

EDS-2016-ML Series

16-port unmanaged Ethernet switches



Features and Benefits

- 10/100BaseT(X) (RJ45 connector), 100BaseFX (multi-mode, SC/ST connectors)¹
- QoS supported to process critical data in heavy traffic
- Relay output warning for power failure and port break alarm
- IP30-rated metal housing
- Redundant dual 12/24/48 VDC power inputs
- -40 to 75°C operating temperature range (-T model)

Certifications



Introduction

The EDS-2016-ML Series of industrial Ethernet switches have up to 16 10/100M copper ports and two optical fiber ports with SC/ST connector type options (fiber models will be available in the second half of 2020), which are ideal for applications that require flexible industrial Ethernet connections. Moreover, to provide greater versatility for use with applications from different industries, the EDS-2016-ML Series also allows users to enable or disable the Quality of Service (QoS) function, broadcast storm protection, and the port break alarm function with DIP switches on the outer panel.

In addition to its compact size, the EDS-2016-ML Series features 12/24/48 VDC redundant power inputs, DIN-rail mounting, high-level EMI/EMC capability, and an operating temperature range of -10 to 60°C with -40 to 75°C wide temperature models available. The EDS-2016-ML Series has also passed a 100% burn-in test to ensure it will function reliably in the field.

Specifications

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	EDS-2016-ML: 16 Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3x for flow control IEEE 802.1p for Class of Service

DIP Switch Configuration

Ethernet Interface	Quality of Service (QoS), Broadcast storm protection, Port break alarm
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Input/Output Interface

Alarm Contact Channels	Relay output with current carrying capacity of 1 A @ 24 VDC
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Switch Properties

MAC Table Size	8 K
Packet Buffer Size	2 Mbits
Processing Type	Store and Forward

1. Fiber models will be available in the second half of 2020.

Power Parameters

Connection	1 removable 6-contact terminal block(s)
Input Current	EDS-2016-ML: 0.108 A @ 24 VDC
Input Voltage	12/24/48 VDC, Redundant dual inputs
Operating Voltage	9.6 to 60 VDC
Overload Current Protection	Supported
Reverse Polarity Protection	Supported

Physical Characteristics

Housing	Metal
IP Rating	IP30
Dimensions	EDS-2016-ML: 36 x 135 x 95 mm (1.41 x 5.31 x 3.74 in)
Weight	EDS-2016-ML: 486 g (1.07 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

Safety	UL 61010-2-201, EN 62368-1(LVD)
EMC	EN 55032/35
EMI	CISPR 32, 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 MHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Railway	EN 50121-4
Vibration	IEC 60068-2-6
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32

MTBF

Time	2,070,826 hrs
Standards	Telcordia (Bellcore), GB

Warranty

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

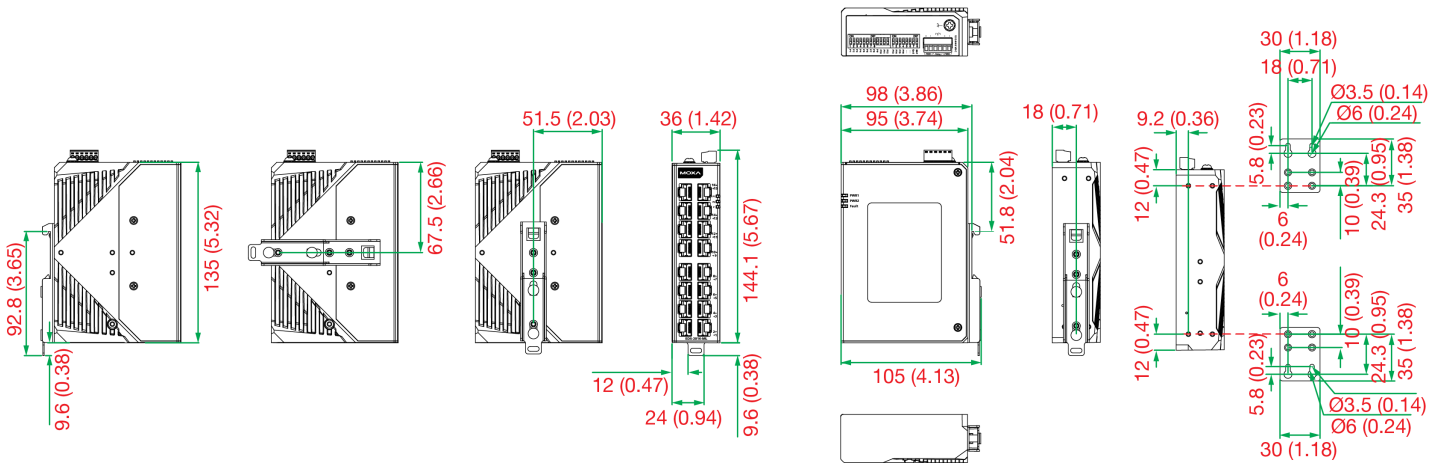
Package Contents

Device	1 x EDS-2016-ML Series switch
Installation Kit	4 x cap, plastic, for RJ45 port
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

EDS-2016-ML Copper Series

Unit: mm (inch)



Ordering Information

Model Name	10/100BaseT(X) Ports, RJ45 Connector	100BaseFX Ports Multi-mode, SC Connector	100BaseFX Ports Multi-mode, ST Connector	100BaseFX Ports Single-mode, SC Connector	Operating Temp.
EDS-2016-ML	16	-	-	-	-10 to 60°C
EDS-2016-ML-T	16	-	-	-	-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-4524	45W/2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 50°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
MDR-40-24	DIN-rail 24 VDC power supply with 40W/1.7A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
MDR-60-24	DIN-rail 24 VDC power supply with 60W/2.5A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature

Wall-Mounting Kits

WK-30-02	Wall-mounting kit, 2 plates, 4 screws, 30 x 66.8 x 2 mm Applicable Models: EDS-2016-ML
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Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit
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