

EDS-205/208 Series

5 and 8-port entry-level unmanaged Ethernet switches



- > 10/100BaseT(X) (RJ45 connector), 100BaseFX (multi-mode, SC/ST connectors)
- > IEEE802.3/802.3u/802.3x support
- > Broadcast storm protection
- > DIN-rail mounting ability
- > -10 to 60°C operating temperature range



Introduction

The EDS-205/208 series of industrial Ethernet switches are entry-level industrial 5 and 8-port Ethernet switches that support IEEE 802.3/802.3u/802.3x with 10/100M, full/half-duplex, MDI/MDIX auto-sensing RJ45 ports. The EDS-205/208 switches are rated to operate at temperatures ranging from -10 to 60°C, and are rugged enough for

any harsh industrial environment. The switches can be easily installed on a DIN-rail as well as in distribution boxes. The DIN-rail mounting capability, wide operating temperature, and the IP30 housing with LED indicators make the plug-and-play EDS-205/208 switches easy to use and reliable.

Specifications

Technology

Standards:

IEEE 802.3 for 10BaseT
 IEEE 802.3u for 100BaseT(X) and 100BaseFX
 IEEE 802.3x for Flow Control

Processing Type: Store and Forward

Switch Properties

MAC Table Size: 1 K

Packet Buffer Size: 512 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, multi-mode)

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:

EDS-205: 24 VDC (12 to 48 VDC), single input
 EDS-208 Series: 24 VDC (12 to 45 VDC), single input

Input Current:

EDS-205: 0.11 A @ 24 V
 EDS-208: 0.07 A @ 24 V
 EDS-208-M: 0.1 A @ 24 V

Overload Current Protection: 2.5 A

Connection: 1 removable 3-contact terminal block

Reverse Polarity Protection: Present

Physical Characteristics

Housing: Plastic

IP Rating: IP30 protection

Dimensions:

EDS-205: 24.9 x 100 x 86.5 mm (0.98 x 3.94 x 3.41 in)
 EDS-208 Series: 40 x 100 x 86.5 mm (1.57 x 3.94 x 3.41 in)

Weight:

EDS-205: 135 g (0.30 lb)
 EDS-208 Series: 170 g (0.38 lb)

Installation: DIN-rail mounting

Environmental Limits

Operating Temperature: -10 to 60°C (14 to 140°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:

EDS-205: UL 508, EN 60950-1
EDS-208 Series: UL 508

EMC: EN 55032/24

EMI: CISPR 32, FCC Part 15B Class A

EMS:

IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV
IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m
IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV
IEC 61000-4-5 Surge: Power: 1 kV; Signal: 1 kV
IEC 61000-4-6 CS: 3 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:

EDS-205: 3,915,945 hrs
EDS-208: 401,624 hrs
EDS-208-M-SC/ST: 368,353 hrs

Standard: Telcordia (Bellcore), GB

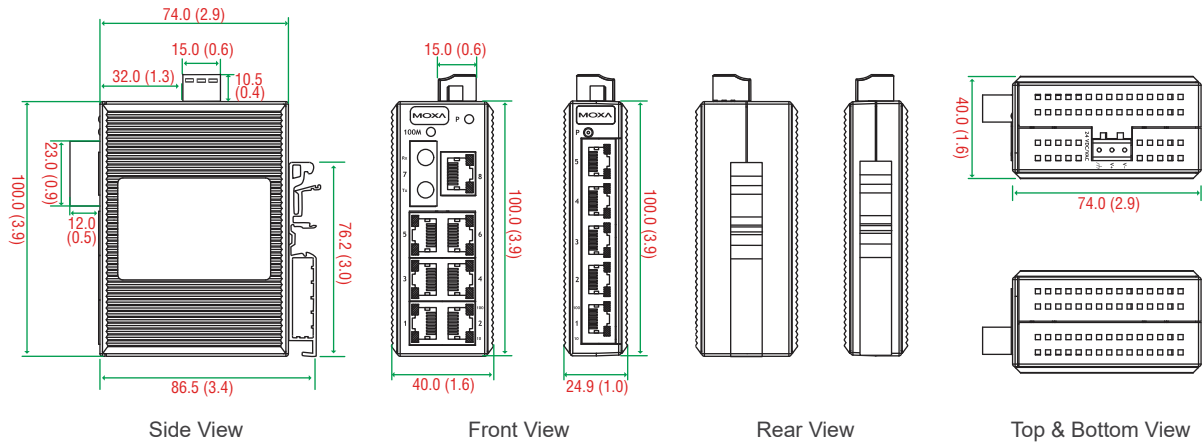
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)



Ordering Information

Available Models	Port Interface		Housing Material	Power Range		
	Standard Temperature (-10 to 60°C)	10/100BaseT(X)			100BaseFX	
					Multi-Mode, SC Connector	Multi-Mode, ST Connector
EDS-205	5	–	–	Plastic	12 to 48 VDC	
EDS-208	8	–	–	Plastic	12 to 45 VDC	
EDS-208-M-SC	7	1	–	Plastic	12 to 45 VDC	
EDS-208-M-ST	7	–	1	Plastic	12 to 45 VDC	

Optional Accessories (can be purchased separately)

DR-4524/75-24/120-24: 45/75/120 W DIN-rail 24 VDC power supplies

MDR-40-24/60-24: 40/60 W DIN-rail 24 VDC power supplies, -20 to 70°C operating temperature

RK-4U: 4U-high 19-inch rack-mounting kit

Package Checklist

- EDS-205 or EDS-208 switch
- Hardware installation guide (printed)
- Warranty card