

# EDS-P206A-4PoE Series

**6-port unmanaged Ethernet switches with 4 IEEE 802.3af/at PoE+ ports**



- > IEEE 802.3af/at compliant PoE and Ethernet combo ports
- > Up to 30 watts per PoE port
- > 12/24/48 VDC wide range redundant power inputs
- > Intelligent power consumption detection and classification
- > Redundant dual VDC power inputs
- > -40 to 75°C operating temperature range (T models)



## Introduction

The EDS-P206A-4PoE switches are smart, 6-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-P206A-4PoE switches enable centralization of the power supply and provide up to 30 watts of power per port. The

switches can be used to power IEEE 802.3af/at 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.

## Specifications

### Technology

#### Standards:

- IEEE 802.3af/at 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:** 2 K

**Packet Buffer Size:** 768 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/ST connector)

**PoE Pinout:** V+, V+, V-, V- for pins 1, 2, 3, 6 (Endspan, MDI-X Alternative A)

### Optical Fiber

		100BaseFX		
		Multi-Mode		Single-Mode
Fiber Cable Type	OM1	50/125 μm		G. 652
		800 MHz*km		
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:** 12/24/48 VDC, redundant dual inputs

**Operating Voltage:** 12 to 57 VDC

**Input Current:** 5.55 A @ 24 VDC

**Overload Current Protection:** Present

**Connection:** 1 removable 4-contact terminal block

**Reverse Polarity Protection:** Present

**Power Consumption:** Max. 13.2 W full loading without PDs' consumption

**Power Budget:** Max. 120 W for total PDs' consumption  
Max. 30 W for each PoE port

### Physical Characteristics

**Housing:** Metal

**IP Rating:** IP30 protection

**Dimensions:** 50.3 × 114 × 70 mm (1.98 x 4.53 x 2.76 in)

**Weight:** 375 g (0.83 lb)

**Installation:** DIN-rail mounting, wall mounting (with optional kit)

### Environmental Limits

**Operating Temperature:**

Standard Models: -10 to 60°C (14 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: 20 V/m  
 IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV  
 IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV  
 IEC 61000-4-6 CS: Signal: 10 V  
 IEC 61000-4-8

**Shock:** IEC 60068-2-27

**Freefall:** IEC 60068-2-32

**Vibration:** IEC 60068-2-6

**MTBF** (mean time between failures)

**Time:** 1,398,743 hrs

**Standard:** Telcordia (Bellcore), GB

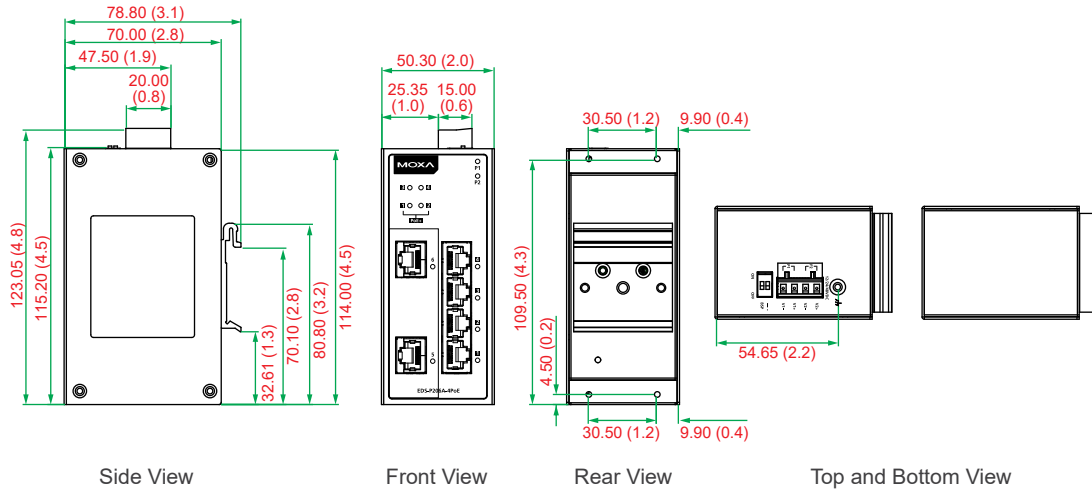
**Warranty**

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

**Dimensions**

Unit: mm (inch)



**Ordering Information**

Available Models		Port Interface			
Standard Temperature (-10 to 60°C)	Wide Temperature (-40 to 75°C)	10/100BaseT(X)	100BaseFX		
			Multit-Mode, SC Connector	Multit-Mode, ST Connector	Single-Mode, SC Connector
EDS-P206A-4PoE	EDS-P206A-4PoE-T	6	-	-	-
EDS-P206A-4PoE-M-SC	EDS-P206A-4PoE-M-SC-T	5	1	-	-
EDS-P206A-4PoE-M-ST	EDS-P206A-4PoE-M-ST-T	5	-	1	-
EDS-P206A-4PoE-MM-SC	EDS-P206A-4PoE-MM-SC-T	4	2	-	-
EDS-P206A-4PoE-MM-ST	EDS-P206A-4PoE-MM-ST-T	4	-	2	-
EDS-P206A-4PoE-S-SC	EDS-P206A-4PoE-S-SC-T	5	-	-	1
EDS-P206A-4PoE-SS-SC	EDS-P206A-4PoE-SS-SC-T	4	-	-	2

**Optional Accessories** (can be purchased separately)

**DR-75-24/120-24:** 75/120 W DIN-rail 24 VDC power supplies

**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-P206A-4PoE switch
- Protective caps for unused ports
- Hardware installation guide (printed)
- Warranty card