

## Industrial Ethernet Switch - FL SWITCH SMN 8TX-PN - 2989501

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>)



Smart Managed Narrow Switch (SMN) with eight 10/100 Mbps RJ45 ports, PROFINET mode (default)

### Product Description

The Smart Managed Narrow switch (SMN) is an Ethernet switch suitable for industrial applications with eight Fast Ethernet ports in RJ45 format. (FL SWITCH SMN 8TX-PN) "PROFINET" mode is activated on the switch by default.

### Why buy this product

- Web-based management, SNMP
- Slim design
- VLANs
- PROFINET device
- MRP (client and master)
- SNMP
- RSTP



### Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	780.000 g
Custom tariff number	85176200
Country of origin	Germany

### Technical data

#### Note

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

#### Environmental Product Compliance

China RoHS	Hazardous substances above threshold values;
------------	--

# Industrial Ethernet Switch - FL SWITCH SMN 8TX-PN - 2989501

## Technical data

### Environmental Product Compliance

	Environmentally Friendly Use Period = 50;
	For details go to tab "Downloads", Category "Manufacturer's declaration"

### Dimensions

Width	57 mm
Height	133 mm
Depth	125 mm

### 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)
Air pressure (operation)	86 kPa ... 108 kPa (2000 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (3500 m above sea level)

### Interfaces

Interface 1	Ethernet (RJ45)
No. of ports	8 (RJ45 ports)
Connection method	RJ45
Note on connection method	Auto negotiation and autocrossing
Transmission physics	Copper
Transmission speed	10/100 MBit/s
Transmission length	100 m (per segment)
Signal LEDs	Supply voltage, data transmission, error, link, activity
Interface 5	Serial (RS-232)
Connection method	RS-232-C, 6-pos. MINI-DIN socket (PS/2)

### Function

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).
Management	Web-based management (HTTP)
	SNMP v1/v2
	Serial interface (V.24)
Diagnostic functions	RMON History
	N:1-Portmirroring
	LLDP (Link Layer Discovery Protocol)

# Industrial Ethernet Switch - FL SWITCH SMN 8TX-PN - 2989501

## Technical data

### Function

	SNMP-Traps
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
Supported browsers	Internet Explorer 5.5 or higher
Redundancy	MRP (Media Redundancy Protocol)
	RSTP (Rapid Spanning Tree Protocol)
	FRD (Fast Ring Detection)
	Large Tree Support
PROFINET IO device function	PROFINET device
	Fast Startup
PROFINET IO conformance class	Conformance-Class B
Time synchronization	SNTP
Additional functions	BootP
	DHCP-Client
Status and diagnostic indicators	LEDs: US1, US2 (power supply), Fail (alarm contact), 2 LEDs per Ethernet port (Link and switchable Activity/Speed/Duplex)
Signal contact control voltage	24 V (typical)
Signal contact control current	100 mA

### Security functions

Link Layer Discovery Protocol (LLDP)	As per protocol 802.2
--------------------------------------	-----------------------

### Network expansion parameters

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

### Supply voltage

Supply voltage	24 V DC (redundant)
Residual ripple	3.6 V <sub>PP</sub> (within the permitted voltage range)
Supply voltage range	18 V DC ... 32 V DC
Typical current consumption	250 mA (at U <sub>S</sub> = 24 V DC)
Current consumption	320 mA

### General

# Industrial Ethernet Switch - FL SWITCH SMN 8TX-PN - 2989501

## Technical data

### General

Mounting type	DIN rail
Type AX	Book type
Net weight	720 g

### Connection data

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	7 mm

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Developed in acc. with standard	IEC 61000-6.2
Test standard	IEC 61000-4-2 (ESD)
Test result	Criterion A
Test standard	IEC 61000-4-3 (electromagnetic fields)
Test result	Criterion A
Test standard	IEC 61000-4-4 (burst)
Test result	Criterion A
Test standard	IEC 61000-4-5 (surge)
Test result	Criterion A
Test standard	IEC 61000-4-6 (immunity to conducted interference)
Test result	Criterion A
Noise emission	EN 61000-6-3 +A11
Noise immunity	EN 61000-6-2:2005
Vibration (storage/transport)	5g, 150 Hz, in acc. with IEC 60068-2-6
Free from substances that could impair the application of coating	Yes
Vibration (operation)	In acc. with IEC 60068-2-6: 5g, 150 Hz

