavelength	Typical (nm)		1300	
		TX Range (nm)		1260 to 1360	
		RX Range (nm)		1100 to 1600	
	Optical Power	TX Range (dBm)		-10 to -20	
		RX Range (dBm)		-3 to -32	
		Link Budget (dB)		12	
		Dispersion Penalty (dB)		3	
	<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
--------------------	------------------

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

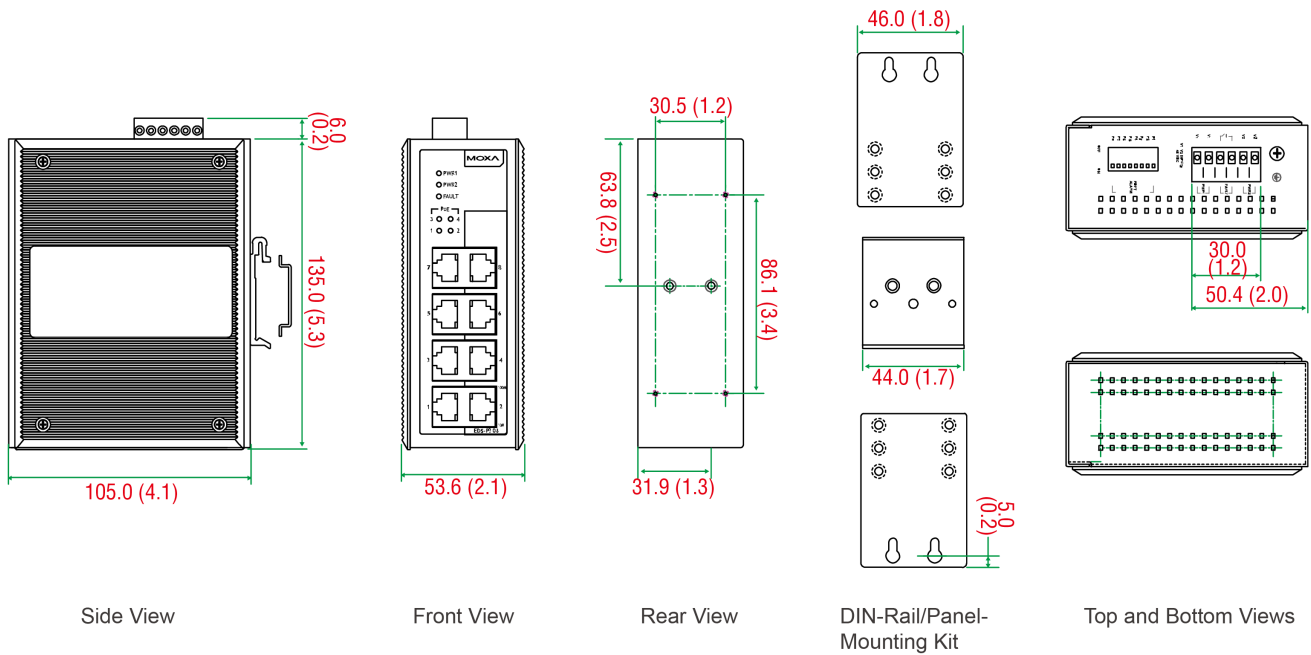
Physical Characteristics

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
-------	---

Rack-Mounting Kits

RK-4U

19-inch rack-mounting kit

© Moxa Inc. All rights reserved. Updated Nov 12, 2018.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.