

## Industrial Ethernet Switch - FL NAT SMN 8TX - 2989365

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Smart Managed Narrow NAT switch with eight 10/100 Mbps RJ45 ports and 1:1 NAT router function

The figure shows a version of the product

### Product Description

#### Description

The FL NAT SMN 8TX is the first product in the range of Phoenix Contact to combine the functions of a NAT router (NAT = Network Address Translation) and a switch in one device. The NAT switch is suitable for all applications in automation applications with a control cabinet friendly, slim housing, the "manual factor".

Port 1 is the port via which the NAT implementation takes place in the higher-level network. Ports 2 to 8 of the managed switch are used for the higher-level network. The FL NAT SMN 8TX can be configured via a web server as well as via SNMP (Simple Network Management Protocol).

The FL NAT SMN 8TX is the first combination device that combines switch mechanism (at layer2 level) and routing (at layer3 level). If two devices were needed in the past and thus double installation width for installation and double price for the procurement, FL NAT SMN 8TX is a highly functional device at a highly attractive price.

The switch functions including port mirroring, LLDP or redundancy mechanisms ensure the standard, powerful data communication on seven 100 Mbps LAN ports.

Machine manufacturers always have the problem of fitting their machines with an IP address area which can be integrated back into the IT network of their customers. With the FL NAT SMN 8TX individual machines or systems can be equipped with always identical IP addresses and then these IP addresses in the application are implemented in the required IP address areas of the higher-level company network. This function block is usually known as Network Address Translation - NAT.


### Your advantages

- Web-based management, SNMP
- Slim design
- VLANs
- SNMP
- 1:1 NAT
- Virtual NAT
- 7 LAN-Ports
- RSTP with fast switch-over
- Routing



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## Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 456074
GTIN	4046356456074
Weight per Piece (excluding packing)	800.000 g
Custom tariff number	85176200
Country of origin	Germany

## Technical data

### Dimensions

Width	57 mm
Height	133 mm
Depth	130 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	Ethernet
No. of ports	8 (RJ45 ports)
Note on the connection method	Auto negotiation and autocrossing
Transmission physics	Copper
Transmission speed	10/100 Mbps
Transmission length	100 m (per segment)
Signal LEDs	Supply voltage, data transmission, error, link, activity
Interface	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 2, priority classes in acc. with IEEE 802.1 P TCP/IP protocol, BootP-capable, integrated web server function, Rapid Spanning Tree (RSTP), router, 1:1 NAT router
Management	Web-based management (HTTP)
	SNMP v1/v2

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## Technical data

### Function

Diagnostic functions	RMON History
	LLDP (Link Layer Discovery Protocol)
	SNMP-Traps
Filter functions	VLAN (up to 32 VLANs)
Redundancy	RSTP (Rapid Spanning Tree Protocol)
	FRD (Fast Ring Detection)
	Large Tree Support
	STP (Spanning Tree Protocol)
	MRP (Media Redundancy Protocol)
Additional functions	Routing (1:1 NAT, Virtual NAT, Routing)
	BootP
	DHCP-Client
Supported browsers	Internet Explorer 5.5 or higher
PROFINET conformance class	Conformance-Class A
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 DC (typical)
Signal contact control current	600 mA (maximum)

### 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	600 mA (at U <sub>S</sub> = 24 V DC)
Max. current consumption	600 mA

### General

Mounting type	DIN rail
Type AX	Book type
Net weight	650 g
MTTF	349.06 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	185.83 Years (SN 29500 standard, temperature 40°C, operating cycle 34.25%)
	46.86 Years (SN 29500 standard, temperature 70°C, operating cycle 100%)

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### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	Operation: 25g, 11 ms duration, semi-sinusoidal shock impulse
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	Storage/Transport: 50g, 11 ms duration, semi-sinusoidal shock impulse
Type of test	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6
Test result	Operation/Storage/Transport: 5g, 150 Hz, Criterion 3
Type of test	Free fall in acc. with IEC 60068-2-32
Test result	1 m
Noise emission	EN 61000-6-4:2007 + A1:2011
Noise immunity	EN 61000-6-2:2005
Vibration (storage/transport)	5g, 10 Hz ... 150 Hz, in accordance with IEC 60068-2-6
Vibration (operation)	in accordance with IEC 60068-2-6: 5g, 10 Hz ... 150 Hz

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Classifications

### eCl@ss

eCl@ss 10.0.1	19170401
eCl@ss 4.0	27250500
eCl@ss 4.1	27250500
eCl@ss 5.0	19030100
eCl@ss 5.1	19030100
eCl@ss 6.0	19170100
eCl@ss 7.0	19170106
eCl@ss 8.0	19170106
eCl@ss 9.0	19170106

### ETIM

ETIM 3.0	EC000734
ETIM 4.0	EC001478
ETIM 5.0	EC000734
ETIM 6.0	EC000734

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## Classifications

### ETIM

ETIM 7.0	EC000734
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### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201410
UNSPSC 13.2	43222612
UNSPSC 18.0	43222612
UNSPSC 19.0	43222612
UNSPSC 20.0	43222612
UNSPSC 21.0	43222612

## Accessories

### Accessories

#### 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

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### Accessories

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Patch cable - FL CAT6 PATCH 1,5 - 2891482



Patch cable, CAT6, pre-assembled, 1.5 m

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Patch cable - FL CAT6 PATCH 2,0 - 2891589



Patch cable, CAT6, pre-assembled, 2.0 m

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Patch cable - FL CAT6 PATCH 3,0 - 2891686



Patch cable, CAT6, pre-assembled, 3.0 m

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Patch cable - FL CAT6 PATCH 5,0 - 2891783



Patch cable, CAT6, pre-assembled, 5.0 m

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Patch cable - FL CAT6 PATCH 7,5 - 2891880



Patch cable, CAT6, pre-assembled, 7.5 m

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### Accessories

Patch cable - FL CAT6 PATCH 10 - 2891877



Patch cable, CAT6, pre-assembled, 10 m

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Patch cable - FL CAT6 PATCH 12,5 - 2891369



Patch cable, CAT6, pre-assembled, 12.5 m

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Patch cable - FL CAT6 PATCH 15,0 - 2891372



Patch cable, CAT6, pre-assembled, 15.0 m

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Patch cable - FL CAT6 PATCH 20,0 - 2891576



Patch cable, CAT6, pre-assembled, 20.0 m

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### Patch panel

Patch panels - FL PF 8TX CAT 6 - 2891071



Patch field with eight RJ45 CAT6 network connections

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### Accessories

#### 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

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#### 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.