

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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 temperature range, four RJ45 ports with 10/100 Mbps on all ports, one SFP port 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	1085169
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	DNN116
Product Key	DNN116
GTIN	4055626834917
Weight per Piece (including packing)	286 g
Weight per Piece (excluding packing)	204 g
Customs tariff number	85176200
Country of origin	TW

Technical Data

Dimensions

Width	22.5 mm
Height	117 mm
Depth	84 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	4
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	4 (RJ45 ports)

Ethernet (SFP)

Number of interfaces	1
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	1 (SFP port)

Product properties

Product type	Switch
Product family	Unmanaged Switch 1000
MTTF	143.4 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

	1664.2 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	1582.8 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

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	215 mA (at 9 V DC)
Typical current consumption	21 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 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

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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)	-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
----------------	---

1085169

<https://www.phoenixcontact.com/gb/products/1085169>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1085169>



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-1085169



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

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

Classifications

ECLASS

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

ETIM

ETIM 8.0	EC000734
----------	----------

UNSPSC

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

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

Environmental Product Compliance

REACH SVHC

Lead 7439-92-1

1085169

<https://www.phoenixcontact.com/gb/products/1085169>

Accessories

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

1087544

<https://www.phoenixcontact.com/gb/products/1087544>



PCB connector, nominal cross section: 2.5 mm², color: light grey, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: 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/gb/products/1998263>



PCB connector, nominal cross section: 2.5 mm², color: light grey, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: 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

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

2881007

<https://www.phoenixcontact.com/gb/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/gb/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 SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

FL PANEL ADAPTER 22.5 - Mounting panel

1085488

<https://www.phoenixcontact.com/gb/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 clamp

0800886

<https://www.phoenixcontact.com/gb/products/0800886>



End clamp, width: 9.5 mm, color: gray

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

FL RJ45 PROTECT CAP - Dust protection

2832991

<https://www.phoenixcontact.com/gb/products/2832991>



Dust protection caps for RJ45 socket

FL SFP FX - Media module

2891081

<https://www.phoenixcontact.com/gb/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 SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

FL SFP FX SM - Media module

2891082

<https://www.phoenixcontact.com/gb/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/gb/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 SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

FL CAT5 PATCH 0,5 - Patch cable

2832263

<https://www.phoenixcontact.com/gb/products/2832263>

Patch cable, CAT5, assembled, 0.5 m



FL CAT5 PATCH 1,0 - Patch cable

2832276

<https://www.phoenixcontact.com/gb/products/2832276>

Patch cable, CAT5, assembled, 1 m



FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

FL CAT5 PATCH 2,0 - Patch cable

2832289

<https://www.phoenixcontact.com/gb/products/2832289>

Patch cable, CAT5, assembled, 2 m



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

1411854

<https://www.phoenixcontact.com/gb/products/1411854>

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



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1408360

<https://www.phoenixcontact.com/gb/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/gb/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

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1408968

<https://www.phoenixcontact.com/gb/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/gb/products/1408969>



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

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1408970

<https://www.phoenixcontact.com/gb/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/gb/products/1115607>



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

FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1115605

<https://www.phoenixcontact.com/gb/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/gb/products/1115633>

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



FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1115634

<https://www.phoenixcontact.com/gb/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/gb/products/1115588>

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



FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1115587

<https://www.phoenixcontact.com/gb/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/gb/products/1115601>

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



FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1115600

<https://www.phoenixcontact.com/gb/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/gb/products/1115625>

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



FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1115624

<https://www.phoenixcontact.com/gb/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/gb/products/1115636>

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



FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1115629

<https://www.phoenixcontact.com/gb/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/gb/products/1115596>

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



FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1115595

<https://www.phoenixcontact.com/gb/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/gb/products/1115618>

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



FL SWITCH 1004NT-SFX - Industrial Ethernet Switch



1085169

<https://www.phoenixcontact.com/gb/products/1085169>

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

1115617

<https://www.phoenixcontact.com/gb/products/1115617>

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



Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd

Halesfield 13, Telford

Shropshire, TF7 4PG

01952 681700

info@phoenixcontact.co.uk