





Product overview Unmanaged Switches

Features	Copper ports	Fiber optic ports	Port speed	Quality of Service	Special features	Order No.		
Unmanaged Switches for universal use: FL SWITCH 1000 and 1100 NEW								
Supply voltage: 9 ... 32 V DC, 18 ... 30 V AC, temperature range: -10°C ... +60°C								
	5 x RJ45	–	10/100 Mbps	●	–	1085039		
	4 x RJ45	1 x MM SC		●	–	1084159*		
		1 x MM ST		●	–	1085179*		
		1 x SM SC		●	–	1085214*		
		1 x SFX		●	–	1085177*		
	5 x RJ45	2 x SFX		●	–	1085176*		
	8 x RJ45	–		●	–	1085256		
	16 x RJ45	–	●	–	1085255			
	5 x RJ45	–	10/100/1000 Mbps	●	Jumbo frames	1085254		
		4x RJ45				1x SFP	●	1085173*
		5 x RJ45				2 x SFP	●	1085171*
		8 x RJ45				–	●	1085243

* Available from Summer 2020

Features	Mounting type	Width	Designation	Order No.
Mounting accessories for DIN rail devices				
Adapters for wall mounting or flat mounting on the DIN rail, or for devices of the FL SWITCH 1000 series				
	Wall mounting	22.5 mm	FL PANEL ADAPTER 22.5	1085488
		40 mm	FL PANEL ADAPTER 40	1085486
	Flat DIN rail mounting	22.5 mm	FL DIN-RAIL ADAPTER 22.5	1085485
		40 mm	FL DIN-RAIL ADAPTER 40	1085484

Features	Copper ports	Fiber optic ports	Port speed	Quality of Service	Special features	Order No.
Unmanaged Switches for rack mounting: FL SWITCH 1800 and 1900						
Supply voltage: 120/220 V AC, temperature range: 0°C ... +60°C						
	24 x RJ45	–	10/100 Mbps	●	19" mounting	2891041
		–	10/100/1000 Mbps	●		2891057
Robust Unmanaged Switches for harsh ambient conditions: FL SWITCH SFNT						
Supply voltage: 9 ... 36 V DC, temperature range: -40°C ... +75°C						
	5 x RJ45	–	10/100 Mbps	●	ATEX, IECEx (Class I, Div. 2)	2891003
		–		●	Protective coating	2891043
		–	10/100/1000 Mbps	●	–	2891390
		–		●	Protective coating	2891391
	4 x RJ45	1 x MM SC	10/100 Mbps	●	ATEX, IECEx (Class I, Div. 2)	2891004
		2 x MM SC		●	Protective coating	2891044
	8 x RJ45	–		●	ATEX, IECEx (Class I, Div. 2)	2891005
		–		●	Protective coating	2891045
		–		●	IEC 61850-3, 12 ... 57 V DC	2891065
	7 x RJ45	1 x MM SC		●	ATEX, IECEx (Class I, Div. 2)	2891006
		1 x MM ST		●	Protective coating	2891046
				●	–	2891007
				●	Protective coating	2891047
	6 x RJ45	2 x MM SC		●	–	2891025
				●	Protective coating	2891048
		2 x MM ST		●	–	2891026
				●	Protective coating, 12 ... 48 V DC	2891049
	16 x RJ45	–		●	ATEX, IECEx, 12 ... 48 V DC	2891952
14 x RJ45	2 x MM SC	●		12 ... 48 V DC	2891954	

Unmanaged Switches

Standard switches with basic functions

FL SWITCH SFNB... Unmanaged Switches are designed for simple entry-level applications where low installation costs and a high degree of industrialization are required.

