



Product: SPIDER-PL-20-07T1S2S299EWWHHHH

Configurator: SPIDER-SL /-PL configurator

Configurator Description

Reliably transmit large amounts of data across any distance with the SPIDER III family of industrial Ethernet switches. These unmanaged switches have plug-and-play capabilities to allow for quick installation and startup - without any tools - to maximize uptime.

Technical Specifications

Product description

| | |
|------------------------|---|
| Description | Unmanaged, Industrial ETHERNET Rail Switch, fanless design, store and forward switching mode, USB interface for configuration , Fast Ethernet |
| Port type and quantity | 7 x 10/100BASE-TX, TP cable, RJ45 sockets, auto-crossing, auto-negotiation, auto-polarity , 2 x 100BASE-FX, SM cable, SC sockets |

Product Life Cycle

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|--------------------|------------|
| Availability | passiv |
| Last Order Date | 2023-09-30 |
| Last Delivery Date | 2023-12-31 |

More Interfaces

| | |
|--------------------------------|-----------------------------------|
| Power supply/signaling contact | 1 x plug-in terminal block, 6-pin |
| USB interface | 1 x USB for configuration |

Network size - length of cable

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|---------------------------------|---|
| Twisted pair (TP) | 0 - 100 m |
| Single mode fiber (SM) 9/125 µm | 0 - 30 km (Link Budget at 1300 nm = 0 - 16 db; A = 0.4 dB/km; BLP = 3.5 ps/(nm*km)) |

Network size - cascadiability

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|------------------------|-----|
| Line - / star topology | any |
|------------------------|-----|

Power requirements

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|--------------------------------|---------------------------------------|
| Current consumption at 24 V DC | Max. 280 mA |
| Operating Voltage | 12/24 V DC (9.6 - 32 V DC), redundant |
| Power consumption | Max. 6.9 W |
| Power output in BTU (IT)/h | 23.7 |

Diagnostics features

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| Diagnostic functions | LEDs (power, link status, data, data rate) |
|----------------------|--|

Ambient conditions

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|------------------------------------|---|
| MTBF | 852.056 h (Telcordia) 731.432 h (Telcordia) |
| Operating temperature | -40+70 °C |
| Storage/transport temperature | -40+85 °C |
| Relative humidity (non-condensing) | 10 - 95 % |
| Protective paint on PCB | Yes (conformal coating) |

Mechanical construction

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|--------------------|--|
| Dimensions (WxHxD) | 56 x 135 x 117 mm (w/o terminal block) |
| Weight | 510 g |

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|------------------|--------------------|
| Mounting | DIN rail |
| Protection class | IP40 metal housing |

Mechanical stability

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|-------------------------|--|
| IEC 60068-2-6 vibration | 3.5 mm, 5–8.4 Hz, 10 cycles, 1 octave/min 1 g, 8.4–150 Hz, 10 cycles, 1 octave/min |
| IEC 60068-2-27 shock | 15 g, 11 ms duration, 18 shocks |

EMC interference immunity

| | |
|--|--|
| EN 61000-4-2 electrostatic discharge (ESD) | 8 kV contact discharge, 15 kV air discharge |
| EN 61000-4-3 electromagnetic field | 20V/m (80 – 3000 MHz) |
| EN 61000-4-4 fast transients (burst) | 4kV power line; 4kV data line |
| EN 61000-4-5 surge voltage | power line: 2kV (line/earth), 1kV (line/line); 4kV data line |
| EN 61000-4-6 Conducted Immunity | 10V (150 kHz - 80 MHz) |

EMC emitted immunity

| | |
|-------------------|----------------------------|
| EN 55022 | EN 55032 Class A |
| FCC CFR47 Part 15 | FCC 47CFR Part 15, Class A |

Approvals

| | |
|--|--|
| Basis Standard | CE, FCC, EN61131 |
| Safety of industrial control equipment | cUL 61010-1/61010-2-201 |
| Hazardous locations | ISA 12.12.01 Class 1 Div. 2; ATEX Zone 2 |
| Shipbuilding | DNV |
| Substation | IEC61850-3; IEEE1613 |
| Railway norm | EN50121-4 |

Reliability

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|-----------|---|
| Guarantee | 60 months (please refer to the terms of guarantee for detailed information) |
|-----------|---|

Scope of delivery and accessories

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|-------------------|--|
| Accessories | Rail Power Supply RPS 30/80 EEC/120 EEC (CC), Wall mounting plate for DIN rail mounting (width 40/70 mm) |
| Scope of delivery | Device, terminal block, safety instruction |

Further Instructions

| | |
|-----------------------|---|
| Product Documentation | https://www.doc.hirschmann.com/index.html |
| Certificates | https://www.doc.hirschmann.com/certificates.html |

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