

# EDS-2005-EL Series

## 5-port entry-level unmanaged Ethernet switches with metal housing



### Features and Benefits

- 10/100BaseT(X) (RJ45 connector)
- Compact size for easy installation
- QoS supported to process critical data in heavy traffic
- IP40-rated metal housing
- -40 to 75°C wide operating temperature range (-T models)
- Compliant with PROFINET Conformance Class A<sup>1</sup>

### Certifications



## Introduction

The EDS-2005-EL series of industrial Ethernet switches have five 10/100M copper ports, which are ideal for applications that require simple industrial Ethernet connections. Moreover, to provide greater versatility for use with applications from different industries, the EDS-2005-EL Series also allows users to enable or disable the Quality of Service (QoS) function, and broadcast storm protection (BSP) with DIP switches on the outer panel. In addition, the EDS-2005-EL Series has a rugged metal housing to ensure suitability for use in industrial environments.

The EDS-2005-EL Series has a 12/24/48 VDC single power input, DIN-rail mounting, and high-level EMI/EMC capabilities. In addition to its compact size, the EDS-2005-EL Series has passed a 100% burn-in test to ensure it will function reliably after it has been deployed. The EDS-2005-EL Series has a standard operating temperature range of -10 to 60°C with wide-temperature (-40 to 75°C) models also available.

The EDS-2005-EL Series is also compliant with PROFINET Conformance Class A (CC-A), making these switches suitable for PROFINET networks.

## Specifications

### Ethernet Interface

|                                       |   |
|---------------------------------------|---|
| 10/100BaseT(X) Ports (RJ45 connector) | 5<br>Full/Half duplex mode<br>Auto MDI/MDI-X connection<br>Auto negotiation speed   |
| Standards                             | IEEE 802.3 for 10BaseT<br>IEEE 802.1p for Class of Service<br>IEEE 802.3u for 100BaseT(X)<br>IEEE 802.3x for flow control |

### Switch Properties

|                    |                   |
|--------------------|-------------------|
| Processing Type    | Store and Forward |
| MAC Table Size     | 2 K               |
| Packet Buffer Size | 768 kbits         |

### DIP Switch Configuration

|                    |  |
|--------------------|--|
| Ethernet Interface | Quality of Service (QoS) <sup>2</sup> , Broadcast Storm Protection (BSP) |
|--------------------|--|

1. Only for models with hardware version 2.0.0 or later.  
2. Enabling the QoS DIP switch will also enable Multicast Filtering which will block LLDP & PROFINET PTCP-Delay traffic.

## Power Parameters

|                             |   |
|-----------------------------|---|
| Connection                  | 1 removable 2-contact terminal block(s) |
| Input Current               | 0.045 A @ 24 VDC                        |
| Input Voltage               | 12/24/48 VDC                            |
| Operating Voltage           | 9.6 to 60 VDC                           |
| Overload Current Protection | Supported                               |
| Reverse Polarity Protection | Supported                               |

## Physical Characteristics

|              |  |
|--------------|--|
| Dimensions   | 18 x 81 x 65 mm (0.7 x 3.19 x 2.56 in)                 |
| Installation | DIN-rail mounting<br>Wall mounting (with optional kit) |
| Weight       | 113.5 g (0.25 lb)                                      |
| Housing      | Metal  |

## Environmental Limits

|  |   |
|--|---|
| Ambient Relative Humidity              | 5 to 95% (non-condensing)   |
| Operating Temperature                  | EDS-2005-EL: -10 to 60°C (14 to 140°F)<br>EDS-2005-EL-T: -40 to 75°C (-40 to 167°F) |
| Storage Temperature (package included) | -40 to 85°C (-40 to 185°F)  |

## Standards and Certifications

|           |  |
|-----------|--|
| Safety    | UL 61010-2-201<br>EN 62368-1   |
| EMC       | EN 55032/35<br>EN 61000-6-2/-6-4   |
| EMI       | CISPR 22, 32, FCC Part 15B Class A   |
| EMS       | IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV<br>IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m<br>IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV<br>IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV<br>IEC 61000-4-6 CS: 10 V<br>IEC 61000-4-8 PFMF |
| Shock     | IEC 60068-2-27   |
| Vibration | IEC 60068-2-6  |
| Freefall  | IEC 60068-2-32   |

