

Industrial Ethernet Switch - FL SWITCH SFN 5GT - 2891444

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Ethernet switch, five TP-RJ45 ports with 10/100/1000 Mbps on all ports, automatic detection of data transmission speed of 10/100/1000 Mbps (RJ45), autocrossing function, and QoS.

Product Description

The FL SWITCH SFN... range of Factoryline switches with standard functions in numerous versions can be used for quick and cost-effective Ethernet network expansion to the field level. Due to their narrow housing design, the components are suitable for universal remote use in control cabinets and junction boxes. The switches have five or eight ports.

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

The RJ45 ports offer an auto crossing function, which means it is not necessary to make a distinction between 1:1 and crossover cables.

Switching properties

-Multi-address function

The switch independently learns the addresses for termination devices. 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.

Power connection is via a removable COMBICON connector. US is 24 V DC and GND is 0 V DC. # FE, functional earth.


Your advantages

- ✓ Auto negotiation and autocrossing detection simplifies installation and setup
- ✓ Jumbo frame support (frame size up to 10,240 bytes/frame)
- ✓ QoS-prioritized (Quality of Service) messages
- ✓ Local diagnostic indicators with LEDs
- ✓ All ports offer transmission speeds of 1000 Mbps



Key Commercial Data

Industrial Ethernet Switch - FL SWITCH SFN 5GT - 2891444

Packing unit	1 pc
GTIN	 4 055626 000886
GTIN	4055626000886
Weight per Piece (excluding packing)	300.000 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	28 mm
Height	110 mm
Depth	70 mm

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-10 °C ... 60 °C
Ambient temperature (storage/transport)	-10 °C ... 70 °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	Ethernet (RJ45)
No. of ports	5 (RJ45 ports)
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 / auto negotiation, complies with IEEE 802.3, store and forward switching mode
Additional functions	Autonegotiation
	Jumbo frames (Max. 10,240 bytes)
PROFINET conformance class	Conformance-Class A
Status and diagnostic indicators	LEDs: U _s , link and activity per port

Network expansion parameters

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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
Residual ripple	3.6 V _{PP} (within the permitted voltage range)
Supply voltage range	10 V DC ... 60 V DC
Typical current consumption	200 mA (at U _S = 24 V DC)
Max. current consumption	580 mA (10 V DC)

General

Mounting type	DIN rail
Type AX	Block design
Net weight	205 g
Housing material	Aluminum
MTTF	205.1 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

