

## Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Wide-temperature Ethernet switch, 4 TP RJ45 ports, 1 FO port, 100 Mbps full duplex in SC-D format, automatic detection of data transmission speed of 10/100 Mbps (RJ45), autocrossing function, reads QoS priority messages, accepts security frames

### Your advantages

- ✓ Local diagnostic indicators with LEDs
- ✓ Alarm contact for power supply and link status diagnostics
- ✓ The switch also offers cable locking and port blocking
- ✓ QoS-prioritized (Quality of Service) messages
- ✓ Wide operating temperature range (-40°C ... +75°C)
- ✓ RJ45 ports support a transmission speed of 10/100 Mbps; fiber optic ports support 100 Mbps

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 457194
GTIN	4046356457194
Weight per Piece (excluding packing)	480.000 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
	Use in potentially explosive areas is not permitted in China.

### Dimensions

# Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

## Technical data

### 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)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Air pressure (operation)	62 kPa ... 108 kPa (up to 4160 m above mean sea level)
Air pressure (storage/transport)	62 kPa ... 108 kPa (up to 4160 m above mean sea level)

### Interfaces

Interface	Ethernet (RJ45)
No. of ports	4 (RJ45 ports)
Note on the connection method	Auto negotiation and autocrossing
Transmission physics	Ethernet in RJ45 twisted pair
Transmission speed	10/100 Mbps
Transmission length	100 m (per segment)
Signal LEDs	Data receive, link status
Interface	Fiber optic interface
No. of ports	1 (SC multi-mode)
Transmission physics	multi-mode fiberglass
Transmission speed	100 Mbps (full duplex)
Transmission length	12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)
	3.3 km (fiberglass with F-G 62.5/125 2.6 dB/km F600)
	7.1 km (fiberglass with F-G 50/125 0.7 dB/km F1200)
	3.1 km (fiberglass with F-G 50/125 1.6 dB/km F800)
Wavelength	1300 nm

### Function

Basic functions	Unmanaged switch / autonegotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact
Additional functions	Autonegotiation
Status and diagnostic indicators	LEDs: U <sub>S1</sub> , U <sub>S2</sub> (redundant voltage supply), link and activity per port

### Network expansion parameters

Cascading depth	Network, linear, and star structure: any
Maximum conductor length (twisted pair)	100 m

# Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

## Technical data

### Supply voltage

Supply voltage	24 V DC (redundant)
Residual ripple	3.6 V <sub>PP</sub> (within the permitted voltage range)
Supply voltage range	9 V DC ... 32 V DC
Typical current consumption	180 mA (at U <sub>S</sub> = 24 V DC)
Max. current consumption	565 mA (@9 V DC)

### General

Mounting type	DIN rail
Type AX	Block design
Net weight	475.8 g
Housing material	Aluminum
MTTF	79.7 Years (MIL-HDBK-217F standard, temperature 25°C, operating cycle 100%)

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Conformance	CE-compliant
ATEX	# II 3 G Ex nA nC IIC T4 Gc
IECEX	Ex nA nC IIC T4 Gc
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D

### 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"

## Classifications

### eCl@ss

eCl@ss 10.0.1	19170402
eCl@ss 11.0	19170402
eCl@ss 4.0	27250500
eCl@ss 4.1	27250500
eCl@ss 5.0	19030100
eCl@ss 5.1	19030100
eCl@ss 6.0	19170100

# Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

## Classifications

### eCl@ss

eCl@ss 7.0	19170106
eCl@ss 9.0	19170106

### ETIM

ETIM 2.0	EC000734
ETIM 3.0	EC000734
ETIM 4.0	EC000734
ETIM 6.0	EC000734
ETIM 7.0	EC000734

### UNSPSC

UNSPSC 6.01	43172901
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201410
UNSPSC 13.2	43222612
UNSPSC 18.0	43222612
UNSPSC 19.0	43222612
UNSPSC 20.0	43222612
UNSPSC 21.0	43222612

## Approvals

### Approvals

#### Approvals

DNV GL / BV / LR / NK / ABS / BSH / UL Listed / cUL Listed / EAC / EAC / cULus Listed

#### Ex Approvals

ATEX / IECEx / UL Listed / cUL Listed / cULus Listed

### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAA00002HR
--------	---	---	------------

# Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

## Approvals

BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	22935/C0 BV
LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	LR2002520TA
NK		<a href="http://www.classnk.or.jp/hp/en/">http://www.classnk.or.jp/hp/en/</a>	TA20175M
ABS		<a href="http://www.eagle.org/eagleExternalPortalWEB/">http://www.eagle.org/eagleExternalPortalWEB/</a>	19-HG1928426-PDA
BSH			627
UL Listed		<a href="http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
cUL Listed		<a href="http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
EAC			RU *- DE.A*08.B.00739
EAC			RU*-DE.*.B.00741/19
cULus Listed			

## Accessories

### Accessories

## Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

### Accessories

#### Assembly adapter

Mounting plate - FL PA SFNT 5-8 - 2891012



Mounting plate for SFNT switches

---

#### Data cable preassembled

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



Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6<sub>A</sub>, cable outlet: straight, Ethernet

---

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



Patch cable, CAT6<sub>A</sub>, 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<sub>A</sub>, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

---

Patch cable - NBC-R4AC/1,0-93B/R4AC - 1408968



Patch cable, degree of protection: IP20, cable length: 1 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

## Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

### Accessories

---

Patch cable - NBC-R4AC/2,0-93B/R4AC - 1408969



Patch cable, degree of protection: IP20, cable length: 2 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

---

Patch cable - NBC-R4AC/5,0-93B/R4AC - 1408970



Patch cable, degree of protection: IP20, cable length: 5 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

---

FO patch cable - FOC-LC:PA-SC:PA-OM2:D01/1 - 1115607



Multi-mode OM2 duplex jumper, LC-SC, UPC polishing, length 1 m

---

FO patch cable - FOC-LC:PA-SC:PA-OM2:D01/2 - 1115605



Multi-mode OM2 duplex jumper, LC-SC, UPC polishing, length 2 m

---

FO patch cable - FOC-SC:PA-SC:PA-OM2:D01/1 - 1115536



Multi-mode OM2 duplex jumper, SC-SC, UPC polishing, length 1 m

---

## Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

### Accessories

FO patch cable - FOC-SC:PA-SC:PA-OM2:D01/2 - 1115535



Multi-mode OM2 duplex jumper, SC-SC, UPC polishing, length 2 m

---

FO patch cable - FOC-ST:PA-SC:PA-OM2:D01/1 - 1115574



Multi-mode OM2 duplex jumper, ST-SC, UPC polishing, length 1 m

---

FO patch cable - FOC-ST:PA-SC:PA-OM2:D01/2 - 1115573



Multi-mode OM2 duplex jumper, ST-SC, UPC polishing, length 2 m

---

FO patch cable - FOC-LC:PA-SC:PA-OM4:D01/1 - 1115601



Multi-mode OM4 duplex jumper, LC-SC, UPC polishing, length 1 m

---

FO patch cable - FOC-LC:PA-SC:PA-OM4:D01/2 - 1115600



Multi-mode OM4 duplex jumper, LC-SC, UPC polishing, length 2 m

---

## Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

### Accessories

FO patch cable - FOC-SC:PA-SC:PA-OM4:D01/1 - 1115424



Multi-mode OM4 duplex jumper, SC-SC, UPC polishing, length 1 m

---

FO patch cable - FOC-SC:PA-SC:PA-OM4:D01/2 - 1115423



Multi-mode OM4 duplex jumper, SC-SC, UPC polishing, length 2 m

---

### End block

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

## Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

### Accessories

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

---

### PCB plug

Printed-circuit board connector - MSTB 2,5/ 6-ST - 1754520



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: MSTB 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

---

### Protective cap

Dust protection - FL RJ45 PROTECT CAP - 2832991



Dust protection caps for RJ45 socket

## Industrial Ethernet Switch - FL SWITCH SFNT 4TX/FX - 2891004

### Accessories

---

#### 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<sub>A</sub> (CAT6<sub>A</sub>), for Gigabit Ethernet (up to 10 Gbps), token ring, FDDI/CDDI, ISDN, and DS1. Suitable for Power over Ethernet (PoE++ / 4PPoE) "Mode A" and "Mode B". RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.

---