Features:

- 5 to 8 ports in a narrow, metal housing
- Optional SC and ST fiber optic ports
- For longer distances, multimode and single mode fiber connections are available
- RJ45 ports provide 10/100 Mbps speeds; fiber optic ports operate at 100 Mbps
- Auto negotiation and autocrossing simplify installation and setup
- LED indicators provide local diagnostics
- Cable locking security options



5 RJ45 ports



Ex:

Technical data

Ethernet interface	
Number of ports	5 (RJ45 ports)
Transmission speed	10/100 Mbps
Fiber optic interface	
Number of ports	-
Transmission speed	-
Connection method	-
Wavelength	-
Transmission distance	-
Function	
Basic functions	Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode
Status and diagnostic indicators	LEDs: U _S , link and activity per port
Power supply	
Supply voltage	24 V DC
Residual ripple	3.6 V _{PP}
Supply voltage range	12 V DC ... 48 V DC
Typical current consumption	185 mA (at U _S = 24 V DC)
General data	
Dimensions	W / H / D 28 mm / 110 mm / 70 mm
Degree of protection	IP20
Ambient temperature (operation)	-10°C ... 60°C
Permissible humidity (operation)	5% ... 95% (non-condensing)
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
EMC note	Class A product, see page 527

Ordering data

Description	Type	Order No.	Pcs./Pkt.
Ethernet switch - 5 RJ45 ports - 8 RJ45 ports - 4 RJ45 ports, 1 SC FO port - 4 RJ45 ports, 1 ST FO port	FL SWITCH SFNB 5TX	2891001	1



8 RJ45 ports



4 RJ45 ports and 1 fiber optic port (multimode)



4 RJ45 ports and 1 fiber optic port (single mode)



Technical data

8 (RJ45 ports) 10/100 Mbps
-
-
-
-

Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode

LEDs: U_S, link and activity per port

24 V DC
3.6 V _{PP}
9 V DC ... 32 V DC
140 mA (at U _S = 24 V DC)

50 mm / 110 mm / 70 mm
IP20
-10°C ... 60°C
5% ... 95% (non-condensing)
EN 61000-6-4
EN 61000-6-2:2005
Class A product, see page 527

Ordering data

Type	Order No.	Pcs./Pkt.
FL SWITCH SFNB 8TX	2891002	1

Technical data

FL SWITCH SFNB 4TX/FX	FL SWITCH SFNB 4TX/FX ST
4 (RJ45 ports) 10/100 Mbps	4 (RJ45 ports) 10/100 Mbps
1 (SC multimode) 100 Mbps (full duplex)	1 (ST multimode) 100 Mbps (full duplex)
SC	ST
12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	1310 nm

Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode

LEDs: U_S, link and activity per port

24 V DC	24 V DC
3.6 V _{PP}	3.6 V _{PP}
12 V DC ... 48 V DC	12 V DC ... 48 V DC
185 mA (at U _S = 24 V DC)	175 mA (at U _S = 24 V DC)

28 mm / 110 mm / 70 mm	28 mm / 110 mm / 70 mm
IP20	IP20
0°C ... 60°C	-10°C ... 60°C
5% ... 95% (non-condensing)	5% ... 95% (non-condensing)
EN 61000-6-4	EN 61000-6-4
EN 61000-6-2	EN 61000-6-2
Class A product, see page 527	Class A product, see page 527

Ordering data

Type	Order No.	Pcs./Pkt.
FL SWITCH SFNB 4TX/FX	2891027	1
FL SWITCH SFNB 4TX/FX ST	2891028	1

Technical data

4 (RJ45 ports) 10/100 Mbps
1 (SC single mode) 100 Mbps (full duplex)
SC
1310 nm
25 km (fiberglass with F-G 9/125 0.5 dB/km)

Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode

LEDs: U_S, link and activity per port

24 V DC
3.6 V _{PP}
12 V DC ... 48 V DC
175 mA (at U _S = 24 V DC)

28 mm / 110 mm / 70 mm
IP20
-10°C ... 60°C
5% ... 95% (non-condensing)
EN 61000-6-4
EN 61000-6-2
Class A product, see page 527

Ordering data

Type	Order No.	Pcs./Pkt.
FL SWITCH SFNB 4TX/FX SM20	2891029	1

Unmanaged Switches

Standard switches with up to 8 ports

FL SWITCH SFN... Unmanaged Switches have a wide range of port configurations and features for standard applications.

