

# FL SWITCH SMN 6TX/2FX SM - Industrial Ethernet Switch



2989556

<https://www.phoenixcontact.com/us/products/2989556>

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Smart Managed Narrow Switch (SMN) with six 10/100 Mbps RJ45 ports and two 100 Mbps single mode SC format fiber optic ports

## Product description

The Smart Managed Narrow switch (SMN) is an Ethernet switch suitable for industrial applications with six Fast Ethernet ports in RJ45 format and two single-mode Fast Ethernet FO ports in SC format

## Commercial data

Item number	2989556
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DNN122
Catalog page	Page 413 (C-6-2017)
GTIN	4046356478304
Weight per piece (including packing)	848.5 g
Weight per piece (excluding packing)	777 g
Country of origin	DE

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## Technical data

### Dimensions

Width	57 mm
Height	133 mm
Depth	125 mm

### Material specifications

Color	gray aluminum
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### Mounting

Mounting type	DIN rail mounting
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### Interfaces

#### Ethernet (RJ45)

Connection method	RJ45
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	10/100 Mbps
Transmission physics	Copper
Transmission length	100 m (per segment)
Signal LEDs	Supply voltage, data transmission, error, link, activity
No. of channels	6 (RJ45 ports)

#### Ethernet FO

Connection method	SC
Transmission speed	100 Mbps (full duplex)
Transmission physics	Single-mode fiberglass
Transmission length	36000 m (fiberglass with F-G 9/125 0.36 dB/km) 32000 m (fiberglass with F-G 9/125 0.4 dB/km) 26000 m (fiberglass with F-G 9/125 0.5 dB/km)
Wavelength	1300 nm
Signal LEDs	Data receive, link status
No. of channels	2 (SC single mode)

#### Serial (RS-232)

Connection method	RS-232-C, 6-pos. MINI-DIN socket (PS/2)
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### Product properties

Product type	Switch
Product family	Managed Switch SMN
Type	Block design

#### Switch functions

Diagnostic functions	RMON History N:1-Portmirroring
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	LLDP (Link Layer Discovery Protocol)
	SNMP-Traps
Basic functions	Store-and-forward switch complies with IEEE 802.3 4 priority classes in acc. with IEEE 802.1 P TCP/IP protocol, BootP-capable, port-mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP), PROFINET Device, Media Redundancy Protocol (MRP).
Signal contact control voltage	24 V (typical)
Signal contact control current	100 mA
PROFINET conformance class	Conformance-Class B
PROFINET device function	PROFINET device
	Fast Startup
Filter functions	Quality of Service (4 priority classes)
	Port-Priorisierung
	VLAN
	IGMP Snooping (128 groups)
	IGMP Query
	Auto-Query-Port
	Extended Multicast Filtering
	Static Multicast Filtering
Management	Web-based management (HTTP)
	SNMP v1/v2
	Serial interface (V.24)
Redundancy	MRP (Media Redundancy Protocol)
	RSTP (Rapid Spanning Tree Protocol)
	FRD (Fast Ring Detection)
	Large Tree Support
Status and diagnostic indicators	LEDs: US1, US2 (power supply), Fail (alarm contact), 2 LEDs per Ethernet port (Link and switchable Activity/Speed/Duplex)
Supported browsers	Internet Explorer 5.5 or higher
Additional functions	BootP
	DHCP-Client
Time synchronization	SNTP

## Security functions

Basic functions	Store-and-forward switch complies with IEEE 802.3 4 priority classes in acc. with IEEE 802.1 P TCP/IP protocol, BootP-capable, port-mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP), PROFINET Device, Media Redundancy Protocol (MRP).
Link Layer Discovery Protocol (LLDP)	As per protocol 802.2

## Electrical properties

Transmission medium	Copper
	FO

## Supply

Supply voltage (DC)	24 V DC (redundant)
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Supply voltage range	18 V DC ... 32 V DC
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)
Typical current consumption	325 mA (at U <sub>S</sub> = 24 V DC)

## Function

Signal contact control voltage	24 V (typical)
Signal contact control current	100 mA

## Connection data

Connection method	Screw connection
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
Stripping length	7 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 55 °C (non-condensing)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz
Air pressure (operation)	86 kPa ... 108 kPa (2000 m above mean sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (3500 m above sea level)

