EDS-P206A-4PoE Series

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

PoE with High Power

> IEEE 802.3af/at compliant PoE and Ethernet combo ports
> Up to 30 watts per PoE port
> 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: 1 K
Packet Buffer Size: 512 KB

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 pin 1, 2, 3, 6 (Endspan, MDI-X Alternative A)

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: 24/48 VDC, redundant dual inputs
Operating Voltage: 22 to 57 VDC
Input Current: 5.48 A @ 24 VDC
Overload Current Protection: Present
Connection: 1 removable 4-contact terminal block
Reverse Polarity Protection: Present
Power Consumption: Max. 11.52 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 × 115 × 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: 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
Safety: UL 508
EMC: EN 55022/24
EMI: CISPR 22, 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
Note: Please check Moxa's website for the most up-to-date certification status.

MTBF (mean time between failures)
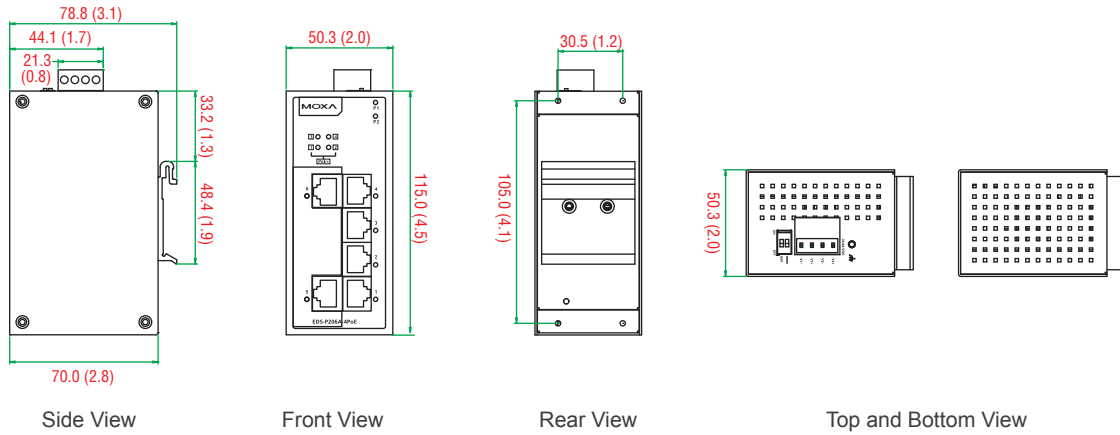**Time:** 645,138 hrs
Standard: Telcordia (Bellcore), GB

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

Dimensions

Unit: mm (inch)

Side View · Front View · Rear View · Top and Bottom View

Ordering Information

Available Models		Port Interface			
			100BaseFX		
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 75°C)	10/100BaseT(X)	Mulit-Mode, SC Connector	Mulit-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