Features:

- 5 to 8 ports in a narrow, metal housing
- Optional SC and ST fiber optic ports
- Quality of Service (QoS) prioritized messages
- RJ45 ports provide 10/100 Mbps speeds; fiber optic ports operate at 100 Mbps
- Auto negotiation and autocrossing simplify installation and setup
- LED indicators provide local diagnostics
- Switch-mounted cable locking and port blocking options



5/8 RJ45 ports for PROFINET

		Technical data		
		FL SWITCH SFN 5TX-PN	FL SWITCH SFN 8TX-PN	
Ethernet interface				
Number of ports		5 (RJ45 ports)	8 (RJ45 ports)	
Transmission speed		10/100 Mbps		
Fiber optic interface				
Number of ports		-	-	
Transmission speed		-	-	
Wavelength		-	-	
Transmission distance		-	-	
Function				
Basic functions		Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode		
Status and diagnostic indicators		LEDs: U _S , link and activity per port		
Power supply				
Supply voltage		24 V DC		
Residual ripple		3.6 V _{pp}		
Supply voltage range		9 V DC ... 32 V DC		
Typical current consumption		90 mA (at U _S = 24 V DC)	140 mA (at U _S = 24 V DC)	
General data				
Dimensions	W / H / D	30 mm / 130 mm / 100 mm	50 mm / 130 mm / 100 mm	
Degree of protection		IP20		
Ambient temperature (operation)		0°C ... 60°C		
Permissible humidity (operation)		5% ... 95% (non-condensing)		
Noise emission		EN 61000-6-4		
Noise immunity		EN 61000-6-2:2005		
EMC note		Class A product, see page 527		
		Ordering data		
Description		Type	Order No.	Pcs./Pkt.
Ethernet switch				
- 5 RJ45 ports		FL SWITCH SFN 5TX-PN	2891151	1
- 8 RJ45 ports		FL SWITCH SFN 8TX-PN	2891018	1
- 8 RJ45 ports, flow control disabled				
- 4 RJ45 ports, 1 SC FO port				
- 4 RJ45 ports, 1 ST FO port				
- 7 RJ45 ports, 1 SC FO port				
- 7 RJ45 ports, 1 ST FO port				
- 7 RJ45 ports, 1 SC FO port, flow control disabled				
- 6 RJ45 ports, 2 SC FO ports				
- 6 RJ45 ports, 2 ST FO ports				
- 6 RJ45 ports, 2 SC FO ports, flow control disabled				



5/8 RJ45 ports



4/7 RJ45 ports and 1 FO port



6 RJ45 ports and 2 FO ports



Ex:



Ex:



Ex:

Technical data	
FL SWITCH SFN 5TX	FL SWITCH SFN 8TX
5 (RJ45 ports)	8 (RJ45 ports)
10/100 Mbps	
-	-
-	-
-	-
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _S , link and activity per port	
24 V DC	3.6 V _{PP}
9 V DC ... 32 V DC	
90 mA (at U _S = 24 V DC)	140 mA (at U _S = 24 V DC)
30 mm / 120 mm / 70 mm	50 mm / 120 mm / 70 mm
IP20	
0°C ... 60°C	
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Technical data	
FL SWITCH SFN 4TX/FX	FL SWITCH SFN 7TX/FX ST
4 (RJ45 ports)	7 (RJ45 ports)
10/100 Mbps	
1 (SC multimode)	1 (ST multimode)
100 Mbps (full duplex)	
1300 nm	
2000 m (Fiberglass 50/125)	
2000 m (Fiberglass 62.5/125)	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _S , link and activity per port	
24 V DC	3.6 V _{PP}
9 V DC ... 32 V DC	
140 mA (at U _S = 24 V DC)	190 mA (at U _S = 24 V DC)
30 mm / 120 mm / 70 mm	50 mm / 120 mm / 70 mm
IP20	
0°C ... 60°C	
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Technical data	
FL SWITCH SFN 6TX/2FX	FL SWITCH SFN 6TX/2FX ST
6 (RJ45 ports)	
10/100 Mbps	
2 (SC multimode)	2 (ST multimode)
100 Mbps (full duplex)	
1300 nm	
2000 m (Fiberglass 50/125)	
2000 m (Fiberglass 62.5/125)	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _S , link and activity per port	
24 V DC	3.6 V _{PP}
9 V DC ... 32 V DC	
230 mA (at U _S = 24 V DC)	
50 mm / 120 mm / 70 mm	
IP20	
0°C ... 60°C	
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 5TX	2891152	1
FL SWITCH SFN 8TX	2891929	1
FL SWITCH SFN 8TX-NF	2891022	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 4TX/FX	2891851	1
FL SWITCH SFN 4TX/FX ST	2891453	1
FL SWITCH SFN 7TX/FX	2891097	1
FL SWITCH SFN 7TX/FX ST	2891110	1
FL SWITCH SFN 7TX/FX-NF	2891023	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 6TX/2FX	2891314	1
FL SWITCH SFN 6TX/2FX ST	2891411	1
FL SWITCH SFN 6TX/2FX-NF	2891024	1

