

## Industrial Ethernet Switch - FL SWITCH SFNT 5GT - 2891390

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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.

### 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, functional earth.

### Why buy this product

- ✓ 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
- ✓ The switch also offers cable locking and port blocking
- ✓ Alarm contact for power supply and link status diagnostics
- ✓ Wide operating temperature range (-40°C ... +75°C)

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## Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	520.000 g
Custom tariff number	85176200
Country of origin	Taiwan

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

Width	30 mm
Height	130 mm
Depth	100 mm

### 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)

### Interfaces

Interface 1	Ethernet (RJ45)
No. of ports	5 (RJ45 ports)
Connection method	RJ45
Note on the connection method	Auto negotiation and autocrossing
Transmission physics	Ethernet in RJ45 twisted pair
Transmission speed	10/100/1000 Mbps

### Function

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: U <sub>S1</sub> , U <sub>S2</sub> (redundant voltage supply), link and activity per port, alarm (power and link down)

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## Technical data

### 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	10 V DC ... 60 V DC
Typical current consumption	typ. 223 mA (at U <sub>S</sub> = 24 V DC)
Max. current consumption	547 mA (10 V DC)
Inrush surge current	7.2 A (400 μs)

### General

Mounting type	DIN rail
Type AX	Block design
Net weight	525.6 g
Housing material	Aluminum

### Standards and Regulations

Noise emission	EN 61000-6-4
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D

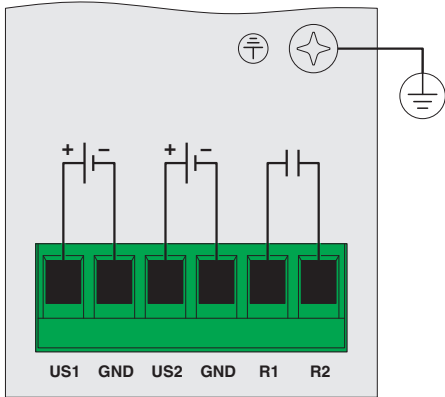
### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 10;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

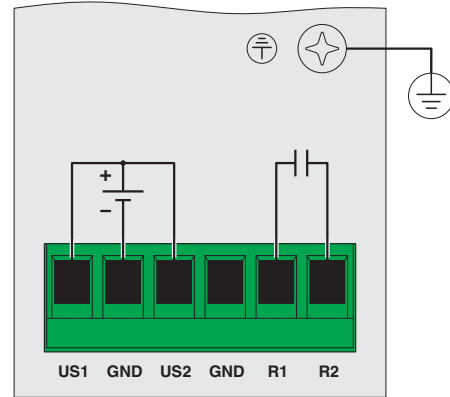
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Connection diagram



Redundant power supply connection

Connection diagram



Single power supply connection

## Classifications

### eCl@ss

eCl@ss 5.1	19030117
eCl@ss 6.0	19170106
eCl@ss 8.0	19170106
eCl@ss 9.0	19170106

### ETIM

ETIM 5.0	EC000734
ETIM 6.0	EC000734

### UNSPSC

UNSPSC 13.2	43222612
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## Approvals

### Approvals

#### Approvals

cUL Listed / UL Listed / cULus Listed

#### Ex Approvals


UL Listed / cUL Listed / cULus Listed


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### Approvals

#### Approval details

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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cULus Listed			
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### Accessories

#### Accessories

##### Assembly adapter

##### Mounting plate - FL PA SFNT 5-8 - 2891012



Mounting plate for SFNT switches

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##### End block

##### End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

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##### Mounting rail adapter

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### Accessories

DIN rail adapter - FL DA SFNT 5-8 - 2891017



Adapter to mount SFNT switches on DIN rail in alternative position

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### Patch cable

Patch cable - FL CAT5 PATCH 0,3 - 2832250



Patch cable, CAT5, assembled, 0.3 m

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Patch cable - FL CAT5 PATCH 0,5 - 2832263



Patch cable, CAT5, assembled, 0.5 m

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Patch cable - FL CAT5 PATCH 1,0 - 2832276



Patch cable, CAT5, assembled, 1 m

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Patch cable - FL CAT5 PATCH 1,5 - 2832221



Patch cable, CAT5, assembled, 1.5 m

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## Industrial Ethernet Switch - FL SWITCH SFNT 5GT - 2891390

### Accessories

Patch cable - FL CAT5 PATCH 2,0 - 2832289



Patch cable, CAT5, assembled, 2 m

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Patch cable - FL CAT5 PATCH 3,0 - 2832292



Patch cable, CAT5, assembled, 3 m

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Patch cable - FL CAT5 PATCH 5,0 - 2832580



Patch cable, CAT5, assembled, 5 m

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Patch cable - FL CAT5 PATCH 7,5 - 2832616



Patch cable, CAT5, assembled, 7.5 m

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Patch cable - FL CAT5 PATCH 10,0 - 2832629



Patch cable, CAT5, assembled, 10 m

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## Industrial Ethernet Switch - FL SWITCH SFNT 5GT - 2891390

### Accessories

Patch cable - FL CAT6 PATCH 0,3 - 2891181



Patch cable, CAT6, pre-assembled, 0.3 m

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Patch cable - FL CAT6 PATCH 0,5 - 2891288



Patch cable, CAT6, pre-assembled, 0.5 m

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Patch cable - FL CAT6 PATCH 1,0 - 2891385



Patch cable, CAT6, pre-assembled, 1.0 m

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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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## Industrial Ethernet Switch - FL SWITCH SFNT 5GT - 2891390

### Accessories

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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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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## Industrial Ethernet Switch - FL SWITCH SFNT 5GT - 2891390

### Accessories

Patch cable - FL CAT6 PATCH 15,0 - 2891372



Patch cable, CAT6, pre-assembled, 15.0 m

Patch cable - FL CAT6 PATCH 20,0 - 2891576



Patch cable, CAT6, pre-assembled, 20.0 m

### Protective cap

Dust protection - FL RJ45 PROTECT CAP - 2832991



Dust protection caps for RJ45 socket

### Safety locking

Port Guard Security Element - FL SEC PAC 4TX - 2832865



Layer1 security elements for four RJ45 network connections for use with patch boxes and panels