## EMC data

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	Store-and-forward switch complies with IEEE 802.3 4 priority classes in acc. with IEEE 802.1 P TCP/IP protocol, BootP-capable, port-mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP), PROFINET Device, Media Redundancy Protocol (MRP).
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### System requirements

Supported browsers	Internet Explorer 5.5 or higher
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## Signaling

Status display	LEDs: US1, US2 (power supply), Fail (alarm contact), 2 LEDs per Ethernet port (Link and switchable Activity/Speed/Duplex)
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## Classifications

### UNSPSC

UNSPSC 21.0	43222612
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(a)-I, 6(c), 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.)	No substance above 0.1 wt%
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## Accessories

### COM CAB MINI DIN - Connecting cable

2400127

<https://www.phoenixcontact.com/us/products/2400127>



Connecting cable, for connecting the controller to a PC (RS-232) for PC WORX with flow control, 3 m in length

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### FL MEM PLUG - Configuration memory

2891259

<https://www.phoenixcontact.com/us/products/2891259>



Exchangeable configuration memory of the device settings for simple device exchange and set-up

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## FL MEM PLUG/MRM - Configuration memory

2891275

<https://www.phoenixcontact.com/us/products/2891275>



Exchangeable configuration memory of the device settings for simple device exchange and set-up. In addition, the Media Redundancy Manager (MRM) license for use is stored within the Media Redundancy protocol (MRP).

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## FL SNMP OPC SERVER V3 - Driver and interface software

2701139

<https://www.phoenixcontact.com/us/products/2701139>



SNMP-OPC server, German and English, for monitoring and configuration of SNMP-capable equipment in HMI and SCADA systems



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## FL CAT6 PATCH 0,3 - Patch cable

2891181

<https://www.phoenixcontact.com/us/products/2891181>



Patch cable, degree of protection: IP20, cable length: 0.3 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## FL CAT6 PATCH 0,5 - Patch cable

2891288

<https://www.phoenixcontact.com/us/products/2891288>



Patch cable, degree of protection: IP20, cable length: 0.5 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## FL CAT6 PATCH 1,0 - Patch cable

2891385

<https://www.phoenixcontact.com/us/products/2891385>



Patch cable, degree of protection: IP20, cable length: 1 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## FL CAT6 PATCH 1,5 - Patch cable

2891482

<https://www.phoenixcontact.com/us/products/2891482>



Patch cable, CAT6, preassembled, 1.5 m

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## FL CAT6 PATCH 2,0 - Patch cable

2891589

<https://www.phoenixcontact.com/us/products/2891589>



Patch cable, degree of protection: IP20, cable length: 2 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## FL CAT6 PATCH 3,0 - Patch cable

2891686

<https://www.phoenixcontact.com/us/products/2891686>



Patch cable, degree of protection: IP20, cable length: 3 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## FL CAT6 PATCH 5,0 - Patch cable

2891783

<https://www.phoenixcontact.com/us/products/2891783>



Patch cable, degree of protection: IP20, cable length: 5 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## FL CAT6 PATCH 7,5 - Patch cable

2891880

<https://www.phoenixcontact.com/us/products/2891880>



Patch cable, degree of protection: IP20, cable length: 7.5 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## FL CAT6 PATCH 10 - Patch cable

2891877

<https://www.phoenixcontact.com/us/products/2891877>



Patch cable, degree of protection: IP20, cable length: 10 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## FL CAT6 PATCH 12,5 - Patch cable

2891369

<https://www.phoenixcontact.com/us/products/2891369>



Patch cable, CAT6, preassembled, 12.5 m

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## FL CAT6 PATCH 15,0 - Patch cable

2891372

<https://www.phoenixcontact.com/us/products/2891372>



Patch cable, degree of protection: IP20, cable length: 15 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## FL CAT6 PATCH 20,0 - Patch cable

2891576

<https://www.phoenixcontact.com/us/products/2891576>



Patch cable, degree of protection: IP20, cable length: 20 m, number of positions: 8, 1 Gbps, CAT6, Ethernet

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## IPASSIGN - Software

2701094

<https://www.phoenixcontact.com/us/products/2701094>



IPAssign is an easy to use tool for setting the IP address of devices which rely on BOOTP. No installation or administrative rights are required to use IPAssign.

This product is free and only available from the "Downloads" tab.

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