

2891391

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Wide-temperature Ethernet switch, five TP RJ45 ports, automatic detection of data transmission speed of 10/100/1000 Mbps (RJ45), autocrossing function, reads QoS priority messages, accepts security frames. Conformal coating for harsh environments.

#### Product description

The FL SWITCH SFN 5GT supports the auto negotiation function at the twisted-pair ports and offers transmission speeds of 10/100/1000 Mbps. Mixed operation for the connection of segments with different data transmission speeds is also supported.

# Switching properties

-Multi-address function

The switch can store up to 8192 MAC addresses in its address table.

#### -Quality of service

In case of heavy traffic, packets tagged with higher priority 802.1Q or Differentiated Services values will be given preference. The switch has four internal priority queues.

#### -Multicast filtering

The multicast filter will block PROFINET PTCP-Delay traffic. This is accomplished 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.

#### -Alarm contact

The switch provides contacts (R1, R2) for remote alarms if a failure is detected. Alarms are triggered if one or both power supplies fail. An alarm can be triggered if a port link is lost. Individual port alarms can be enabled via a DIP switch located on the bottom of the switch. The alarm relay is a normally closed type. When there are no faults, the contact is held open. When a fault occurs, the relay is de-energized to close the contact.

#### -Link monitor DIP switch

To enable an alarm for a port, move the appropriate slider to the ON position. To disable an alarm, move the appropriate slider to the OFF position.

Power connection is via a removable COMBICON connector. US1 and US2 are 24 V DC and GND is 0 V DC. FE symbol is functional earth.

#### Your advantages

- Wide operating temperature range of -40 °C ... 75 °C
- · All ports offer transmission speeds of 1000 Mbps
- Jumbo frame support (frame size up to 10,240 bytes/frame)
- · QoS-prioritized (Quality of Service) messages
- · Alarm contact for power supply and link status diagnostics
- · The switch also offers cable locking and port blocking

#### Commercial data



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Item number	2891391
Packing unit	1 pc
Sales key	DN19
Product key	DNN113
Catalog page	Page 295 (C-6-2019)
GTIN	4055626001104
Weight per piece (including packing)	515 g
Weight per piece (excluding packing)	245 g
Customs tariff number	85176200
Country of origin	TW



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## Technical data

#### **Dimensions**

Width	30 mm
Height	130 mm
Depth	100 mm

#### Notes

#### Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
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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	10/100/1000 Mbps
Transmission physics	Ethernet in RJ45 twisted pair
No. of channels	5 (RJ45 ports)

## Product properties

Product type	Switch
Product family	Unmanaged Switch SFNT
Туре	Block design
MTTF	121.4 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

## Switch functions

Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact
PROFINET conformance class	Conformance-Class A
Status and diagnostic indicators	LEDs: $\mathbf{U_{S1}},\mathbf{U_{S2}}$ (redundant voltage supply), link and activity per port
Additional functions	Autonegotiation
	Jumbo frames (Max. 10,240 bytes)

### Security functions

Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm
	contact



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#### **Electrical properties**

Maximum power dissipation for nominal condition	5.35 W
Transmission medium	Copper
upply	
Supply voltage (DC)	24 V DC (redundant)
Supply voltage range	10 V DC 60 V DC
Power supply connection	Via COMBICON, max. conductor cross section 2.5 mm²
Inrush current	7.2 A (400 µs)
Residual ripple	3.6 V <sub>PP</sub> (within the permitted voltage range)
Max. current consumption	547 mA (10 V DC)
Typical current consumption	223 mA (at U <sub>S</sub> = 24 V DC)

#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C 75 °C
Ambient temperature (storage/transport)	-40 °C 85 °C
Permissible humidity (operation)	5 % 95 % (non-condensing)
Air pressure (operation)	62 kPa 108 kPa (up to 4850 m above mean sea level)
Air pressure (storage/transport)	62 kPa 108 kPa (up to 4850 m above mean sea level)

#### EMC data

Noise immunity	EN 61000-6-2:2005
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4

## System properties

#### Functionality

Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact
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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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