

EDS-2008-ELP Series

8-port entry-level unmanaged Ethernet switches with plastic housing



Features and Benefits

- 10/100BaseT(X) (RJ45 connector)
- Compact size for easy installation
- QoS supported to process critical data in heavy traffic
- IP40-rated plastic housing
- Compliant with PROFINET Conformance Class A¹

Certifications



Introduction

The EDS-2008-ELP series of industrial Ethernet switches have eight 10/100M copper ports and a plastic housing, which are ideal for applications that require simple industrial Ethernet connections. Moreover, to provide greater versatility for use with applications from different industries, the EDS-2008-ELP Series also allows users to enable or disable the Quality of Service (QoS) function, and broadcast storm protection (BSP) with DIP switches on the outer panel.

The EDS-2008-ELP Series has a 12/24/48 VDC single power input, DIN-rail mounting, and high-level EMI/EMC capabilities. In addition to its compact size, the EDS-2008-ELP Series has passed a 100% burn-in test to ensure it will function reliably after it has been deployed. The EDS-2008-ELP Series has a standard operating temperature range of -10 to 60°C.

The EDS-2008-ELP Series is also compliant with PROFINET Conformance Class A (CC-A), making these switches suitable for PROFINET networks.

1. Only for models with hardware version 2.0.0 or later.

Specifications

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	8 Full/Half duplex mode Auto MDI/MDI-X connection Auto negotiation speed
Standards	IEEE 802.3 for 10BaseT IEEE 802.1p for Class of Service IEEE 802.3u for 100BaseT(X) IEEE 802.3x for flow control

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		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).

Switch Properties

Processing Type	Store and Forward
MAC Table Size	2 K
Packet Buffer Size	768 kbits

DIP Switch Configuration

Ethernet Interface	Quality of Service (QoS) ² , Broadcast Storm Protection (BSP)
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Power Parameters

Connection	1 removable 3-contact terminal block(s)
Input Current	0.052 A @ 24 VDC
Input Voltage	12/24/48 VDC
Operating Voltage	9.6 to 60 VDC
Overload Current Protection	Supported
Reverse Polarity Protection	Supported

2. Enabling the QoS DIP switch will also enable Multicast Filtering which will block LLDP & PROFINET PTCP-Delay traffic.

Physical Characteristics

Dimensions	36 x 81 x 65 mm (1.4 x 3.19 x 2.56 in)
Installation	DIN-rail mounting Wall mounting (with optional kit)
Housing	Plastic
Weight	110.5 g (0.24 lb)

Environmental Limits

Ambient Relative Humidity	5 to 95% (non-condensing)
Operating Temperature	-10 to 60°C (14 to 140°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)

Standards and Certifications

Safety	UL 61010-2-201 EN 62368-1
EMC	EN 55032/35 EN 61000-6-2/-6-4
EMI	CISPR 22, 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: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6
Freefall	IEC 60068-2-32

MTBF

Time	3,696,394 hrs
Standards	Telcordia (Bellcore), GB

Warranty

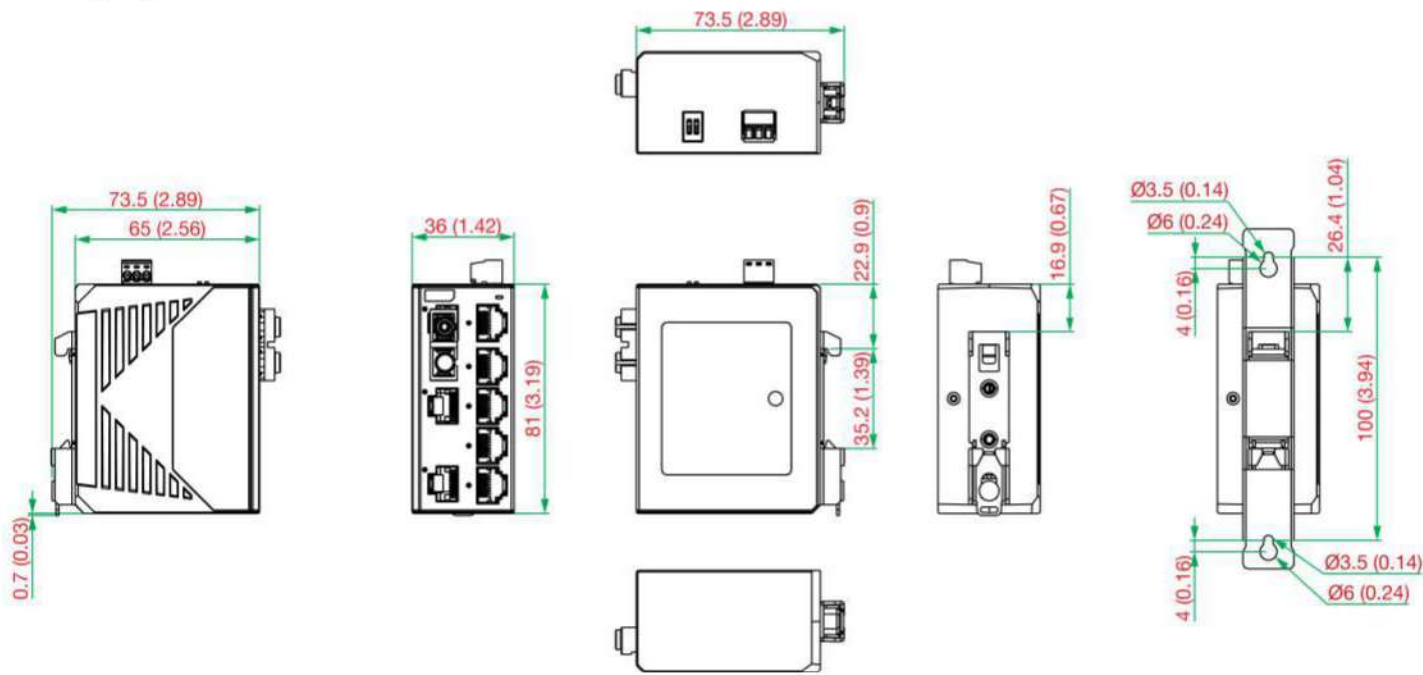
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x EDS-2008 Series switch
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	10/100BaseT(X) Ports (RJ45 connector)	Housing	Operating Temperature
EDS-2008-ELP	8	Plastic	-10 to 60°C

Accessories (sold separately)

Power Supplies

MDR-40-24	DIN-rail 24 VDC power supply with 40W/1.7A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
MDR-60-24	DIN-rail 24 VDC power supply with 60W/2.5A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature

Wall-Mounting Kits

WK-18	Wall-mounting kit, 1 plate (18 x 120 x 8.5 mm)
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Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit
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