FL SWITCH 1005NT-2SFX - Industrial Ethernet Switch

1085164

https://www.phoenixcontact.com/us/products/1085164

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Narrow Ethernet switch, wide temperare range, five RJ45 ports with 10/100 Mbps on all ports, two SFP ports with 100 Mbps, automatic data transmission speed detection, autocrossing function, and QoS

Your advantages

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

Commercial data

Item number	1085164
Packing unit	1 pc
Sales key	DN20
Product key	DNN116
GTIN	4055626832883
Weight per piece (including packing)	349.2 g
Weight per piece (excluding packing)	261 g
Customs tariff number	85176200
Country of origin	TW

Technical data

Dimensions

Width	22.5 mm
Height	140.4 mm
Depth	92.4 mm

Notes

Utilization restriction

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

Material specifications

Housing material	Polycarbonate fiber reinforced
	Aluminum / steel sheet DC01

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)

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

Product type	Switch
Product family	Unmanaged Switch 1000
MTTF	115.8 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

	1350.4 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	1335.2 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	7.44 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 mm²
Residual ripple	3.6 V_{PP} (within the permitted voltage range)
Max. current consumption	310 mA (at 9 V DC)
Typical current consumption	89 mA (at 24 V DC)

Connection data

Connection technology

Connection name	Power supply
pluggable	yes

Power supply

Connection method	Push-in spring connection
Conductor cross section, rigid	0.2 mm² ... 2.5 mm²
Conductor cross section, flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 12

Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 2.5 mm²
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 2.5 mm²
Stripping length	10 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP30
Ambient temperature (operation)	-40 °C ... 75 °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)

EMC data

Conformance with EMC directives	EN 61000-6-2 EN 61000-4-2 (ESD) Criterion B
	EN 61000-6-2 EN 61000-4-3 (electromagnetic fields) Criterion A
	EN 61000-6-2 EN 61000-4-4 (EFT burst) Criterion A
	EN 61000-6-2 EN 61000-4-5 (surge) Criterion B
	EN 61000-6-2 EN 61000-4-6 (line noise immunity) Criterion A
	EN 61000-6-2 EN 61000-4-8 (electromagnetic fields) Criterion A
	EN 61000-6-2 Class A
Noise immunity	EN 61000-6-2:2005
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise emission	EN 61000-6-4:2007 + A1:2011

System properties

Functionality

Basic functions	Unmanaged switch
	Autonegotiation
	Store and Forward switching mode

Signaling

Status display	LEDs: U_S, link and activity per port

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1085164

DNV GL
Approval ID: TAA000034U

UL Listed
Approval ID: FILE E 238705

cUL Listed
Approval ID: FILE E 238705

KC
Approval ID: R-R-PCK-1085164

UAE-RoHS
Approval ID: 23-09-84495

IECEx
Approval ID: IECEx UL 21.0120X

cUL Listed
Approval ID: File E 196811

UL Listed
Approval ID: File E 196811

ATEX
Approval ID: UL 21 ATEX 2638X

cULus Listed

cULus Listed

Classifications

ECLASS

ECLASS-11.0	19170402
ECLASS-12.0	19170402
ECLASS-13.0	19170402

ETIM

ETIM 9.0	EC000734

UNSPSC

UNSPSC 21.0	43222600

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

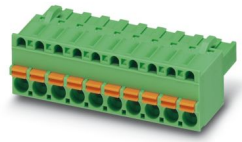
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)

Accessories

FKCT 2,5/ 3-ST KMGY BD:US,GND - PCB connector

1087544

https://www.phoenixcontact.com/us/products/1087544



PCB connector, nominal cross section: 2.5 mm^2, color: light grey, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of rows: 1, number of positions: 3, product range: FKCT 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

FKCT 2,5/ 3-ST KMGY - PCB connector

1998263

https://www.phoenixcontact.com/us/products/1998263



PCB connector, nominal cross section: 2.5 mm^2, color: light grey, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKCT 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

DT-LAN-CAT.6+ - Surge protection device

2881007

https://www.phoenixcontact.com/us/products/2881007



Surge protection in accordance with Class E_A ($CAT6_A$), for Gigabit Ethernet (up to 10 Gbps), token ring, FDDI/CDDI, ISDN, and DS1. Suitable for Power over Ethernet (PoE++ / 4PPoE) “Mode A” and “Mode B”. RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.

FL DIN-RAIL ADAPTER 22.5 - Mounting panel

1085485

https://www.phoenixcontact.com/us/products/1085485



The FL DIN-RAIL ADAPTER 22.5 is designed to allow products 22.5 mm wide to be mounted flush to a standard 35 mm DIN rail, in any orientation.

