

# EDS-305-M12 Series

## 5-port M12/IP67 unmanaged Ethernet switches



- > M12 connectors and IP67 rated case
- > 10/100BaseT(X), 4-pin M12 (D-coding), F/H duplex mode, and auto MDI/MDI-X connection
- > Power input: 12 to 45 VDC, 18 to 30 VAC
- > -40 to 75°C operating temperature range (T models)



### Introduction

The EDS-305-M12 series Ethernet switches are IP67 rated for the toughest industrial applications, which means that the rugged housing and connectors guard against dust, water, and oil. By using M12 connectors, you can rest assured that Ethernet cables will connect tightly to the switch, and will be robust enough to protect your

applications from external disturbances, such as the vibration and shock encountered in the transportation industry. The space-saving EDS-305-M12 switches can be mounted virtually anywhere, and wide operating temperature (-40 to 75°C) models are also available for use in the extremest of conditions.

### Specifications

#### Technology

##### Standards:

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

**Processing Type:** Store and Forward

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

#### Interface

**M12 Ports:** 10/100BaseT(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection

**LED Indicators:** Power, LNK/ACT

#### Power Requirements

##### Input Voltage:

- 12 to 45 VDC
- 18 to 30 VAC (47 to 63 Hz)

##### Input Current:

- 0.12A @ 24 VDC
- 0.28A @ 24 VAC

**Overload Current Protection:** 1.1 A (Limited Current)

**Connection:** 1 M12 socket (A-coding), single power input

**Reverse Polarity Protection:** Present

#### Physical Characteristics

**Housing:** Plastic, IP67 protection

**Dimensions:** 60 x 125 x 29.6 mm (2.36 x 4.92 x 1.17 in)

**Weight:** 250 g

**Installation:** Field-style mounting, DIN-Rail mounting (with optional kit)

#### Environmental Limits

##### Operating Temperature:

Standard Models: 0 to 60°C (32 to 140°F)  
Wide Temp. Models: -40 to 75°C (-40 to 167°F)

**Storage Temperature:** -40 to 85°C (-40 to 185°F)

**Ambient Relative Humidity:** 5 to 95% (non-condensing)

#### Regulatory Approvals

**Safety:** UL508

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

##### EMS:

EN61000-4-2 (ESD), level 3  
EN61000-4-3 (RS), level 4  
EN61000-4-4 (EFT), level 3  
EN61000-4-5 (Surge), level 3  
EN61000-4-6 (CS), level 2  
EN61000-4-8  
EN61000-4-11

**Maritime:** DNV (Pending), GL (Pending)

**Rail Traffic:** EN50155 (Environmental), EN50121-4 (Pending), EN50121-3-2 (Pending)

**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:** 636,000 hrs

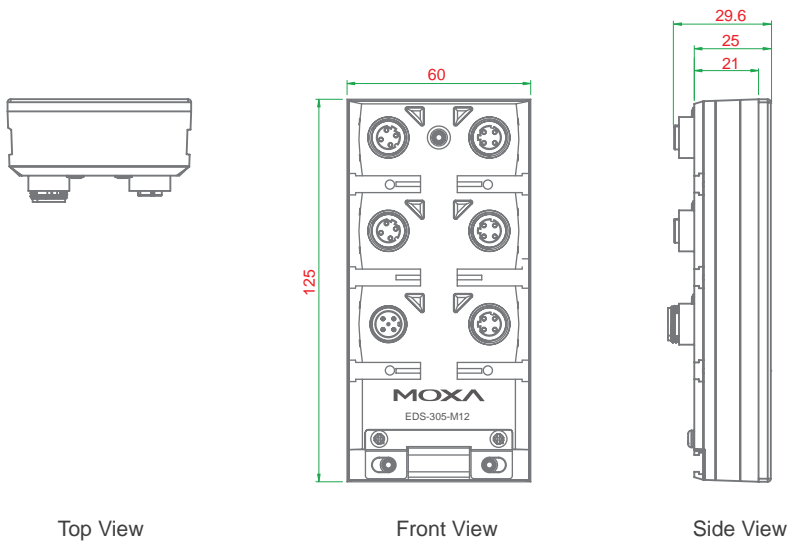
**Database:** Telcordia (Bellcore), GB

#### Warranty

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

**Dimensions (unit = mm)**



**: Ordering Information**

**Available Models**

**EDS-305-M12:** Industrial M12/IP67 unmanaged Ethernet switch with 5 10/100BaseT(X) ports, 0 to 60°C operating temperature

**EDS-305-M12-T:** Industrial M12/IP67 unmanaged Ethernet switch with 5 10/100BaseT(X) ports, -40 to 75°C operating temperature

**Optional Accessories** (can be purchased separately)

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

**DK-M12-305:** DIN-Rail mounting kit for the EDS-305-M12 series

**M12 Patch Cords and Sensor Connectors:**

**M12 Patch Cords**



**CBL-M12D(MM4P)/RJ45-100 IP67**

1-meter M12-to-RJ45 Cat-5E UTP Ethernet cable with waterproof 4-pin D-coded M12 connector



**CBL-M12(FF5P)/OPEN-100 IP67**

1-meter M12-to-5-pin power cable with waterproof 5-pin A-coded M12 connector

**Sensor Connectors**



**M12D-4P-IP68**

Field-installable D-coded screw-in sensor connector, male



**M12A-5P-IP68**

Field-installable A-coded screw-in sensor connector, female