

FL SWITCH 1005N-2SFX - Industrial Ethernet Switch



1085176

<https://www.phoenixcontact.com/us/products/1085176>

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Unmanaged Switch 1000 series, 5 RJ45 ports 10/100 Mbps, 2 SFP ports 100 Mbps, degree of protection: IP30, Ambient temperature (operation): -10 °C ... 60 °C, Supply voltage range: 9 V DC ... 32 V DC, PROFINET Conformance Class A

Your advantages

- RJ45 ports support a transmission speed of 10/100 Mbps
- QoS-prioritized (Quality of Service) messages
- Local diagnostic indicators with LEDs
- PROFINET PTCP filter for reliable communication on PROFINET networks
- Enhanced traffic prioritization for automation protocols
- Energy-efficient Ethernet in accord. with IEEE 802.3az
- PROFINET conformance Class A for real-time data exchange, alarms, and diagnostics
- Auto negotiation and autocrossing detection simplifies installation and setup

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1085176 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | DN20 |
| Product key | DNN116 |
| GTIN | 4055626834832 |
| Weight per piece (including packing) | 258.75 g |
| Weight per piece (excluding packing) | 173 g |
| Customs tariff number | 85176200 |
| Country of origin | TW |

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Technical data

Dimensions

| | |
|--------|----------|
| Width | 22.5 mm |
| Height | 140.4 mm |
| Depth | 92.4 mm |

Notes

Note on application

| | |
|---------------------|-------------------------|
| Note on application | Only for industrial use |
|---------------------|-------------------------|

Utilization restriction

| | |
|----------|---|
| EMC note | EMC: class A product, see manufacturer's declaration in the download area |
|----------|---|

Material specifications

| | |
|------------------|--------------------------------|
| Housing material | Polycarbonate fiber reinforced |
|------------------|--------------------------------|

Mounting

| | |
|---------------|-------------------|
| Mounting type | DIN rail mounting |
|---------------|-------------------|

Interfaces

Ethernet (RJ45)

| | |
|-------------------------------|-----------------------------------|
| Number of interfaces | 5 |
| Connection method | RJ45 |
| Note on the connection method | Auto negotiation and autocrossing |
| Transmission speed | 10/100 Mbps |
| Transmission physics | Ethernet in RJ45 twisted pair |
| Transmission length | 100 m (per segment) |
| Signal LEDs | Data receive, link status |
| No. of channels | 5 (RJ45 ports) |
| Input buffer | 768 Kbits |
| Output buffer | 768 Kbits |

Ethernet (SFP)

| | |
|----------------------|--|
| Number of interfaces | 2 |
| Connection method | SFP |
| Transmission speed | 100 Mbps (full duplex) |
| Transmission physics | Depending on the SFP module |
| Transmission length | up to 40 km (Depending on the fiber/SFP module used) |
| Signal LEDs | Data receive, link status |
| No. of channels | 2 (SFP ports) |

Product properties

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| | |
|----------------|---|
| Product type | Switch |
| Product family | Unmanaged Switch 1000 |
| MTTF | 107.9 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%) |
| | 1346 Years (SN 29500 standard, temperature 25°C, operating cycle 21%) |
| | 1294.8 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day)) |

Switch functions

| | |
|----------------------------------|---|
| Basic functions | Unmanaged switch |
| | Autonegotiation |
| | Store and Forward switching mode |
| PROFINET conformance class | Conformance Class A |
| MAC address table | 2k |
| Status and diagnostic indicators | LEDs: U _S , link and activity per port |
| Additional functions | 100 BASE-TX/100BASE-FX (IEEE 802.3u) |
| | Quality of Service (QoS) prioritization (IEEE 802.1p) |
| | Energy-efficient Ethernet (IEEE 802.3az) |
| | 10Base-T (IEEE 802.3) |

Security functions

| | |
|-----------------|----------------------------------|
| Basic functions | Unmanaged switch |
| | Autonegotiation |
| | Store and Forward switching mode |

