# EDS-G308 Series

*8G-port full Gigabit unmanaged Ethernet switches*



### Features and Benefits

- Fiber-optic options for extending distance and improving electrical noise immunity
- Redundant dual 12/24/48 VDC power inputs
- Supports 19.6 KB jumbo frames
- Relay output warning for power failure and port break alarm
- Broadcast storm protection
- -40 to 75°C operating temperature range (-T models)

### Certifications

## Introduction

The EDS-G308 switches are equipped with 8 Gigabit Ethernet ports and 2 fiber-optic ports, making them ideal for applications that demand high bandwidth. The EDS-G308 switches provide an economical solution for your industrial Gigabit Ethernet connections, and the built-in relay warning function alerts network managers when power failures or port breaks occur. The 4-pin DIP switches can be used for controlling broadcast protection, jumbo frames, and IEEE 802.3az energy saving. In addition, 100/1000 SFP speed switching is ideal for easy on-site configuration for any industrial automation application.

A standard-temperature model, which has an operating temperature range of -10 to 60°C, and a wide-temperature range model, which has an operating temperature range of -40 to 75°C, are available. Both models undergo a 100% burn-in test to ensure that they fulfill the special needs of industrial automation control applications. The switches can be installed easily on a DIN rail or in distribution boxes.

## Specifications

| Input/Output Interface | |
|---|---|
| Alarm Contact Channels | 1 relay output with current carrying capacity of 1 A @ 24 VDC |
| **Ethernet Interface** | |
| 10/100/1000BaseT(X) Ports (RJ45 connector) | EDS-G308/G308-T: 8<br>EDS-G308-2SFP/G308-2SFP-T: 6<br><br>All models support:<br>Auto negotiation speed<br>Full/Half duplex mode<br>Auto MDI/MDI-X connection |
| Combo Ports (10/100/1000BaseT(X) or 100/1000BaseSFP+) | EDS-G308-2SFP: 2<br>EDS-G308-2SFP-T: 2 |
| Standards | IEEE 802.3 for 10BaseT<br>IEEE 802.3ab for 1000BaseT(X)<br>IEEE 802.3u for 100BaseT(X) and 100BaseFX<br>IEEE 802.3x for flow control<br>IEEE 802.3z for 1000BaseX<br>IEEE 802.3az for Energy-Efficient Ethernet |
| **DIP Switch Configuration** | |
| Ethernet Interface | Broadcast storm protection, Jumbo Frame, IEEE 802.3az energy saving, 100/1000 SFP speed switching, Port break alarm |

## Switch Properties

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|---|---|
| Jumbo Frame Size | 9.6 KB |
| MAC Table Size | 8 K |
| Packet Buffer Size | 4 Mbits |
| Processing Type | Store and Forward |

## Power Parameters

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|---|---|
| Connection | 1 removable 6-contact terminal block(s) |
| Input Voltage | 12/24/48 VDC, Redundant dual inputs |
| Operating Voltage | 9.6 to 60 VDC |
| Reverse Polarity Protection | Supported |
| Input Current | EDS-G308: 0.29 A @ 24 VDC<br>EDS-G308-2SFP: 0.31 A @ 24 VDC |

## Physical Characteristics

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|---|---|
| Housing | Metal |
| IP Rating | IP30 |
| Dimensions | 53 x 135 x 105 mm (2.08 x 5.31 x 4.13 in) |
| Weight | 880 g (1.94 lb) |
| Installation | DIN-rail mounting, Wall mounting (with optional kit) |

## Environmental Limits

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|---|---|
| Operating Temperature | Standard Models: -10 to 60°C (14 to 140°F)<br>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

| | |
|---|---|
| Freefall | IEC 60068-2-32 |
| EMC | EN 55032/24 |
| EMI | CISPR 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: 20 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 |
| Hazardous Locations | ATEX, Class I Division 2 |
| Maritime | ABS, DNV-GL, LR, NK |
| Railway | EN 50121-4 |
| Safety | EN 60950-1, UL 508, EN 60950-1 (LVD) |
| Shock | IEC 60068-2-27 |
| Vibration | IEC 60068-2-6 |

