

EDS-305シリーズ

5ポートアンマネージド・イーサネット・スイッチ



機能と特長

- 電源障害およびポート切断アラームのためのリレー出力警告
- ブロードキャストストーム防止
- -40～75°Cの幅広い動作温度範囲（-Tモデル）

認証



製品紹介

EDS-305イーサネットスイッチは、産業用イーサネット接続向けに経済的なソリューションを提供します。これらの5ポートスイッチには、電源障害やポートの切断が発生したときにネットワークエンジニアに警告するリレー警告機能が組み込まれています。また、スイッチは、Class 1 Div. 2およびATEX Zone 2規格で定義されている危険な場所など、過酷な産業環境向けに設計されています。

スイッチは、FCC、UL、およびCE規格に準拠しており、0～60°Cの標準動作温度範囲、または-40～75°Cの広い動作温度範囲をサポートしています。すべてのスイッチは、100%バーンインテストを受けており、産業用オートメーションの制御アプリケーションの特別なニーズを満たしています。EDS-305スイッチは、DINレールや配電ボックスに簡単に取付けることができます。

仕様

Input/Output Interface

| | |
|------------------------|---|
| Alarm Contact Channels | 1 relay output with current carrying capacity of 1 A @ 24 VDC |
|------------------------|---|

Ethernet Interface

| | |
|---|--|
| 10/100BaseT(X) Ports (RJ45 connector) | EDS-305/305-T: 5 EDS-305-M-SC/M-ST/S-SC/S-SC-80: 4 All models support: Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection |
| 100BaseFX Ports (multi-mode SC connector) | EDS-305-M-SC/M-SC-T: 1 |
| 100BaseFX Ports (multi-mode ST connector) | EDS-305-M-ST/M-ST-T: 1 |
| 100BaseFX Ports (single-mode SC connector) | EDS-305-S-SC/S-SC-T: 1 |
| 100BaseFX Ports (single-mode SC connector, 80 km) | EDS-305-S-SC-80: 1 |