Electrical properties

| | |
|---|---------------------|
| Maximum power dissipation for nominal condition | 2.79 W (at 24 V DC) |
| Transmission medium | Copper |

Supply

| | |
|-----------------------------|--|
| Supply voltage (DC) | 24 V DC |
| Supply voltage (AC) | 24 V AC (50/60 Hz) |
| Supply voltage range | 9 V DC ... 32 V DC |
| | 18 V AC ... 30 V AC (50/60 Hz) |
| Power supply connection | Via COMBICON, max. conductor cross-section 2.5 mm ² |
| Residual ripple | 3.6 V _{PP} (within the permitted voltage range) |
| Max. current consumption | 310 mA (at 9 V DC) |
| Typical current consumption | 25 mA (at 24 V DC) |

Connection data

Power supply

| | |
|-----------------------------------|---|
| Connection method | Push-in spring connection |
| pluggable | yes |
| Conductor cross-section, rigid | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross-section, flexible | 0.2 mm ² ... 2.5 mm ² |

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| | |
|---|--|
| Conductor cross-section AWG | 24 ... 12 |
| Conductor cross-section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² ... 2.5 mm ² |
| Conductor cross-section, flexible, with ferrule, without plastic sleeve | 0.25 mm ² ... 2.5 mm ² |
| | 0.25 mm ² ... 2.5 mm ² |
| Conductor cross-section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² ... 2.5 mm ² |
| Stripping length | 10 mm |

Environmental and real-life conditions

Ambient conditions

| | |
|--|---|
| Degree of protection | IP30 |
| Ambient temperature (operation) | -10 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Altitude | 2000 m (maximum) |
| Permissible humidity (operation) | 5 % ... 95 % (non-condensing) |
| Permissible humidity (storage/transport) | 5 % ... 95 % (non-condensing) |
| Shock (operation) | 30g (EN 60068-2-27) |
| Vibration (operation) | in acc. with IEC 60068-2-6: 5g, 150 Hz |
| Air pressure (operation) | 79 kPa ... 108 kPa up to 2000 m above mean sea level (Without derating) |
| Air pressure (storage/transport) | 79 kPa ... 108 kPa up to 2000 m above mean sea level (Without derating) |

Approvals

Conformity/Approvals

| | |
|------------------|--|
| UL, USA / Canada | UL 61010-1, UL 61010-2-201 Class I, Div. 2, Groups A, B, C, D, T4 Class I, Zone 2, Group IIC, T4 |
| FCC | Title 47 Part 15 Subpart B:2018 Class A |
| FCC certificate | T190905D11-C |

EMC data

| | |
|-----------------------|-------------------|
| Noise immunity | EN 61000-6-2:2019 |
| Noise emission | |
| Standards/regulations | EN_61000-6-4:2019 |

System properties

Functionality

| | |
|-----------------|----------------------------------|
| Basic functions | Unmanaged switch |
| | Autonegotiation |
| | Store and Forward switching mode |

Signaling

| | |
|----------------|---|
| Status display | LEDs: U _S , link and activity per port |
|----------------|---|

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Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1085176>

 **KC**
Approval ID: R-R-PCK-1085176

 **cULus Listed**
Approval ID: E238705

 **cULus Listed**
Approval ID: E140403

 **cUL Listed**
Approval ID: E196811

 **UL Listed**
Approval ID: E196811

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 19170402 |
| ECLASS-15.0 | 19170402 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC000734 |
|-----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 43222600 |
|-------------|----------|

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Environmental product compliance

EU RoHS

| | |
|---|--------------|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 7(a), 7(c)-I |

China RoHS

| | |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|-------------------------------------|--------------------------------------|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| SCIP | c8234ce2-80ae-4c90-865e-e9b8e551afaf |

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 5.859 kg CO2e |
|---------|---------------|

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Phoenix Contact USA
 586 Fulling Mill Road
 Middletown, PA 17057, United States
 (+717) 944-1300
info@phoenixcon.com