

EDS-P206A Series

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



Features and Benefits

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

Certifications



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

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	EDS-P206A-4PoE Series: 2 EDS-P206A-4PoE-M-SC/M-ST/S-SC Series: 1 Supported functions: Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
100BaseFX Ports (multi-mode SC connector)	EDS-P206A-4PoE-M-SC Series: 1 EDS-P206A-4PoE-MM-SC Series: 2
100BaseFX Ports (multi-mode ST connector)	EDS-P206A-4PoE-M-ST Series: 1 EDS-P206A-4PoE-MM-ST Series: 2
100BaseFX Ports (single-mode SC connector)	EDS-P206A-4PoE-S-SC/P206A-4PoE-S-SC-T: 1 EDS-P206A-4PoE-SS-SC/P206A-4PoE-SS-SC-T: 2
PoE Ports (10/100BaseT(X), RJ45 connector)	4 Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
Standards	IEEE 802.3 for 10BaseT IEEE 802.3af/at for PoE/PoE+ output IEEE 802.3x for flow control 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		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

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

Power Parameters

Input Current	5.55 A @ 24 VDC
Connection	1 removable 4-contact terminal block(s)
Operating Voltage	12 to 57 VDC
Input Voltage	12/24/48 VDC Redundant dual inputs
Power Budget	Max. 120 W for total PD consumption Max. 30 W for each PoE port
Power Consumption (Max.)	Max. 13.2 W full loading without PDs' consumption
Reverse Polarity Protection	Supported
Overload Current Protection	Supported