Unmanaged Switches

Standard switches with up to 16 ports

FL SWITCH SFN(T)... 16-port Unmanaged Switches provide Ethernet connections with high contact density for larger or higher-level applications.

Features:

- 16 ports in a narrow, metal housing with redundant power supply
- Optional SC fiber optic ports
- Standard devices (-10°C ... +60°C) and devices with wide temperature range (-40°C ... +75°C) available
- RJ45 ports provide 10/100 Mbps speeds; fiber optic ports operate at 100 Mbps
- Auto negotiation and autocrossing simplify installation and setup
- LED indicators provide local diagnostics
- Cable locking security options
- DC and AC power supply options



5/8 RJ45 ports with AC supply



Technical data		
	FL SWITCH SFN 5TX-24VAC	FL SWITCH SFN 8TX-24VAC
Ethernet interface		
Number of ports	5 (RJ45 ports)	8 (RJ45 ports)
Transmission speed	10/100 Mbps	
Fiber optic interface		
Number of ports	-	-
Transmission speed	-	-
Wavelength	-	-
Transmission distance	-	-
Function	Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
Basic functions	LEDs: U _S , link and activity per port	
Status and diagnostic indicators		
Power supply	24 V AC/DC	
Supply voltage	3.6 V _{PP}	
Residual ripple	20 V AC ... 28 V AC	
Supply voltage range		
Typical current consumption	114 mA (at U _S = 24 V AC)	189 mA (at U _S = 24 V AC)
General data		
Dimensions	30 mm / 120 mm / 70 mm	50 mm / 120 mm / 70 mm
Degree of protection	IP20	
Ambient temperature (operation)	0°C ... 60°C	
Permissible humidity (operation)	5% ... 95% (non-condensing)	
Noise emission	EN 61000-6-4	
Noise immunity	EN 61000-6-2:2005	
EMC note	Class A product, see page 527	

Ethernet interface	
Number of ports	
Transmission speed	
Fiber optic interface	
Number of ports	
Transmission speed	
Wavelength	
Transmission distance	
Function	
Basic functions	
Status and diagnostic indicators	
Power supply	
Supply voltage	
Residual ripple	
Supply voltage range	
Typical current consumption	
General data	
Dimensions	W / H / D
Degree of protection	
Ambient temperature (operation)	
Permissible humidity (operation)	
Noise emission	
Noise immunity	
EMC note	

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 5TX-24VAC	2891021	1
FL SWITCH SFN 8TX-24VAC	2891020	1

Description	
Ethernet switch	
- 5 RJ45 ports	
- 8 RJ45 ports	
Ethernet switch	
- 16 RJ45 ports	
- 15 RJ45 ports, 1 SC FO port	
- 14 RJ45 ports, 2 SC FO ports	
Ethernet switch, wide temperature	
- 16 RJ45 ports	
- 14 RJ45 ports, 2 SC FO ports	



