

# FL SWITCH SFN 6GT/2SX - Industrial Ethernet Switch



2891398

<https://www.phoenixcontact.com/us/products/2891398>

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Ethernet switch, 6 RJ45 ports, 10/100/1000 Mbps on all RJ45 ports, 2 multi-mode SC-D ports, 1 Gbps full duplex, auto negotiation (RJ45), autocrossing function, with signal contact and QoS, extended temperature range

## Your advantages

- Jumbo frame support (frame size up to 9600 bytes/frame)
- All ports offer transmission speeds of 1000 Mbps
- Relay contact for alarm processing of voltage states
- 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	2891398
Packing unit	1 pc
Sales key	DN19
Product key	DNN113
GTIN	4046356101196
Weight per piece (including packing)	552.2 g
Weight per piece (excluding packing)	425 g
Customs tariff number	85176200
Country of origin	TW

## 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	10/100/1000 Mbps
Transmission physics	Ethernet in RJ45 twisted pair
No. of channels	6 (RJ45 ports)

#### Fiber optic interface

Connection method	SC
Transmission speed	1000 Mbps (full duplex)
Transmission physics	multi-mode fiberglass
Transmission length	220 m (Fiberglass 62.5/125) 550 m (Fiberglass 50/125)
Wavelength	850 nm
No. of channels	2 (SC multi-mode)

#### Potential-free signaling contact

Connection method	Plug-in/screw connection via COMBICON
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### Product properties

Product type	Switch
Product family	Unmanaged Switch SFN
Type	Block design
MTTF	36.4 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

#### Insulation characteristics

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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#### Switch functions

Basic functions	Unmanaged switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode
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Signal contact control voltage	Monitoring of the redundant supply voltage
PROFINET conformance class	Conformance Class A
Status and diagnostic indicators	LEDs: U <sub>S1</sub> , U <sub>S2</sub> (redundant voltage supply), link and activity per port
Additional functions	Autonegotiation
	Jumbo frames (max. 9,600 bytes)

## Security functions

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

Local diagnostics	US1/2 Supply voltage Green LED
	100/ACT Link status/data transmission Yellow LED
	1000/ACT Link status/data transmission Yellow LED
Maximum power dissipation for nominal condition	8.4 W
Test section	500 V DC 1 min
Transmission medium	Copper
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## Supply

Supply voltage (DC)	24 V DC (redundant)
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	350 mA (at U <sub>S</sub> = 24 V DC)

## Function

Signal contact control voltage	Monitoring of the redundant supply voltage
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## Connection data

### Power supply

Connection method	Pluggable COMBICON screw connections
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)	-25 °C ... 75 °C
Ambient temperature (storage/transport)	-35 °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

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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

## EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise immunity	EN 61000-6-2:2005

## Noise emission

Standards/regulations	EN 61000-6-4
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## 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>S1</sub> , U <sub>S2</sub> (redundant voltage supply), link and activity per port
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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(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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