

# FL SWITCH SFN 6TX/2FX-NF - Industrial Ethernet Switch



2891024

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Ethernet switch, 6 TP RJ45 ports, 2 FO ports, 100 Mbps full duplex in SC-D format, automatic detection of data transmission speed of 10 or 100 Mbps (RJ45), autocrossing function, flow control disabled

## Your advantages

- QoS-prioritized (Quality of Service) messages
- RJ45 ports support a transmission speed of 10/100 Mbps
- Fiber-optic ports support 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	2891024
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN19
Product key	DNN113
GTIN	4046356500098
Weight per piece (including packing)	504.3 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	120 mm
Depth	70 mm

### 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
Transmission length	100 m (per segment)
Signal LEDs	Data receive, link status
No. of channels	6 (RJ45 ports)

Fiber optic interface	
Connection method	SC
Transmission speed	100 Mbps (full duplex)
Transmission physics	multi-mode fiberglass
Transmission length	2000 m (Fiberglass 50/125) 2000 m (Fiberglass 62.5/125)
Wavelength	1300 nm
No. of channels	2 (SC multi-mode)

### Product properties

Product type	Switch
Product family	Unmanaged Switch SFN
Type	Block design
MTTF	61.9 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)
Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, no flow control

Insulation characteristics	
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

Switch functions	
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Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, no flow control
Status and diagnostic indicators	LEDs: $U_S$ , link and activity per port
Additional functions	Autonegotiation

## Security functions

Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, no flow control
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## Electrical properties

Local diagnostics	US1/2 Supply voltage Green LED LNK/ACT Link status/data transmission Green LED 100 Data transmission speed Yellow LED
Maximum power dissipation for nominal condition	5.54 W
Test section	500 V DC 1 min
Transmission medium	Copper FO

## Supply

Supply voltage (DC)	24 V DC
Supply voltage range	18.5 V DC ... 30.2 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	230 mA (at $U_S = 24$ V DC)

## Connection data

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 ... 14
Stripping length	7 mm

## 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)
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz
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)
Resistance to gases that may endanger the functions, in acc. with DIN 40046-36, DIN 40046-37	Sulfur dioxide (SO <sub>2</sub> ) 10 ±0.3 cm <sup>3</sup> /m <sup>3</sup> , hydrogen sulfide (H <sub>2</sub> S) 1 ±0.3 cm <sup>3</sup> /m <sup>3</sup> , at 25°C and 75% humidity and exposure of four days

## Standards and regulations

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

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Conformance with EMC directives	IEC 61000-6-2 IEC 61000-4-2 (ESD) Criterion B
	IEC 61000-4-3 (immunity to radiated interference) Criterion A
	IEC 61000-4-4 (burst) Criterion B
	IEC 61000-4-5 (surge) Criterion B
	IEC 61000-4-6 (immunity to conducted interference) Criterion A
	IEC 61000-4-8 (immunity to magnetic fields) Criterion A
Noise immunity	EN 55022 (emitted interference) Criterion A
	EN 61000-6-2:2005

Noise emission

Standards/regulations	EN 61000-6-4
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## System properties

Functionality

Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, no flow control
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## Signaling

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

### ETIM

ETIM 9.0

EC000734

### UNSPSC

UNSPSC 21.0

43222600

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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	15(a), 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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