16 RJ45 ports



15 RJ45 ports and 1 FO port



14 RJ45 ports and 2 FO ports



Technical data	
FL SWITCH SFN 16TX	FL SWITCH SFNT 16TX
16 (RJ45 ports) 10/100 Mbps	
-	
-	
-	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store-and-forward switching mode, includes alarm contacts	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant) 3.6 V _{PP} 12 V DC ... 48 V DC 350 mA (at U _S = 24 V DC)	
70 mm / 135 mm / 110 mm IP20	
0°C ... 60°C -40°C ... 75°C	
5% ... 95% (non-condensing) EN 61000-6-4 EN 61000-6-2 Class A product, see page 527	

Technical data	
15 (RJ45 ports) 10/100 Mbps	
1 (SC multimode) 100 Mbps (full duplex) 1300 nm 12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store-and-forward switching mode, includes alarm contacts	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant) 3.6 V _{PP} 12 V DC ... 48 V DC 350 mA (at U _S = 24 V DC)	
70 mm / 135 mm / 110 mm IP20	
0°C ... 60°C -40°C ... 75°C	
5% ... 95% (non-condensing) EN 61000-6-4 EN 61000-6-2 Class A product, see page 527	

Technical data	
FL SWITCH SFN 14TX/2FX	FL SWITCH SFNT 14TX/2FX
14 (RJ45 ports) 10/100 Mbps	
2 (SC multimode) 100 Mbps (full duplex) 1300 nm 12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store-and-forward switching mode, includes alarm contacts	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant) 3.6 V _{PP} 12 V DC ... 48 V DC 350 mA (at U _S = 24 V DC)	
70 mm / 135 mm / 110 mm IP20	
0°C ... 60°C -40°C ... 75°C	
5% ... 95% (non-condensing) EN 61000-6-4 EN 61000-6-2	

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 16TX	2891933	1
FL SWITCH SFNT 16TX	2891952	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 15TX/FX	2891934	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 14TX/2FX	2891935	1
FL SWITCH SFNT 14TX/2FX	2891954	1

Standard Gigabit switch

FL SWITCH SFN... Gigabit

Unmanaged Switches have a wide range of port configurations with fiberglass and copper as well as functions for standard applications.

Features:

- 5/8 ports in a narrow, metal housing with redundant power supply
- All ports provide 1000 Mbps speeds
- LED indicators provide local diagnostics
- Relay contact
- **FL SWITCH SFN 6GT/2LX** provides a transmission distance of up to 10 km with 2 single mode fiberglass ports
- **FL SWITCH SFN 6GT/2LX-20** provides a transmission distance of up to 20 km with 2 single mode fiberglass ports



5 / 8 RJ45 ports



Ethernet interface	
Number of ports	
Transmission speed	
Fiber optic interface	
Number of ports	
Transmission speed	
Wavelength	
Transmission distance	
Function	
Basic functions	
Status and diagnostic indicators	
Power supply	
Supply voltage	
Residual ripple	
Supply voltage range	
Typical current consumption	
General data	
Dimensions	W / H / D
Degree of protection	
Ambient temperature (operation)	
Permissible humidity (operation)	
Noise emission	
Noise immunity	
EMC note	

Technical data	
FL SWITCH SFN 5GT	FL SWITCH SFN 8GT
5 (RJ45 ports)	8 (RJ45 ports)
10/100/1000 Mbps	
	-
	-
	-
	-
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _S , link and activity per port	LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port
24 V DC	24 V DC (redundant)
	3.6 V _{PP}
10 V DC ... 60 V DC	9 V DC ... 32 V DC
200 mA (at U _S = 24 V DC)	430 mA (at U _S = 24 V DC)
General data	
28 mm / 110 mm / 70 mm	50 mm / 120 mm / 70 mm
	IP20
-10°C ... 60°C	-40°C ... 75°C
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Description
Ethernet switch
- 5 RJ45 ports
- 8 RJ45 ports
- 7 RJ45 ports, 1 SC FO port (multimode)
- 6 RJ45 ports, 2 SC FO ports (multimode)
- 6 RJ45 ports, 2 SC FO ports (single mode) with 10 km range
- 6 RJ45 ports, 2 SC FO ports (single mode) with 20 km range
Ethernet switch, wide temperature
- 5 RJ45 ports
Ethernet switch, wide temperature, protective coating for harsh environments
- 5 RJ45 ports