### MTBF

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|---|---|
| Time | 2,424,649 hrs |
| Standards | Telcordia (Bellcore), GB |

### Warranty

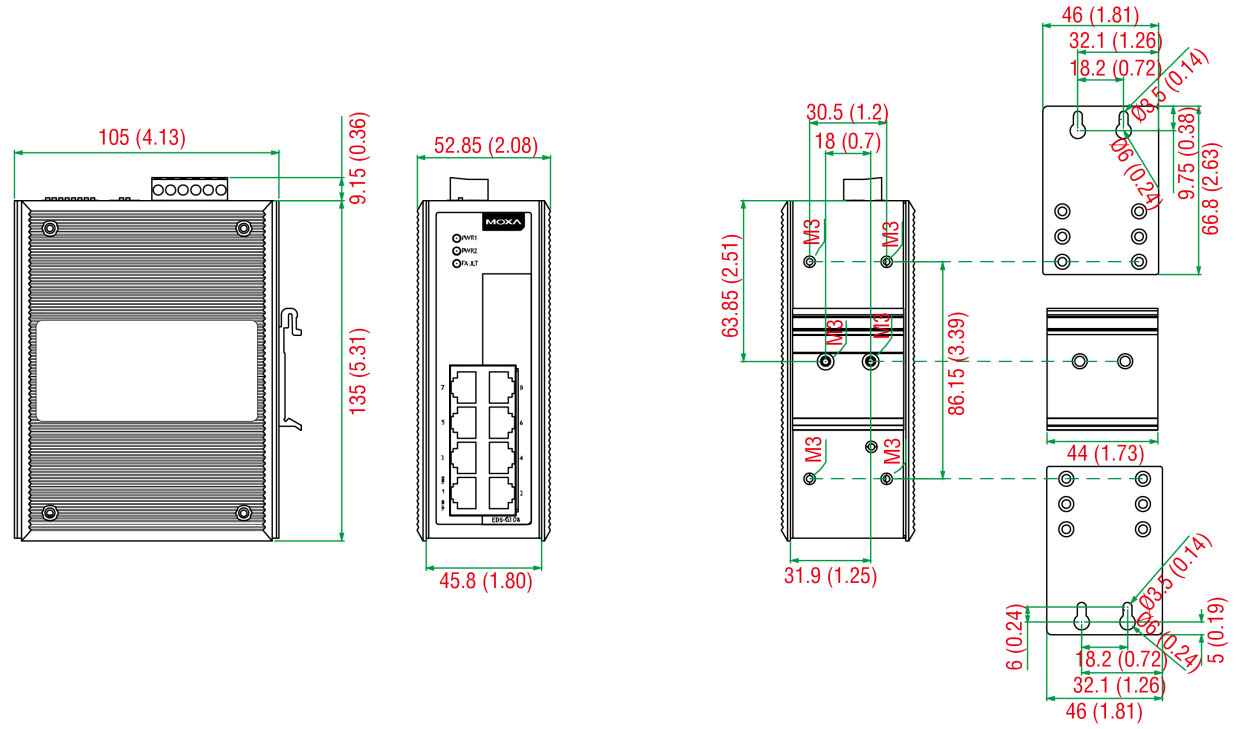
| | |
|---|---|
| Warranty Period | 5 years |
| Details | See www.moxa.com/warranty |

### Package Contents

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|---|---|
| Device | 1 x EDS-G308 Series switch |
| Installation Kit | 4 x cap, plastic, for RJ45 port<br>2 x cap, plastic, for SFP slot (-2SFP models) |
| Documentation | 1 x quick installation guide<br>1 x warranty card |
| Note | SFP modules need to be purchased separately for use with this product. |

## Dimensions

Unit: mm (inch)