FL PANEL ADAPTER 22.5 - Mounting panel

1085488

https://www.phoenixcontact.com/us/products/1085488

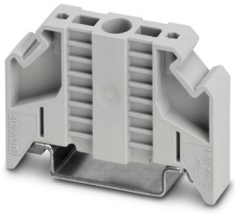


The FL PANEL ADAPTER 22.5 is designed to allow products 22.5 mm wide to be mounted flush to a panel, in any orientation.

E/NS 35 N - End bracket

0800886

https://www.phoenixcontact.com/us/products/0800886

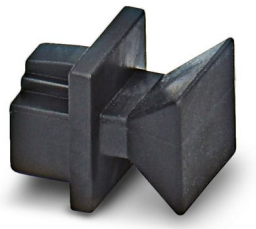


End clamp, width: 9.5 mm, color: gray

FL RJ45 PROTECT CAP - Dust protection

2832991

https://www.phoenixcontact.com/us/products/2832991



Dust protection caps for RJ45 socket

FL SFP FX - Media module

2891081

https://www.phoenixcontact.com/us/products/2891081



The small form-factor plug-in module provides a fiber optic interface with a data transmission speed of 100 Mbps with a wavelength of 1310 nm (long).

FL SFP FX SM - Media module

2891082

https://www.phoenixcontact.com/us/products/2891082



The small form-factor plug-in module provides a fiber optic interface with a data transmission speed of 100 Mbps with a wavelength of 1310 nm (long).

FL SFP FE WDM20-SET - Media module

2702439

https://www.phoenixcontact.com/us/products/2702439



Fast Ethernet SFP WDM set for transmission up to a maximum of 20 km on a single fiber with a wavelength of 1310/1550 nm.

FL CAT5 PATCH 0,5 - Patch cable

2832263

https://www.phoenixcontact.com/us/products/2832263



Patch cable, CAT5, assembled, 0.5 m

FL CAT5 PATCH 1,0 - Patch cable

2832276

https://www.phoenixcontact.com/us/products/2832276



Patch cable, CAT5, assembled, 1 m

FL CAT5 PATCH 2,0 - Patch cable

2832289

https://www.phoenixcontact.com/us/products/2832289

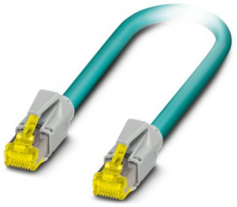


Patch cable, CAT5, assembled, 2 m

NBC-R4AC-R4AC-IE8A/.../... - Patch cable

1411854

https://www.phoenixcontact.com/us/products/1411854

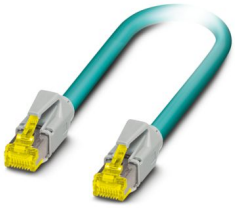


Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, $CAT6_A$, cable outlet: straight, Ethernet

NBC-R4AC/10G-R4AC/10G-94F/2,0 - Patch cable

1408360

https://www.phoenixcontact.com/us/products/1408360

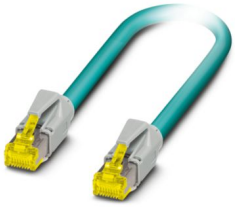


Patch cable, CAT6$_A$, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 2.0 m

NBC-R4AC/10G-R4AC/10G-94F/3,0 - Patch cable

1408365

https://www.phoenixcontact.com/us/products/1408365



Patch cable, CAT6$_A$, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

NBC-R4AC/1,0-93B/R4AC - Patch cable

1408968

https://www.phoenixcontact.com/us/products/1408968



Patch cable, degree of protection: IP20, cable length: 1 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

NBC-R4AC/2,0-93B/R4AC - Patch cable

1408969

https://www.phoenixcontact.com/us/products/1408969



Patch cable, degree of protection: IP20, cable length: 2 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

NBC-R4AC/5,0-93B/R4AC - Patch cable

1408970

https://www.phoenixcontact.com/us/products/1408970



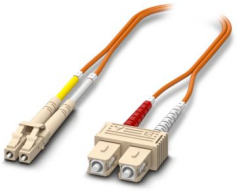
Patch cable, degree of protection: IP20, cable length: 5 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

