

FL SWITCH 1005N-2SFX - Industrial Ethernet Switch

1085176

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



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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
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Utilization restriction

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

Housing material	Polycarbonate fiber reinforced
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Mounting

Mounting type	DIN rail mounting
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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))
Basic functions	Unmanaged switch Autonegotiation Store and Forward switching mode

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
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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

Connection technology	
Connection name	Power supply

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

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

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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>



EAC

Approval ID: RU D-DE.GB09.B.00312



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 9.0	EC000734
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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

EF3.0 Climate Change

CO2e kg	5.859 kg CO2e
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