Side View | Front View | Rear View | DIN-Rail/Panel-Mounting Kit

## Ordering Information

| Model Name | 10/100/1000BaseT(X) Ports RJ45 Connector | Combo Ports 10/100/1000BaseT(X) or 100/1000BaseSFP | Operating Temp. |
|---|---|---|---|
| EDS-G308 | 8 | – | -10 to 60°C |
| EDS-G308-T | 8 | – | -40 to 75°C |

| Model Name | 10/100/1000BaseT(X) Ports RJ45 Connector | Combo Ports 10/100/1000BaseT(X) or 100/1000BaseSFP | Operating Temp. |
|---|---|---|---|
| EDS-G308-2SFP | 6 | 2 | -10 to 60°C |
| EDS-G308-2SFP-T | 6 | 2 | -40 to 75°C |

## Accessories (sold separately)

### SFP Modules

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|---|---|
| SFP-1FELLC-T | SFP module with 1 100Base single-mode with LC connector for 80 km transmission, -40 to 85°C operating temperature |
| SFP-1FEMLC-T | SFP module with 1 100Base multi-mode with LC connector for 4 km transmission, -40 to 85°C operating temperature |
| SFP-1FESLC-T | SFP module with 1 100Base single-mode with LC connector for 40 km transmission, -40 to 85°C operating temperature |
| SFP-1G10ALC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature |
| SFP-1G10ALC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature |
| SFP-1G10BLC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature |
| SFP-1G10BLC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature |
| SFP-1G20ALC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature |
| SFP-1G20ALC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature |
| SFP-1G20BLC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature |
| SFP-1G20BLC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature |
| SFP-1G40ALC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature |
| SFP-1G40ALC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature |
| SFP-1G40BLC | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature |
| SFP-1G40BLC-T | WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature |
| SFP-1GEZXLC | SFP module with 1 1000BaseEZX port with LC connector for 110 km transmission, 0 to 60°C operating temperature |
| SFP-1GEZXLC-120 | SFP module with 1 1000BaseEZX port with LC connector for 120 km transmission, 0 to 60°C operating temperature |
| SFP-1GLHLC | SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, 0 to 60°C operating temperature |
| SFP-1GLHLC-T | SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, -40 to 85°C operating temperature |
| SFP-1GLHXLC | SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, 0 to 60°C operating temperature |
| SFP-1GLHXLC-T | SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, -40 to 85°C operating temperature |
| SFP-1GLSXLC | SFP module with 1 1000BaseLSX port with LC connector for 500 m transmission, 0 to 60°C operating temperature |
| SFP-1GLSXLC-T | SFP module with 1 1000BaseLSX port with LC connector for 500 m transmission, -40 to 85°C operating temperature |

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|---|---|
| SFP-1GLXLC | SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, 0 to 60°C operating temperature |
| SFP-1GLXLC-T | SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, -40 to 85°C operating temperature |
| SFP-1GSXLC | SFP module with 1 1000BaseSX port with LC connector for 300/550 m transmission, 0 to 60°C operating temperature |
| SFP-1GSXLC-T | SFP module with 1 1000BaseSX port with LC connector for 300/550 m transmission, -40 to 85°C operating temperature |
| SFP-1GZXLC | SFP module with 1 1000BaseZX port with LC connector for 80 km transmission, 0 to 60°C operating temperature |
| SFP-1GZXLC-T | SFP module with 1 1000BaseZX port with LC connector for 80 km transmission, -40 to 85°C operating temperature |
| SFP-1GTXRJ45-T | SFP module with 1 1000BaseT port with RJ45 connector for 100 m transmission, -40 to 75°C operating temperature |

### Power Supplies

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|---|---|
| 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

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|---|---|
| WK-46 | Wall-mounting kit, 2 plates, 8 screws, 46.5 x 66.8 x 1 mm |

### Rack-Mounting Kits

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

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