Standards and Regulations

Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2:2005

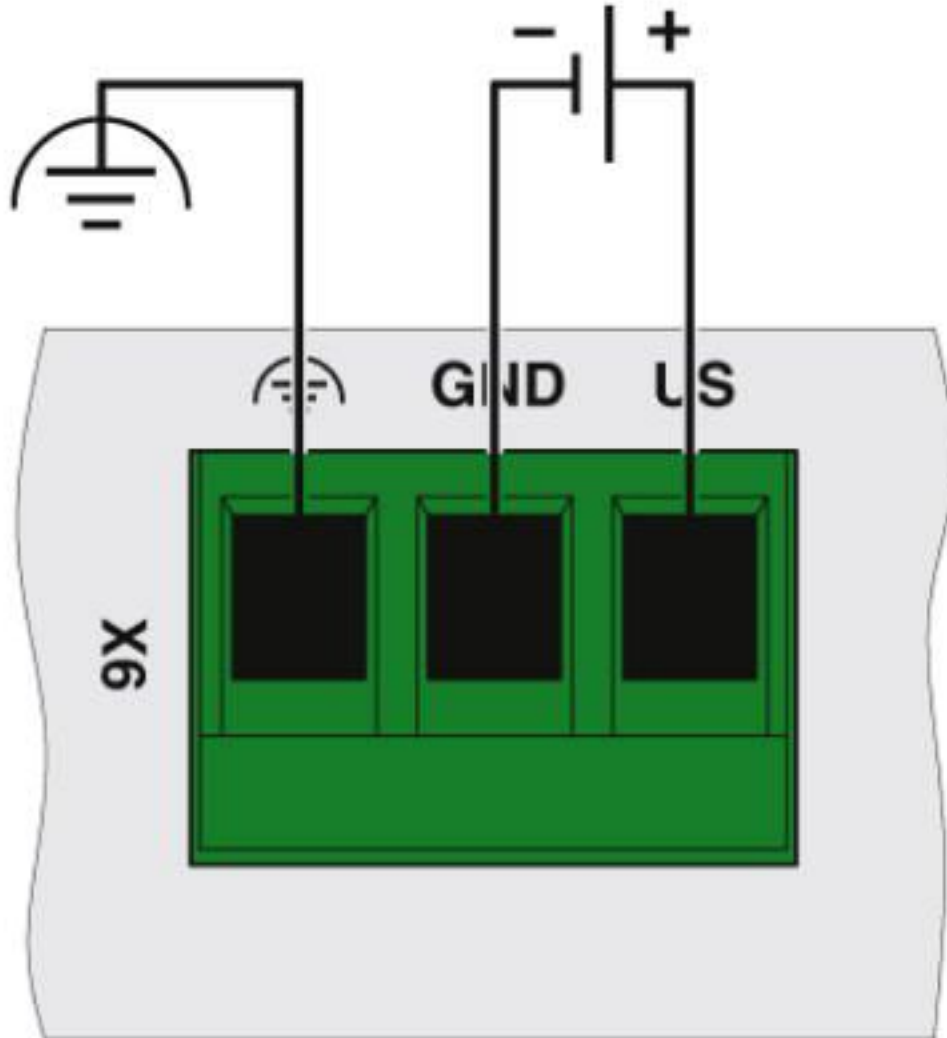
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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



Classifications

eCl@ss

eCl@ss 10.0.1	19170402
eCl@ss 5.0	19030100
eCl@ss 5.1	19030100
eCl@ss 6.0	19170100
eCl@ss 7.0	19170106
eCl@ss 8.0	19170106
eCl@ss 9.0	19170106

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Classifications

ETIM

ETIM 4.0	EC000734
ETIM 5.0	EC000734
ETIM 6.0	EC000734
ETIM 7.0	EC000734

UNSPSC

UNSPSC 13.2	43222612
UNSPSC 18.0	43222612
UNSPSC 19.0	43222612
UNSPSC 20.0	43222612
UNSPSC 21.0	43222612

Approvals

Approvals

Approvals

UL Listed / cUL Listed / KC / EAC / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140324
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KC		http://eng.kcc.go.kr/user/ehpMain.do	R-REI-PCK-2891444
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Approvals

EAC		RU*-DE.*.B.00741/19
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cULus Listed		
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Accessories

Accessories

Data cable preassembled

Patch cable - NBC-R4AC-R4AC-IE8A/.../... - 1411854



Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6_A, cable outlet: straight

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/2,0 - 1408360



Patch cable, CAT6_A, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 2.0 m

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/3,0 - 1408365



Patch cable, CAT6_A, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

End block

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Accessories

End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

Mounting rail adapter

DIN rail adapter - FL DIN RA - 2891053



The FL DIN RA is installed in a standard, 19-inch rack (EIA-310-D, IEC 60297-3-100) to allow DIN rail mounted equipment to be rack mounted.

Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263



Patch cable, CAT5, assembled, 0.5 m

Patch cable - FL CAT5 PATCH 1,0 - 2832276



Patch cable, CAT5, assembled, 1 m

Patch cable - FL CAT5 PATCH 2,0 - 2832289



Patch cable, CAT5, assembled, 2 m

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Accessories

PCB plug

Printed-circuit board connector - MSTB 2,5/ 3-ST - 1754465



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

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

Surge protection for information technology

Surge protection device - DT-LAN-CAT.6+ - 2881007



Surge protection in accordance with Class E_A (CAT6_A), for Gigabit Ethernet (up to 10 Gbps), token ring, FDDI/CDDI, ISDN, and DS1. Suitable for Power over Ethernet (PoE+) "Mode A" and "Mode B". RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.