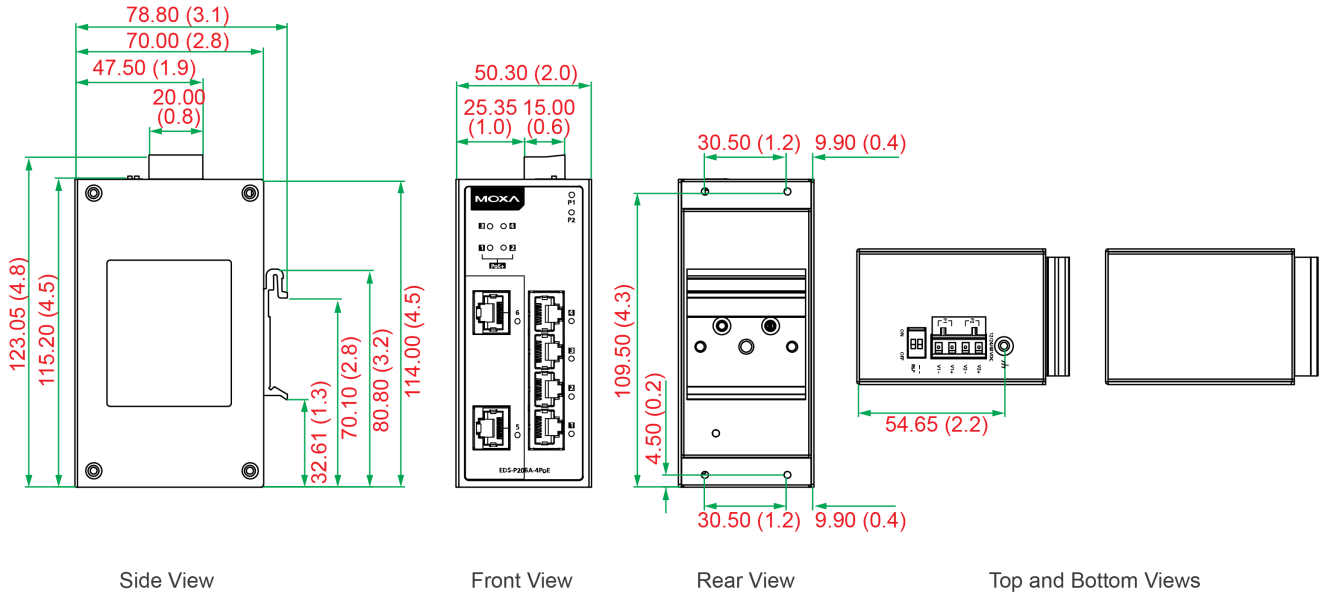
Physical Characteristics

Housing	Metal
IP Rating	IP30
Dimensions	50.3 x 114 x 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 (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Standards and Certifications	
EMI	CISPR 32, FCC Part 15B Class A
EMC	EN 55032/24
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: 10 V IEC 61000-4-8 PFMF
Safety	UL 508
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6
MTBF	
Time	EDS-P206A-4PoE: 1,398,743 hrs EDS-P206A-4PoE-M/S: 1,289,258 hrs
Standards	Telcordia (Bellcore), GB
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x EDS-P206A Series switch
Installation Kit	4 x cap, plastic, for RJ45 port
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 Multi-Mode, ST Connector	100BaseFX Ports Single-Mode, SC Connector	Operating Temp.
EDS-P206A-4PoE	2	4	-	-	-	-10 to 60°C
EDS-P206A-4PoE-T	2	4	-	-	-	-40 to 75°C
EDS-P206A-4PoE-M-SC	1	4	1	-	-	-10 to 60°C
EDS-P206A-4PoE-M-SC-T	1	4	1	-	-	-40 to 75°C
EDS-P206A-4PoE-M-ST	1	4	-	1	-	-10 to 60°C
EDS-P206A-4PoE-M-ST-T	1	4	-	1	-	-40 to 75°C
EDS-P206A-4PoE-MM-SC	-	4	2	-	-	-10 to 60°C
EDS-P206A-4PoE-MM-SC-T	-	4	2	-	-	-40 to 75°C
EDS-P206A-4PoE-MM-ST	-	4	-	2	-	-10 to 60°C
EDS-P206A-4PoE-MM-ST-T	-	4	-	2	-	-40 to 75°C
EDS-P206A-4PoE-S-SC	1	4	-	-	1	-10 to 60°C
EDS-P206A-4PoE-S-SC-T	1	4	-	-	1	-40 to 75°C
EDS-P206A-4PoE-SS-SC	-	4	-	-	2	-10 to 60°C
EDS-P206A-4PoE-SS-SC-T	-	4	-	-	2	-40 to 75°C

Accessories (sold separately)

Power Supplies

DR-120-24	120W/2.5A DIN-rail 24 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-75-24	75W/3.2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 60°C operating temperature
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-46-01	Wall-mounting kit, 2 plates, 8 screws, 46 x 66.8 x 2 mm
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Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit
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Moxa PoE Switch Product Portfolio

Category	Rackmount Managed Switches					Managed Switches										
	Layer 2/3	Layer 2/3	Layer 3	Layer 2	Layer 2	Layer 2	Layer 2	2.5GE Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2
Moxa Solution	RKS-G4028 Series	PT-G7828/G7728 Series	ICS-G7848A/G7850A/G7852A Series	ICS-G7748A/G7750A/G7752A Series	IKS-6728A Series	EDS-4008 Series	EDS-4012 Series	EDS-G4012 Series	EDS-P506E Series	EDS-G512E Series	EDS-P510A Series	EDS-P510 Series	TN-G6500 Series	TN-5500A Series	TN-4500A Series	
PoE Port	Up to 24 x PoE++	24 x PoE+	48 x PoE+	48 x PoE+	8/16/ 24 x PoE+	4 x PoE++	8 x PoE++	8 x PoE++	4 x PoE+	8 x PoE+	8 x PoE+	4 x PoE	8 x PoE	8 x PoE	8 x PoE	
Ethernet Port	Up to 28 x GE	28 x GE	0/2/4 x 10GE + 48 x GE	0/2/4 x 10GE + 48 x GE	4 x GE + 24 x FE	8 x FE + up to 4 x GE uplink pots or 2 x SFP ports	4 x GE + 8 x FE	12 x GE + up to 4 x GE or 2.5 GE fiber-optic ports	2 x GE + 4 x FE	12 x GE	2 x GE + 8 x FE	3 x GE + 7 x FE	12 x GE with push-pull M12 connectors	2 x GE + 8-18 x FE	4 x GE + 12/24 x FE	
PoE Output (Per Port)	90 W	36 W	36 W	36 W	36 W	90 W	90 W	90 W	60 W	36 W	36 W	15.4 W	30 W	30 W	30 W	
Dual Power Input	LV models: 24/48 VDC HV models: 110/220 VAC&VDC External PoE power models: 48 VDC	48 VDC for PoE+ ports and system power 110/220 VAC for system power				LV(A) models: 48 VDC LV(B) models: 12/24/48 VDC			12/24/48 VDC	48 VDC	48 VDC	48 VDC	24/36/48/72/96/110 VDC			
Operating Temp. Range	-40 to 75°C	-40 to 85°C	-10 to 60°C	-10 to 60°C	-40 to 75°C	Standard temp. models: -10 to 60°C Wide temp. models: -40 to 75°C							-40 to 70°C	-40 to 75°C	-40 to 70°C	
Certification	IEC-61850-3, IEEE 1613, EN 50121-4	IEC-61850-3, EN-50121-4	EN-50121-4	EN-50121-4	EN-50121-4	IEC 62443-4-2, IEC-61850-3, IEEE 1613, EN 50121-4, NEMA TS2, Class I Division 2, ATEX, IECEx			IEC 61850-3, IEEE 1613, EN 50121-4, NEMA TS2	IEC-61850-3, IEEE 1613, EN 50121-4, NEMA TS2*, ATEX*, Class I Division 2*	EN-50121-4, Class I Division 2, NEMA TS2	ABS, DNV-GL, LR, NK	EN 50121-4, EN 50155			

