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 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

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 [a] 4 km [b]	40 km [c]
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: 12 to 48 VDC, 18 to 30 VAC (47 to 63 Hz)
EDS-208 series: 12 to 45 VDC, 18 to 30 VAC (47 to 63 Hz)

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: 25 x 100 x 74 mm (0.98 x 3.94 x 2.91 in)
EDS-208: 40 x 100 x 74 mm (1.57 x 3.94 x 2.91 in)

Weight:
EDS-205: 135 g
EDS-208: 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)

Regulatory Approvals

Safety:
EDS-205: UL508
EDS-208: UL508, UL60950-1

EMI: FCC Part 15, CISPR (EN55022) class A

EMS:
EN61000-4-2 (ESD), level 2
EN61000-4-3 (RS), level 3
EN61000-4-4 (EFT), level 3
EN61000-4-5 (Surge), level 3
EN61000-4-6 (CS), EDS-205: level 3; EDS-208: level 2
EN61000-4-8
EN61000-4-11

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 (meantime between failures)
Time:
EDS-205: 323,000 hrs
EDS-208: 368,000 hrs

Database:
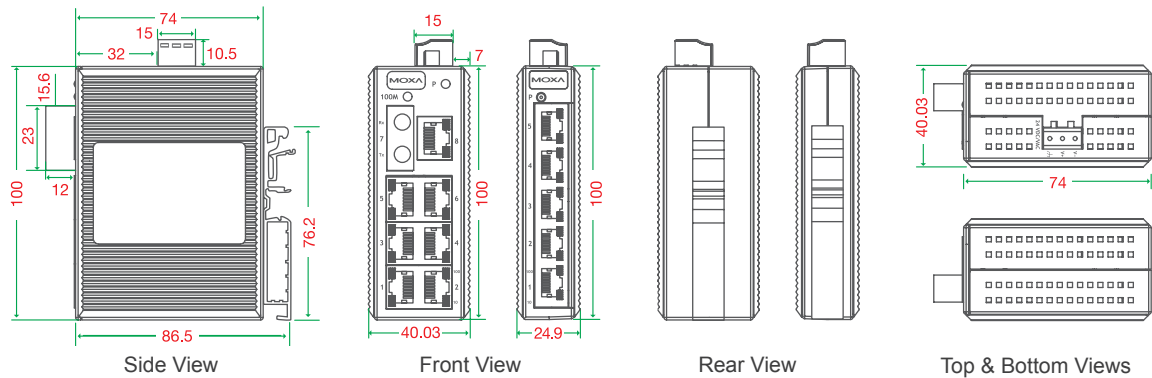EDS-205: Telcordia (Bellcore), GB
EDS-208: MIL-HDBK-217F, GB 25°C

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

Dimensions (unit = mm)

Side View   Front View   Rear View   Top & Bottom Views

: Ordering Information

Available Models	Port Interface			Housing Material	Power Range
		100BaseFX			
Standard Temperature (-10 to 60°C)	10/100BaseT(X)	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
RK-4U: 4U-high 19" rack mounting kit