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 5GT	2891444	1
FL SWITCH SFN 8GT	2891673	1



7 / 6 RJ45 ports and
1 / 2 fiber optic ports (multimode)



6 RJ45 ports and
2 fiber optic ports (single mode)



5 RJ45 ports,
extended temperature range
(-40°C ... +75°C)



Technical data	
FL SWITCH SFN 7GT/SX	FL SWITCH SFN 6GT/2SX
7 (RJ45 ports)	6 (RJ45 ports)
10/100/1000 Mbps	
1 (SC multimode)	2 (SC multimode)
1000 Mbps (full duplex)	
850 nm	
220 m (Fiberglass 62.5/125)	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant)	
3.6 V _{PP}	
9 V DC ... 32 V DC	
320 mA (at U _S = 24 V DC)	350 mA (at U _S = 24 V DC)
50 mm / 120 mm / 70 mm	
IP20	
-25°C ... 75°C	
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Technical data	
FL SWITCH SFN 6GT/2LX	FL SWITCH SFN 6GT/2LX-20
6 (RJ45 ports)	
10/100/1000 Mbps	
2 (SC single mode)	
1000 Mbps (full duplex)	
1310 nm	
10000 m (Fiberglass 9/125)	20000 m (Fiberglass 9/125)
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant)	
3.6 V _{PP}	
9 V DC ... 32 V DC	
360 mA (at U _S = 24 V DC)	
50 mm / 120 mm / 70 mm	
IP20	
-25°C ... 75°C	0°C ... 60°C
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Technical data	
FL SWITCH SFNT 5GT	FL SWITCH SFNT 5GT-C
5 (RJ45 ports)	
10/100/1000 Mbps	
-	
-	
-	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant)	
3.6 V _{PP}	
10 V DC ... 60 V DC	
223 mA (at U _S = 24 V DC)	
30 mm / 130 mm / 100 mm	
IP20	
-40°C ... 75°C	
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 7GT/SX	2891518	1
FL SWITCH SFN 6GT/2SX	2891398	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFN 6GT/2LX	2891987	1
FL SWITCH SFN 6GT/2LX-20	2891563	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFNT 5GT	2891390	1
FL SWITCH SFNT 5GT-C	2891391	1

Unmanaged Switches

Standard switch with wide temperature range

FL SWITCH SFNT... Unmanaged Switches are designed for use in extreme environments and marine applications.

Features:

- 5 to 8 ports in a narrow, metal housing with redundant power supply
- Optional SC and ST fiber optic ports
- RJ45 ports provide 10/100 Mbps speeds; fiber optic ports operate at 100 Mbps
- Extended temperature range for harsh environments (-40°C ... +75°C)
- Auto negotiation and autocrossing simplify installation and setup
- Quality of Service (QoS) prioritized messages
- LED indicators provide local diagnostics
- Alarm contact provides power and link status diagnostics
- Switch-mounted cable locking and port blocking options



5/8 RJ45 ports



Ex: Ex, IEC, RoHS, CE, FCC, UL, VDE, TÜV, etc.

Ethernet interface	
Number of ports	
Transmission speed	
Fiber optic interface	
Number of ports	
Transmission speed	
Wavelength	
Transmission distance	
Function	
Basic functions	
Status and diagnostic indicators	
Power supply	
Supply voltage	
Residual ripple	
Supply voltage range	
Typical current consumption	
General data	
Dimensions	W / H / D
Degree of protection	
Ambient temperature (operation)	
Permissible humidity (operation)	
Noise emission	
Noise immunity	
EMC note	