* Only EDS-G512E-4GSFP model

Category	Modular Managed Switches				Unmanaged Switches			Plug-in Modules			
	Layer 2	Layer 3	10GE Layer 2	10GE Layer 3	-	-	-	PoE+ Injectors	PoE+ Injectors	PoE Splitters	Ethernet-to-Fiber Media Converters
Moxa Solution	MDS-G4012/G4020/G4028 Series	MDS-G4012-L3/G4020-L3/G4028-L3 Series	MDS-G4012-4XGS/G4020-4XGS/G4028-4XGS Series	MDS-G4012-L3-4GXS/G4020-L3-4GXS-G4028-L3-4GXS Series	EDS-G205A Series	EDS-P206P Series	TN-5308 Series	INJ-24A Series	INJ-24 Series	SPL-24 Series	IMC-P101 Series
PoE Port	8/16/24 x PoE+/GPoE+				4 x PoE+	4 x PoE+	4/8 x PoE	1 x PoE+	1 x PoE+	1 x PoE	1 x PoE+
Ethernet Port	4 x GE + up to 24 x FE/GE ports modules		4 x 10GE + up to 24 x FE/GE ports modules or SFP slots		5 x GE	6 x FE	8 x FE	1 x GE	1 x FE	1 x FE	1 x FE
PoE Output (Per Port)	36W				30 W	30 W	15.4 W	60 W	30 W	12.95 W	30 W
Dual Power Input	LV models: 24/48 VDC HV models: 110/220 VAC&VDC External PoE power models: 48 VDC				12/24/48 VDC	12/24/48 VDC	48 VDC (Single input)	24/48 VDC (Single input)	24/48 VDC (Single input)	-	48 VDC
Operating Temp. Range	Standard temp. models: -10 to 60°C Wide temp. models: -40 to 75°C				Standard temp. models: 0 to 60°C Wide temp. models: -40 to 75°C	Standard temp. models: -10 to 60°C Wide temp. models: -40 to 75°C	Standard temp. models: -25 to 60°C Wide temp. models: -40 to 75°C	Standard temp. models: 0 to 60°C Wide temp. models: -40 to 75°C			
Certification	IEC-61850-3, IEEE 1613, EN 50121-4, Class I Division 2, ATEX, NEMA		IEC-61850-3, IEEE 1613, EN 50121-4, NEMA		EN-50121-4		EN 50155			DNV-GL, ABS, LR, NK	

Note: Refer to the individual product datasheets on the Moxa website for the most updated specifications and features.
[Click here to learn more about Moxa PoE switches.](#)