

# 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

**Flow Control:** IEEE 802.3x flow control, back pressure flow control

#### Switch Properties

**MAC Table Size:** 1 K

**Packet Buffer Size:** 512 kbit

#### Interface

**Fiber Ports:** 100BaseFX ports (SC/ST connector, multi-mode)

**RJ45 Ports:** 10/100BaseT(X) auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection

**LED Indicators:** Power, 10/100M (TP port), 100M (fiber port)

#### Optical Fiber

	100BaseFX	
	Multi-mode	Single-mode
Wavelength	1300 nm	1310 nm
Max. TX	-10 dBm	0 dBm
Min. TX	-20 dBm	-5 dBm
RX Sensitivity	-32 dBm	-34 dBm
Link Budget	12 dB	29 dB
Typical Distance	5 km <sup>a</sup> 4 km <sup>b</sup>	40 km <sup>c</sup>
Saturation	-6 dBm	-3 dBm

a. 50/125 μm, 800 MHz\*km fiber optic cable  
 b. 62.5/125 μm, 500 MHz\*km fiber optic cable  
 c. 9/125 μm single-mode fiber optic cable

#### Power Requirements

##### Input Voltage:

EDS-205: 24 VDC (12 to 48 VDC), 18 to 30 VAC (47 to 63 Hz), single input

EDS-208 Series: 24 VDC (12 to 45 VDC), 18 to 30 VAC (47 to 63 Hz), single input

##### Input Current:

EDS-205: 0.12 A @ 24 V

EDS-208: 0.14 A @ 24 V

EDS-208-M: 0.23 A @ 24 V

**Overload Current Protection:** 1.1 A

**Connection:** 1 removable 3-contact terminal block

**Reverse Polarity Protection:** Present

#### Physical Characteristics

**Housing:** Plastic, 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

EDS-208 Series: 170 g

**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

**Safety:**

EDS-205: UL 508, EN 60950-1

EDS-208 Series: UL 508

**EMI:** FCC Part 15 Subpart B Class A, EN 55022 Class A

**EMS:**

EN 61000-4-2 (ESD) Level 2, EN 61000-4-3 (RS) Level 3,

EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3,

EN 61000-4-6 (CS) Level 3,

EN 61000-4-8, EN 61000-4-11

**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:**

EDS-205: 3,915,945 hrs

EDS-208 Series: 7,492,000 hrs

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

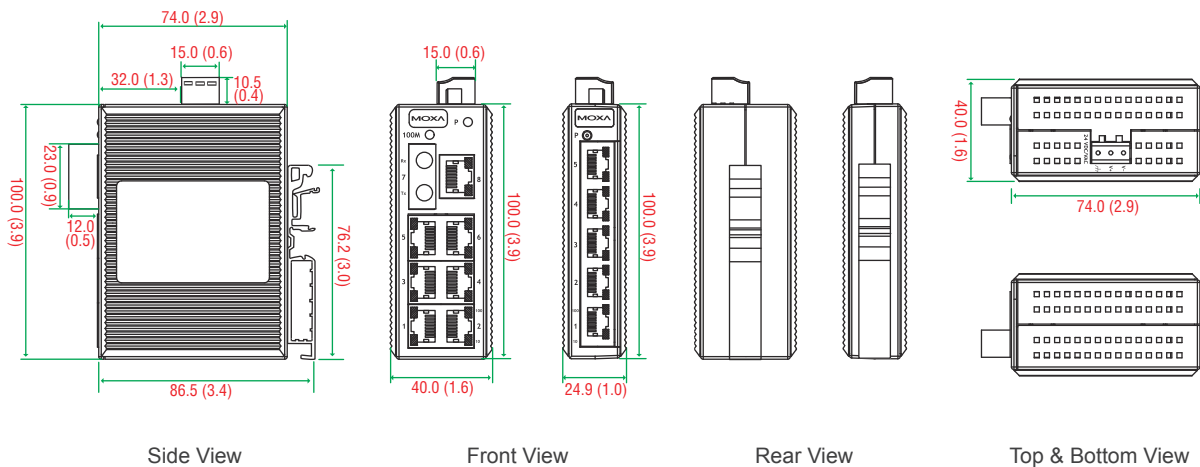
### Warranty

**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		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" rack mounting kit

### Package Checklist

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