Technical data	
FL SWITCH SFNT 5TX	FL SWITCH SFNT 8TX
5 (RJ45 ports)	8 (RJ45 ports)
10/100 Mbps	
	-
	-
	-
	-
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
	24 V DC (redundant)
	3.6 V _{pp}
	9 V DC ... 32 V DC
125 mA (at U _S = 24 V DC)	155 mA (at U _S = 24 V DC)
30 mm / 130 mm / 100 mm	50 mm / 130 mm / 100 mm
	IP20
	-40°C ... 75°C
	5% ... 95% (non-condensing)
	EN 61000-6-4
	EN 61000-6-2
	Class A product, see page 527

Description
Ethernet switch, wide temperature
- 5 RJ45 ports
- 8 RJ45 ports
- 4 RJ45 ports, 1 SC FO port
- 7 RJ45 ports, 1 SC FO port
- 7 RJ45 ports, 1 ST FO port
- 6 RJ45 ports, 2 SC FO ports
- 6 RJ45 ports, 2 ST FO ports
Ethernet switch, wide temperature, protective coating for harsh environments
- 5 RJ45 ports
- 8 RJ45 ports
- 4 RJ45 ports, 1 SC FO port
- 7 RJ45 ports, 1 SC FO port
- 7 RJ45 ports, 1 ST FO port
- 6 RJ45 ports, 2 SC FO ports
- 6 RJ45 ports, 2 ST FO ports

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFNT 5TX	2891003	1
FL SWITCH SFNT 8TX	2891005	1
FL SWITCH SFNT 5TX-C	2891043	1
FL SWITCH SFNT 8TX-C	2891045	1

Mounting plate, for 5- and 8-port SFNT switches
--

Accessories		
Type	Order No.	Pcs./Pkt.
FL PA SFNT 5-8	2891012	1



4 RJ45 ports and 1 FO port



7 RJ45 ports and 1 FO port



6 RJ45 ports and 2 FO ports



Technical data	
FL SWITCH SFNT 4TX/FX	
4 (RJ45 ports) 10/100 Mbps	
1 (SC multimode) 100 Mbps (full duplex) 1300 nm 12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant) 3.6 V _{PP} 9 V DC ... 32 V DC 180 mA (at U _S = 24 V DC)	
30 mm / 130 mm / 100 mm IP20 -40°C ... 75°C 5% ... 95% (non-condensing) EN 61000-6-4 EN 61000-6-2 Class A product, see page 527	

Technical data	
FL SWITCH SFNT 7TX/FX ST	
7 (RJ45 ports) 10/100 Mbps	
1 (SC multimode) 1 (ST multimode) 100 Mbps (full duplex) 1300 nm 12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant) 3.6 V _{PP} 9 V DC ... 32 V DC 180 mA (at U _S = 24 V DC)	
50 mm / 130 mm / 100 mm IP20 -40°C ... 75°C 5% ... 95% (non-condensing) EN 61000-6-4 EN 61000-6-2 Class A product, see page 527	

Technical data	
FL SWITCH SFNT 6TX/2FX ST	
6 (RJ45 ports) 10/100 Mbps	
2 (SC multimode) 2 (ST multimode) 100 Mbps (full duplex) 1300 nm 12.1 km (fiberglass with F-G 62.5/125 0.7 dB/km F1000)	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode, includes QoS and alarm contact	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant) 3.6 V _{PP} 9 V DC ... 32 V DC 250 mA (at U _S = 24 V DC)	
50 mm / 130 mm / 100 mm IP20 -40°C ... 75°C 5% ... 95% (non-condensing) EN 61000-6-4 EN 61000-6-2 Class A product, see page 527	

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFNT 4TX/FX	2891004	1
FL SWITCH SFNT 4TX/FX-C	2891044	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFNT 7TX/FX FL SWITCH SFNT 7TX/FX ST	2891006 2891007	1 1
FL SWITCH SFNT 7TX/FX-C FL SWITCH SFNT 7TX/FX ST-C	2891046 2891047	1 1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SFNT 6TX/2FX FL SWITCH SFNT 6TX/2FX ST	2891025 2891026	1 1
FL SWITCH SFNT 6TX/2FX-C FL SWITCH SFNT 6TX/2FX ST-C	2891048 2891049	1 1

Accessories		
FL PA SFNT 5-8	2891012	1

Accessories		
FL PA SFNT 5-8	2891012	1

Accessories		
FL PA SFNT 5-8	2891012	1

Standard SF switch

FL SWITCH SF... Unmanaged Switches have a wide variety of port configurations in a low-profile metal housing and are designed for standard applications.