FOC-LC:PA-SC:PA-OM2:D01/1 - FO patch cable

1115607

https://www.phoenixcontact.com/us/products/1115607

Multi-mode OM2 duplex jumper, LC-SC, UPC polishing, length 1 m

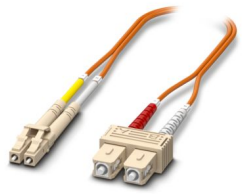


FOC-LC:PA-SC:PA-OM2:D01/2 - FO patch cable

1115605

https://www.phoenixcontact.com/us/products/1115605

Multi-mode OM2 duplex jumper, LC-SC, UPC polishing, length 2 m

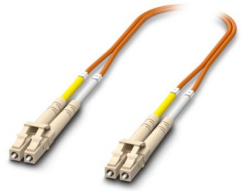


FOC-LC:PA-LC:PA-OM2:D01/1 - FO patch cable

1115633

https://www.phoenixcontact.com/us/products/1115633

Multi-mode OM2 duplex jumper, LC-LC, UPC polishing, length 1 m

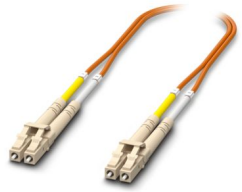


FOC-LC:PA-LC:PA-OM2:D01/2 - FO patch cable

1115634

https://www.phoenixcontact.com/us/products/1115634

Multi-mode OM2 duplex jumper, LC-LC, UPC polishing, length 2 m

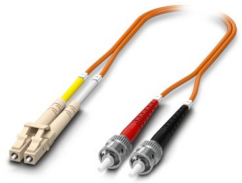


FOC-LC:PA-ST:PA-OM2:D01/1 - Fiber optic cable

1115588

https://www.phoenixcontact.com/us/products/1115588

Multi-mode OM2 duplex jumper, LC-ST, UPC polishing, length 1 m

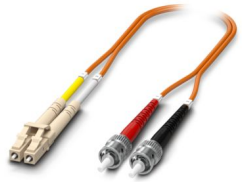


FOC-LC:PA-ST:PA-OM2:D01/2 - Fiber optic cable

1115587

https://www.phoenixcontact.com/us/products/1115587

Multi-mode OM2 duplex jumper, LC-ST, UPC polishing, length 2 m



FOC-LC:PA-SC:PA-OM4:D01/1 - FO patch cable

1115601

https://www.phoenixcontact.com/us/products/1115601

Multi-mode OM4 duplex jumper, LC-SC, UPC polishing, length 1 m

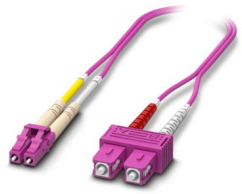


FOC-LC:PA-SC:PA-OM4:D01/2 - FO patch cable

1115600

https://www.phoenixcontact.com/us/products/1115600

Multi-mode OM4 duplex jumper, LC-SC, UPC polishing, length 2 m



FOC-LC:PA-LC:PA-OM4:D01/1 - FO patch cable

1115625

https://www.phoenixcontact.com/us/products/1115625

Multi-mode OM4 duplex jumper, LC-LC, UPC polishing, length 1 m



FOC-LC:PA-LC:PA-OM4:D01/2 - FO patch cable

1115624

https://www.phoenixcontact.com/us/products/1115624

Multi-mode OM4 duplex jumper, LC-LC, UPC polishing, length 2 m

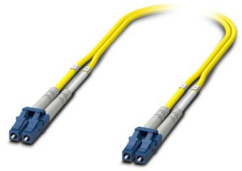


FOC-LC:PA-LC:PA-OS2:D01/1 - FO patch cable

1115636

https://www.phoenixcontact.com/us/products/1115636

Single-mode OS2 duplex jumper, LC-LC, UPC polishing, length 1 m



FOC-LC:PA-LC:PA-OS2:D01/2 - FO patch cable

1115629

https://www.phoenixcontact.com/us/products/1115629

Single-mode OS2 duplex jumper, LC-LC, UPC polishing, length 2 m

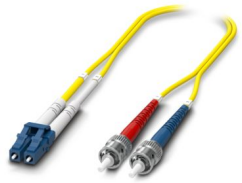


FOC-LC:PA-ST:PA-OS2:D01/1 - FO patch cable

1115596

https://www.phoenixcontact.com/us/products/1115596

Single-mode OS2 duplex jumper, LC-ST, UPC polishing, length 1 m

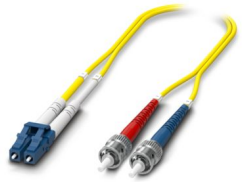


FOC-LC:PA-ST:PA-OS2:D01/2 - FO patch cable

1115595

https://www.phoenixcontact.com/us/products/1115595

Single-mode OS2 duplex jumper, LC-ST, UPC polishing, length 2 m

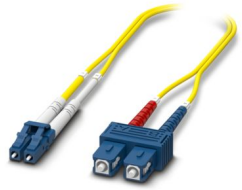


FOC-LC:PA-SC:PA-OS2:D01/1 - FO patch cable

1115618

https://www.phoenixcontact.com/us/products/1115618

Single-mode OS2 duplex jumper, LC-SC, UPC polishing, length 1 m

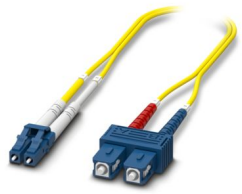


FOC-LC:PA-SC:PA-OS2:D01/2 - FO patch cable

1115617

https://www.phoenixcontact.com/us/products/1115617

Single-mode OS2 duplex jumper, LC-SC, UPC polishing, length 2 m



Phoenix Contact 2024 © - all rights reserved
https://www.phoenixcontact.com

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