

# FL SWITCH 1005N - Industrial Ethernet Switch



1085039

<https://www.phoenixcontact.com/us/products/1085039>

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, five RJ45 ports with 10/100 Mbps on all ports, automatic data transmission speed detection, autocrossing function, and QoS

## Your advantages

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

## Commercial data

Item number	1085039
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN20
Product key	DNN116
GTIN	4055626834320
Weight per piece (including packing)	210.13 g
Weight per piece (excluding packing)	131 g
Customs tariff number	85176200
Country of origin	TW

# FL SWITCH 1005N - Industrial Ethernet Switch



1085039

<https://www.phoenixcontact.com/us/products/1085039>

## Technical data

### Dimensions

Width	22.5 mm
Height	117 mm
Depth	84 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

### Product properties

Product type	Switch
Product family	Unmanaged Switch 1000
MTTF	167.2 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)
	1627 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	1526 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))

### Switch functions

# FL SWITCH 1005N - Industrial Ethernet Switch



1085039

<https://www.phoenixcontact.com/us/products/1085039>

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 <sub>S</sub> , 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	0.99 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 <sup>2</sup>
Residual ripple	3.6 V <sub>PP</sub> (within the permitted voltage range)
Max. current consumption	110 mA (at 9 V DC)
Typical current consumption	19 mA (at 24 V DC)

## Connection data

### Power supply

Connection method	Push-in spring connection
pluggable	yes
Conductor cross-section, rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 12
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible, with ferrule, without plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Stripping length	10 mm

## Environmental and real-life conditions

# FL SWITCH 1005N - Industrial Ethernet Switch



1085039

<https://www.phoenixcontact.com/us/products/1085039>

## 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)

## Standards and regulations

Free from substances that could impair the application of coating	In acc. with VW specification
---	-------------------------------

## Approvals

### Conformity/Approvals

UL, USA / Canada	UL 61010-1, UL 61010-2-201, UL 62368-1 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

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
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 61000-6-4 EN 55032 Class A
	EN 61000-6-4 Conducted noise emission EN 55032 Class A
Noise immunity	FCC/CFR 47, Part 15.109 Class A
	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

# FL SWITCH 1005N - Industrial Ethernet Switch



1085039

<https://www.phoenixcontact.com/us/products/1085039>

## Signaling

Status display

LEDs: U<sub>S</sub>, link and activity per port

# FL SWITCH 1005N - Industrial Ethernet Switch



1085039

<https://www.phoenixcontact.com/us/products/1085039>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1085039>



**IECEE CB Scheme**  
Approval ID: DK-91138-UL



**IECEE CB Scheme**  
Approval ID: DK-91246-UL



**KC**  
Approval ID: R-R-PCK-1085039



**cULus Listed**  
Approval ID: E238705



**cULus Listed**  
Approval ID: E140304

**CC-Link IE TSN Class A**  
Approval ID: NRT-IT-00068

**TEC**  
Approval ID: MTCTE:379403535



**cUL Listed**  
Approval ID: E196811



**UL Listed**  
Approval ID: E196811

# FL SWITCH 1005N - Industrial Ethernet Switch



1085039

<https://www.phoenixcontact.com/us/products/1085039>

## Classifications

### ECLASS

ECLASS-13.0	19170402
ECLASS-15.0	19170402

### ETIM

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

### UNSPSC

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

# FL SWITCH 1005N - Industrial Ethernet Switch



1085039

<https://www.phoenixcontact.com/us/products/1085039>

## 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	2cf6e074-8e85-4498-87aa-8a0ef94111a5

### EF3.1 Climate Change

CO2e kg	11.27 kg CO2e
---------	---------------

Phoenix Contact 2026 © - 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](mailto:info@phoenixcon.com)