

# FL SWITCH SFN 8TX-PN - Industrial Ethernet Switch



2891018

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Ethernet switch, eight TP RJ45 ports, automatic detection of data transmission speed of 10 or 100 Mbps (RJ45), autocrossing function. The multicast filter will block PROFINET PTCP-Delay traffic.

## Product description

FL SWITCH SFN... Factoryline switches with standard functions can be used for quick and cost-effective Ethernet network expansion to the field level. The narrow housing design makes them suitable for universal remote use in control cabinets and junction boxes.

FL SWITCH SFN...-PN switches have a unique multicast filter that blocks PROFINET PTCP-Delay traffic.

## Switching properties

### - Multi-address function

The switch independently learns the addresses of termination devices connected to a port by evaluating the source addresses in the data. Only packets with unknown addresses, with a source address of this port or with a multicast/broadcast address in the destination address field are forwarded via the corresponding port. Up to 2048 MAC addresses can be stored.

### - Quality of service

In cases of heavy traffic, packets with an 802.1Q priority level between 4 and 7 or with an IPv4 Type of Service Precedence value of one or more are considered high priority and are processed before packets with an 802.1Q priority level between 0 and 3 or an IPv4 Type of Service Precedence value of 0.

### - Multicast filtering

The multicast filter will block PROFINET PTCP-Delay traffic by filtering frames with the destination MAC address in the range 01-80-C2-00-00-02 through 01-80-C2-00-00-0F. Note that the filter blocks LLDP traffic because PTCP-Delay uses the same MAC address (01-80-C2-00-00-0E).

### - Security

Low cost, low complexity security (optional) elements are available to restrict access or tampering.

### - Wiring

Power connection is via a removable COMBICON connector. US is +24 V DC and GND is 0 V DC. FE is via a separate screw.

## Your advantages

- QoS-prioritized (Quality of Service) messages
- Multicast filter to block PROFINET PTCP-Delay traffic
- RJ45 ports support a transmission speed of 10/100 Mbps
- Local diagnostic indicators with LEDs
- The switch also offers cable locking and port blocking
- Auto negotiation and autocrossing detection simplifies installation and setup

## Commercial data

Item number	2891018
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN19
Product key	DNN113

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Catalog page	Page 290 (C-6-2019)
GTIN	4046356997300
Weight per piece (including packing)	615 g
Weight per piece (excluding packing)	365 g
Customs tariff number	85176200
Country of origin	TW

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## Technical data

### Dimensions

Width	50 mm
Height	130 mm
Depth	100 mm

### Notes

Note on application

Note on application	Only for industrial use
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### Material specifications

Housing material	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	Ethernet in RJ45 twisted pair
No. of channels	8 (RJ45 ports)

### Product properties

Product type	Switch
Product family	Unmanaged Switch SFN
Type	Block design
MTTF	128 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

Data management status

Article revision	02
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Switch functions

Basic functions	Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode
PROFINET conformance class	Conformance-Class A
Status and diagnostic indicators	LEDs: U <sub>S</sub> , link and activity per port
Additional functions	Autonegotiation

Security functions

Basic functions	Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode
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## Electrical properties

Maximum power dissipation for nominal condition	3.36 W
Transmission medium	Copper

### Supply

Supply voltage (DC)	24 V DC
Supply voltage range	9 V DC ... 32 V DC
Residual ripple	3.6 V <sub>PP</sub> (within the permitted voltage range)
Typical current consumption	140 mA (at U <sub>S</sub> = 24 V DC)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Air pressure (operation)	86 kPa ... 108 kPa (up to 1500 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (up to 3500 m above sea level)

## EMC data

Conformance with EMC directives	IEC 61000-6-2 IEC 61000-4-2 (ESD) Criterion B
Noise immunity	EN 61000-6-2:2005
Noise emission	EN 61000-6-4

## System properties

### Functionality

Basic functions	Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode
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## Signaling

Status display	LEDs: U <sub>S</sub> , link and activity per port
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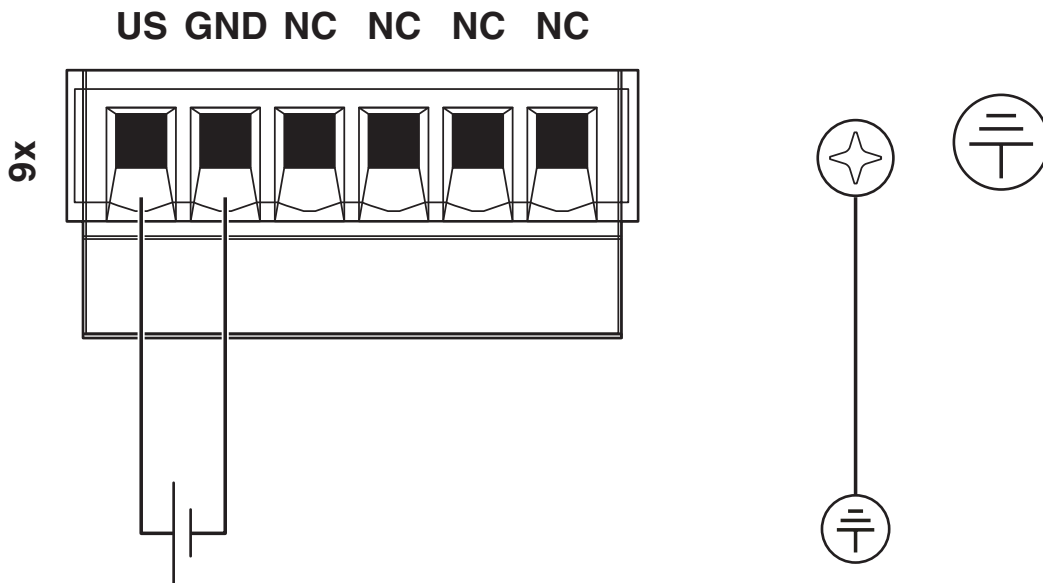
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## Drawings

Connection diagram



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## Approvals

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**EAC**

Approval ID: RU\*-DE.\*.B.00741/19



**cUL Listed**

Approval ID: FILE E 140324

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## Classifications

### ECLASS

ECLASS-11.0	19170402
ECLASS-12.0	19170402
ECLASS-13.0	19170402

### ETIM

ETIM 9.0	EC000734
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### UNSPSC

UNSPSC 21.0	43222600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-10
	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)
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