### Classifications

#### eCl@ss

eCl@ss 4.0	24010504
eCl@ss 4.1	24010504

# Industrial Ethernet Switch - FL SWITCH SMN 8TX-PN - 2989501

## Classifications

### eCl@ss

eCl@ss 5.0	19030117
eCl@ss 5.1	19030117
eCl@ss 6.0	19170106
eCl@ss 7.0	19170106
eCl@ss 8.0	19170106
eCl@ss 9.0	19170106

### ETIM

ETIM 4.0	EC000734
ETIM 5.0	EC000734

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201410
UNSPSC 13.2	43201410

## Approvals

### Approvals

---

#### Approvals


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


---

#### Ex Approvals

---

### Approval details

UL Listed  <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> FILE E 140324
---

cUL Listed  <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> FILE E 140324
--

## Industrial Ethernet Switch - FL SWITCH SMN 8TX-PN - 2989501

### Approvals

EAC EAC-Zulassung

EAC RU \*-DE.A\*30.B.01735

cULus Listed 

### Accessories

#### Accessories

#### Configuration memory

Configuration memory - FL MEM PLUG - 2891259



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

Configuration memory - FL MEM PLUG/MRM - 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).

#### Drivers and interfaces

Software - FL SNMP OPC SERVER V3 - 2701139



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

#### Network management software

## Industrial Ethernet Switch - FL SWITCH SMN 8TX-PN - 2989501

### Accessories

Software - FL VIEW 32 LITE - 2701744



FL VIEW, SNMP-based software in English, for the detection and display of Ethernet networks. 32 nodes (network devices) can be monitored in one Class C subnetwork with this version.

---

### Patch cable

Patch cable - FL CAT6 PATCH 0,3 - 2891181



Patch cable, CAT6, pre-assembled, 0.3 m

---

Patch cable - FL CAT6 PATCH 0,5 - 2891288



Patch cable, CAT6, pre-assembled, 0.5 m

---

Patch cable - FL CAT6 PATCH 1,0 - 2891385



Patch cable, CAT6, pre-assembled, 1.0 m

---

Patch cable - FL CAT6 PATCH 1,5 - 2891482



Patch cable, CAT6, pre-assembled, 1.5 m

---

## Industrial Ethernet Switch - FL SWITCH SMN 8TX-PN - 2989501

### Accessories

Patch cable - FL CAT6 PATCH 2,0 - 2891589



Patch cable, CAT6, pre-assembled, 2.0 m

---

Patch cable - FL CAT6 PATCH 3,0 - 2891686



Patch cable, CAT6, pre-assembled, 3.0 m

---

Patch cable - FL CAT6 PATCH 5,0 - 2891783



Patch cable, CAT6, pre-assembled, 5.0 m

---

Patch cable - FL CAT6 PATCH 7,5 - 2891880



Patch cable, CAT6, pre-assembled, 7.5 m

---

Patch cable - FL CAT6 PATCH 10 - 2891877



Patch cable, CAT6, pre-assembled, 10 m

---



## Industrial Ethernet Switch - FL SWITCH SMN 8TX-PN - 2989501

### Accessories

Patch cable - FL CAT6 PATCH 12,5 - 2891369



Patch cable, CAT6, pre-assembled, 12.5 m

---

Patch cable - FL CAT6 PATCH 15,0 - 2891372



Patch cable, CAT6, pre-assembled, 15.0 m

---

Patch cable - FL CAT6 PATCH 20,0 - 2891576



Patch cable, CAT6, pre-assembled, 20.0 m

---

### Programming cable

Connecting cable - COM CAB MINI DIN - 2400127



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

---

Software - IPASSIGN - 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.

---

