

Industrial Ethernet Switch - FL SWITCH 1004N-FX SM - 1085214

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Unmanaged Switch 1000, 4 RJ45 ports 10/100 Mbps, 1 SC single mode 100 Mbps, degree of protection: IP30, PROFINET Conformance-Class A

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, alarms, and diagnostics
- ✓ Energy-efficient Ethernet in accord. with IEEE 802.3az
- ✓ PROFINET PTCP filter for reliable communication on PROFINET networks
- ✓ Enhanced traffic prioritization for automation protocols



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	220.000 g
Country of origin	Taiwan

Technical data

Note

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

Dimensions

Width	22.5 mm
Height	122.88 mm
Depth	90.26 mm

Industrial Ethernet Switch - FL SWITCH 1004N-FX SM - 1085214

Technical data

Ambient conditions

Degree of protection	IP30
Ambient temperature (operation)	-10 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
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)

Interfaces

Interface	Ethernet (RJ45)
No. of ports	4 (RJ45 ports)
Note on the connection method	Auto negotiation and autocrossing
Transmission physics	Ethernet in RJ45 twisted pair
Transmission speed	10/100 Mbps
Transmission length	100 m (per segment)
Signal LEDs	Data receive, link status
Interface	Ethernet FO
No. of ports	1 (SC single mode)
Transmission physics	Single-mode fiberglass
Transmission speed	100 Mbps (full duplex)
Transmit capacity, minimum	-20 dBm
Transmit capacity, maximum	0 dBm
Minimum receiver sensitivity	-32 dBm
Maximum receiver sensitivity	0 dBm
Transmission length	20 km (fiberglass with F-G 9/125 0.5 dB/km)
Wavelength	1310 nm

Function

Basic functions	Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode
Additional functions	Autonegotiation
MAC address table	2k
PROFINET conformance class	Conformance-Class A
Status and diagnostic indicators	LEDs: U _s , link and activity per port

Network expansion parameters

Cascading depth	Network, linear, and star structure: any
Maximum conductor length (twisted pair)	100 m

Supply voltage

Industrial Ethernet Switch - FL SWITCH 1004N-FX SM - 1085214

Technical data

Supply voltage

Supply voltage	24 V DC
	24 V AC (50/60 Hz)
Residual ripple	3.6 V _{PP} (within the permitted voltage range)
Supply voltage range	9 V DC ... 32 V DC
	18 V AC ... 30 V AC (50/60 Hz)
Typical current consumption	51 mA
Max. current consumption	196 mA

General

Mounting type	DIN rail
Type AX	Stand-alone
Net weight	138 g
MTTF	95.9 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)
	298.8 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	188.3 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))

Connection data

Connection method	Push-in spring connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	10 mm

Standards and Regulations

Type of test	Free fall in accordance with EN 61131-2
Vibration (storage/transport)	5g, 150 Hz, in acc. with IEC 60068-2-6
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz
Shock (operation)	30g (EN 60068-2-27)

Classifications

eCl@ss

eCl@ss 10.0.1	19170402
eCl@ss 11.0	19170402

Industrial Ethernet Switch - FL SWITCH 1004N-FX SM - 1085214

Classifications

eCl@ss

eCl@ss 9.0	19170106
------------	----------

ETIM

ETIM 5.0	EC000734
----------	----------

Approvals

Approvals

Approvals

UL Listed / cUL Listed / UL Listed / cUL Listed / EAC

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140403
-----------	--	---	---------------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140403
------------	--	---	---------------

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
-----------	--	---	---------------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
------------	--	---	---------------

EAC			RU D- DE.GB09.B.00312
-----	--	--	--------------------------

Industrial Ethernet Switch - FL SWITCH 1004N-FX SM - 1085214

Accessories

Accessories

Assembly adapter

Mounting plate - FL DIN-RAIL ADAPTER 22.5 - 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.

Mounting plate - FL PANEL ADAPTER 22.5 - 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.

Data cable preassembled

Patch cable - NBC-R4AC-R4AC-IE8A/.../... - 1411854



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

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

Industrial Ethernet Switch - FL SWITCH 1004N-FX SM - 1085214

Accessories

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

End block

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263



Patch cable, CAT5, assembled, 0.5 m

Patch cable - FL CAT5 PATCH 1,0 - 2832276



Patch cable, CAT5, assembled, 1 m

Patch cable - FL CAT5 PATCH 2,0 - 2832289



Patch cable, CAT5, assembled, 2 m

Industrial Ethernet Switch - FL SWITCH 1004N-FX SM - 1085214

Accessories

PCB plug

PCB connector - FKCT 2,5/ 3-ST KMGY BD:US,GND - 1087544



PCB connector, nominal cross section: 2.5 mm², color: light gray, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of rows: 1, Number of positions per row: 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: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - FKCT 2,5/ 3-ST KMGY - 1998263



PCB connector, nominal cross section: 2.5 mm², color: light gray, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 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: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Protective cap

Dust protection - FL RJ45 PROTECT CAP - 2832991



Dust protection caps for RJ45 socket

Surge protection for information technology

Surge protection device - DT-LAN-CAT.6+ - 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+) "Mode A" and "Mode B". RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.