## MTBF

|           |                          |
|-----------|--------------------------|
| Time      | 5,249,061 hrs            |
| Standards | Telcordia (Bellcore), GB |

## Warranty

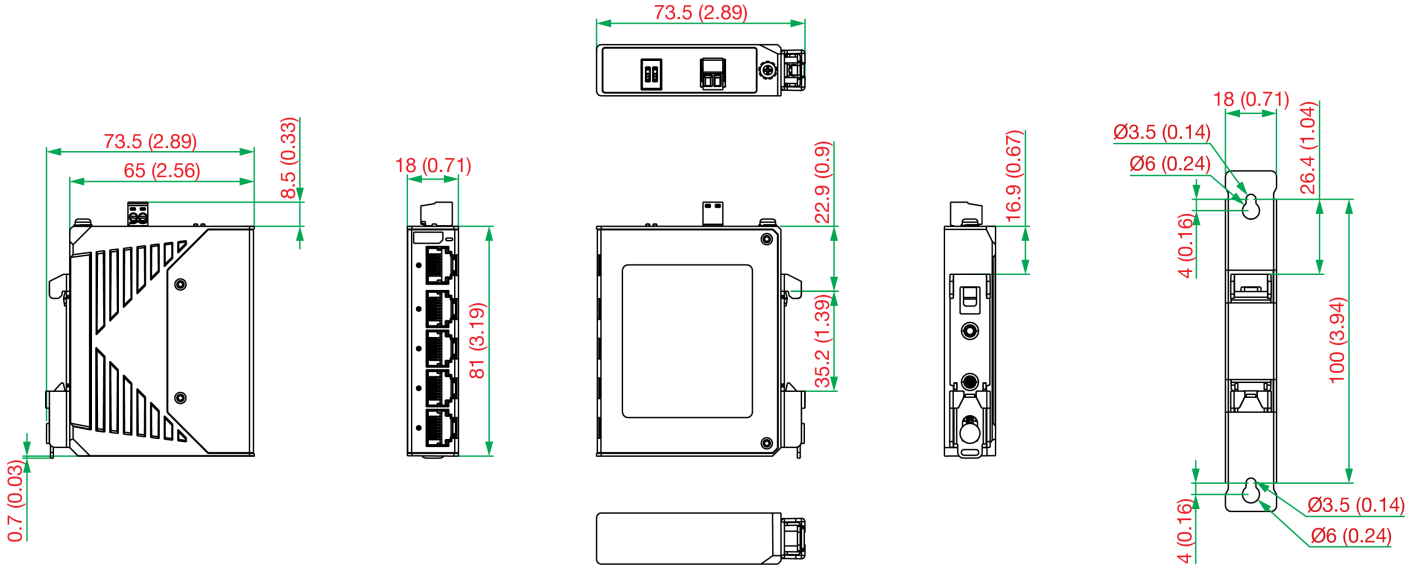
|                 |  |
|-----------------|--|
| Warranty Period | 5 years  |
| Details         | See <a href="http://www.moxa.com/warranty">www.moxa.com/warranty</a> |

## Package Contents

|               |   |
|---------------|---|
| Device        | 1 x EDS-2005 Series switch                        |
| Documentation | 1 x quick installation guide<br>1 x warranty card |

## Dimensions

Unit: mm (inch)



## Ordering Information

| Model Name    | 10/100BaseT(X) Ports (RJ45 connector) | Operating Temperature |
|---------------|---------------------------------------|-----------------------|
| EDS-2005-EL   | 5                                     | -10 to 60°C           |
| EDS-2005-EL-T | 5                                     | -40 to 75°C           |

## Accessories (sold separately)

### Power Supplies

|           |   |
|-----------|---|
| 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-18 | Wall-mounting kit, 1 plate (18 x 120 x 8.5 mm) |
|-------|--|

### Rack-Mounting Kits

|       |                           |
|-------|---------------------------|
| RK-4U | 19-inch rack-mounting kit |
|-------|---------------------------|

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