| Standards | IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3x for flow control | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|--|----------------|------------------------|------------------------|--------------|--|-----------|--|--|------------|------------------------|------------------------|------------------|-----|----------------|-------|-------|--------------|------------------|--|------|------|-------|-------|------------|--------------|------|--|------|------|---------------|--------------|--|--------------|--------------|---------------|--------------|--|--------------|--------------|---------------|----------------|------------|--|---------|---------|----------------|-----------|--|-----------|-----------|------------------|----|--|----|----|-------------------------|---|--|---|---|
| Optical Fiber | <table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="3">100BaseFX</th> </tr> <tr> <th>Multi-Mode</th> <th>Single-Mode (40 km)</th> <th>Single-Mode (80 km)</th> </tr> </thead> <tbody> <tr> <th rowspan="2">Fiber Cable Type</th> <th rowspan="2">OM1</th> <th>50/125 μm</th> <td rowspan="2">G.652</td> <td rowspan="2">G.652</td> </tr> <tr> <th>800 MHz x km</th> </tr> <tr> <td colspan="2">Typical Distance</td> <td>4 km</td> <td>5 km</td> <td>40 km</td> <td>80 km</td> </tr> <tr> <th rowspan="3">Wavelength</th> <th>Typical (nm)</th> <td colspan="2">1300</td> <td>1310</td> <td>1550</td> </tr> <tr> <th>TX Range (nm)</th> <td colspan="2">1260 to 1360</td> <td>1280 to 1340</td> <td>1530 to 1570</td> </tr> <tr> <th>RX Range (nm)</th> <td colspan="2">1100 to 1600</td> <td>1100 to 1600</td> <td>1100 to 1600</td> </tr> <tr> <th rowspan="4">Optical Power</th> <th>TX Range (dBm)</th> <td colspan="2">-10 to -20</td> <td>0 to -5</td> <td>0 to -5</td> </tr> <tr> <th>RX Range (dBm)</th> <td colspan="2">-3 to -32</td> <td>-3 to -34</td> <td>-3 to -34</td> </tr> <tr> <th>Link Budget (dB)</th> <td colspan="2">12</td> <td>29</td> <td>29</td> </tr> <tr> <th>Dispersion Penalty (dB)</th> <td colspan="2">3</td> <td>1</td> <td>1</td> </tr> </tbody> </table> <p>Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power. Note: Compute the “typical distance” of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).</p> | | | | | | 100BaseFX | | | Multi-Mode | Single-Mode (40 km) | Single-Mode (80 km) | Fiber Cable Type | OM1 | 50/125 μ m | G.652 | G.652 | 800 MHz x km | Typical Distance | | 4 km | 5 km | 40 km | 80 km | Wavelength | Typical (nm) | 1300 | | 1310 | 1550 | TX Range (nm) | 1260 to 1360 | | 1280 to 1340 | 1530 to 1570 | RX Range (nm) | 1100 to 1600 | | 1100 to 1600 | 1100 to 1600 | Optical Power | TX Range (dBm) | -10 to -20 | | 0 to -5 | 0 to -5 | RX Range (dBm) | -3 to -32 | | -3 to -34 | -3 to -34 | Link Budget (dB) | 12 | | 29 | 29 | Dispersion Penalty (dB) | 3 | | 1 | 1 |
| | | 100BaseFX | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Multi-Mode | Single-Mode (40 km) | Single-Mode (80 km) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fiber Cable Type | OM1 | 50/125 μ m | G.652 | G.652 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 800 MHz x km | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Typical Distance | | 4 km | 5 km | 40 km | 80 km | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wavelength | Typical (nm) | 1300 | | 1310 | 1550 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TX Range (nm) | 1260 to 1360 | | 1280 to 1340 | 1530 to 1570 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RX Range (nm) | 1100 to 1600 | | 1100 to 1600 | 1100 to 1600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Optical Power | TX Range (dBm) | -10 to -20 | | 0 to -5 | 0 to -5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RX Range (dBm) | -3 to -32 | | -3 to -34 | -3 to -34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Link Budget (dB) | 12 | | 29 | 29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Dispersion Penalty (dB) | 3 | | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

DIP Switch Configuration

| | |
|--------------------|------------------|
| Ethernet Interface | Port break alarm |
|--------------------|------------------|

Switch Properties

| | |
|--------------------|-------------------|
| MAC Table Size | 1 K |
| Packet Buffer Size | 384 K |
| Processing Type | Store and Forward |

Power Parameters

| | |
|-----------------------------|---|
| Input Current | EDS-305/305-T: 0.11 A @ 24 VDC EDS-305-M/S Models: 0.15 A @ 24 VDC |
| Connection | 1 removable 6-contact terminal block(s) |
| Operating Voltage | 12 to 48 VDC |
| Input Voltage | 24 VDC Redundant dual inputs |
| Reverse Polarity Protection | Supported |
| Overload Current Protection | Supported |

Physical Characteristics

| | |
|--------------|--|
| Housing | Metal |
| IP Rating | IP30 |
| Dimensions | 53.6 x 135 x 105 mm (2.11 x 5.31 x 4.13 in) |
| Weight | 790 g (1.75 lb) |
| Installation | DIN-rail mounting Wall 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 (package included) | -40 to 85°C (-40 to 185°F) |
| Ambient Relative Humidity | 5 to 95% (non-condensing) |

Standards and Certifications

| | |
|---------------------|---|
| Hazardous Locations | ATEX Class I Division 2 |
| EMI | CISPR 32, FCC Part 15B Class A |
| EMC | EN 55032/24 |
| Vibration | IEC 60068-2-6 |
| 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: 1 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 3 V IEC 61000-4-8 PFMF |
| Safety | UL 508 UL 60950-1 CSA C22.2 No. 60950-1 |
| Shock | IEC 60068-2-27 |
| Freefall | IEC 60068-2-32 |
| Maritime | DNV |

MTBF

| | |
|-----------|---------------|
| Time | 422,742 hrs |
| Standards | MIL-HDBK-217F |

