# **EDS-G205 Series**

## 5G-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 10 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-G205-1GTXSFP switches are equipped with 5 Gigabit Ethernet ports and 1 fiber-optic port, making them ideal for applications that require high bandwidth. The EDS-G205-1GTXSFP 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)                | 4<br>Auto negotiation speed<br>Full/Half duplex mode<br>Auto MDI/MDI-X connection   |
| Combo Ports (10/100/1000BaseT(X) or 100/<br>1000BaseSFP+) | 1   |
| 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 |
| Switch Properties   |   |
| MAC Table Size  | 8 K   |
| Packet Buffer Size  | 1 Mbits   |



| Jumbo Frame Size                       | 10 КВ  |
|--|--|
| Processing Type                        | Store and Forward  |
| DIP Switch Configuration               |  |
| Ethernet Interface                     | Broadcast storm protection, Jumbo Frame, IEEE 802.3az energy saving, 100/1000 SFP speed switching, Port break alarm  |
| Power Parameters                       |  |
| 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                          | 0.14 A @ 24 VDC  |
| Physical Characteristics               |  |
| Housing                                | Metal  |
| IP Rating                              | IP30   |
| Dimensions                             | 29 x 135 x 105 mm (1.14 x 5.31 x 4.13 in)  |
| Weight                                 | 290 g (0.64 lb)  |
| Installation                           | DIN-rail mounting, Wall mounting (with optional kit)   |
| Environmental Limits                   |  |
| Operating Temperature                  | EDS-G205-1GTXSFP: -10 to 60°C (14 to 140°F)<br>EDS-G205-1GTXSFP-T: -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  |
| ЕМІ                                    | 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

| MI DF            |   |
|------------------|---|
| Time             | 2,823,446 hrs                                     |
| Standards        | Telcordia (Bellcore), GB                          |
| Warranty         |   |
| Warranty Period  | 5 years   |
| Details          | See www.moxa.com/warranty                         |
| Package Contents |   |
| Device           | 1 x EDS-G205 Series switch                        |
| Installation Kit | 1 x cap, plastic, for SFP slot                    |
|                  |   |
| Documentation    | 1 x quick installation guide<br>1 x warranty card |

## **Dimensions**

Unit: mm (inch)



# **Ordering Information**

| Model Name         | 10/100/1000BaseT(X) Ports<br>RJ45 Connector | Combo Ports<br>10/100/1000BaseT(X) or 100/<br>1000BaseSFP | Operating Temp. |
|--------------------|---|---|-----------------|
| EDS-G205-1GTXSFP   | 4   | 1   | -10 to 60°C     |
| EDS-G205-1GTXSFP-T | 4   | 1   | -40 to 75°C     |

# **Accessories (sold separately)**

#### SFP Modules

SFP-1FELLC-T

SFP module with 1 100Base single-mode with LC connector for 80 km transmission, -40 to  $85^{\circ}$ C operating temperature



| SFP-1FEMLC-T    | SFP module with 1 100Base multi-mode with LC connector for 4 km transmission, -40 to $85^{\circ}$ 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 $85^{\circ}$ 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   |
| 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 $60^{\circ}$ C operating temperature                              |
| SFP-1GSXLC-T    | SFP module with 1 1000BaseSX port with LC connector for 300/550 m transmission, -40 to $85^{\circ}$ 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  |
|                 |  |



| 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 $60^{\circ}$ 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 $60^{\circ}$ 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 $70^{\circ}$ C operating temperature   |  |
| Wall-Mounting Kits                                   |   |  |
| WK-30  | Wall-mounting kit, 2 plates, 4 screws, 40 x 30 x 1 mm   |  |
| WK-46  | Wall-mounting kit, 2 plates, 8 screws, 46.5 x 66.8 x 1 mm   |  |
| Rack-Mounting Kits                                   |   |  |
| RK-4U  | 19-inch rack-mounting kit   |  |
| @ Maye Inc. All visite recorded Undeted Cap 02, 0010 |   |  |

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