Warranty

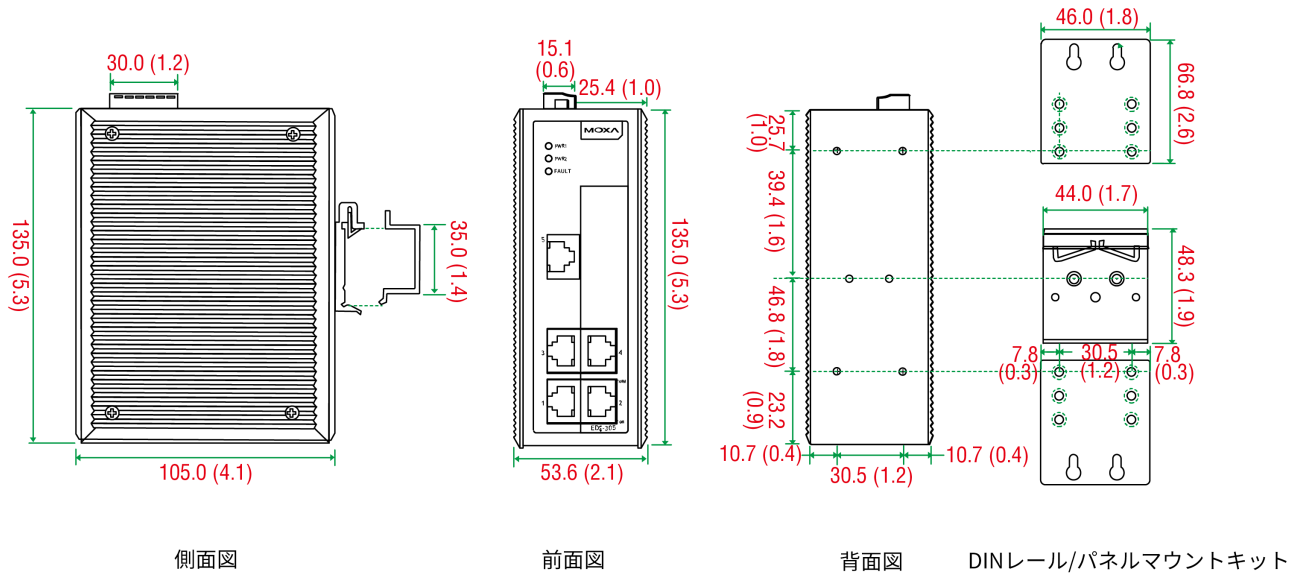
| | |
|-----------------|--|
| Warranty Period | 5 years |
| Details | See www.moxa.com/jp/warranty |

Package Contents

| | |
|------------------|---|
| Device | 1 x EDS-305 Series switch |
| Installation Kit | 2 x cap, plastic, for RJ45 port 1 x cap, plastic, for SC fiber port (-SC models) 1 x cap, plastic, for ST fiber port (-ST models) |
| Documentation | 1 x quick installation guide 1 x warranty card |

寸法

単位: mm (インチ)



注文情報

| 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-305 | 5 | - | - | - | 0 to 60°C |
| EDS-305-T | 5 | - | - | - | -40 to 75°C |
| EDS-305-M-SC | 4 | 1 | - | - | 0 to 60°C |
| EDS-305-M-SC-T | 4 | 1 | - | - | -40 to 75°C |
| EDS-305-M-ST | 4 | - | 1 | - | 0 to 60°C |
| EDS-305-M-ST-T | 4 | - | 1 | - | -40 to 75°C |
| EDS-305-S-SC | 4 | - | - | 1 | 0 to 60°C |
| EDS-305-S-SC-80 | 4 | - | - | 1 | 0 to 60°C |
| EDS-305-S-SC-T | 4 | - | - | 1 | -40 to 75°C |

アクセサリ (別売)

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 |

Rack-Mounting Kits

| | |
|-------|---------------------------|
| RK-4U | 19-inch rack-mounting kit |
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Wall-Mounting Kits

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

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