Features:

- Up to 16 ports in a low-profile metal housing with redundant power supply
- Optional SC and ST fiber optic ports
- RJ45 ports provide 10/100 Mbps speeds; fiber optic ports operate at 100 Mbps
- Auto negotiation and autocrossing simplify installation and setup
- LED indicators provide local diagnostics
- Relay contact for alarm processing of voltage states
- Cable locking security options



8/16 RJ45 ports



Ethernet interface	
Number of ports	
Transmission speed	
Fiber optic interface	
Number of ports	
Transmission speed	
Wavelength	
Transmission distance	
Other connections	
Floating signal contact	
Function	
Basic functions	
Status and diagnostic indicators	
Power supply	
Supply voltage	
Residual ripple	
Supply voltage range	
Typical current consumption	
General data	
Dimensions	W / H / D
Degree of protection	
Ambient temperature (operation)	
Permissible humidity (operation)	
Noise emission	
Noise immunity	
EMC note	

Technical data	
FL SWITCH SF 8TX	FL SWITCH SF 16TX
8 (RJ45 ports)	16 (RJ45 ports)
10/100 Mbps	
	-
	-
	-
	-
Plug-in/screw connection via COMBICON	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant)	
3.6 V _{pp}	
18.5 V DC ... 30.2 V DC	
200 mA (at U _S = 24 V DC)	300 mA (at U _S = 24 V DC)
IP20	
0°C ... 55°C	
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Description
Ethernet switch
- 8 RJ45 ports
- 16 RJ45 ports
- 7 RJ45 ports, 1 SC FO port
- 7 RJ45 ports, 1 ST FO port
- 15 RJ45 ports, 1 SC FO port
- 6 RJ45 ports, 2 SC FO ports
- 6 RJ45 ports, 2 ST FO ports
- 14 RJ45 ports, 2 SC FO ports
- 4 RJ45 ports, 3 ST FO ports

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SF 8TX	2832771	1
FL SWITCH SF 16TX	2832849	1



7/15 RJ45 ports and 1 FO port



6/14 RJ45 ports and 2 FO ports



4 RJ45 ports and 3 FO ports



Technical data	
FL SWITCH SF 7TX/FX	FL SWITCH SF 15TX/FX
7 (RJ45 ports)	15 (RJ45 ports)
10/100 Mbps	
1 (SC multimode)	
100 Mbps (full duplex)	
1300 nm	
5.7 km (fiberglass with F-G 50/125 0.7 dB/km F1200)	6400 m (fiberglass with F-G 50/125 0.7 dB/km F1200)
Plug-in/screw connection via COMBICON	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant)	
3.6 V _{PP}	
18.5 V DC ... 30.2 V DC	
220 mA (at U _S = 24 V DC)	330 mA (at U _S = 24 V DC)
135 mm / 115.3 mm / 30 mm	205 mm / 115.3 mm / 30 mm
IP20	
0°C ... 55°C	
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Technical data	
FL SWITCH SF 6TX/2FX	FL SWITCH SF 14TX/2FX
6 (RJ45 ports)	14 (RJ45 ports)
10/100 Mbps	
2 (SC multimode)	
100 Mbps (full duplex)	
1300 nm	
5.7 km (fiberglass with F-G 50/125 0.7 dB/km F1200)	6400 m (fiberglass with F-G 50/125 0.7 dB/km F1200)
Plug-in/screw connection via COMBICON	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant)	
3.6 V _{PP}	
18.5 V DC ... 30.2 V DC	
240 mA (at U _S = 24 V DC)	360 mA (at U _S = 24 V DC)
135 mm / 115.3 mm / 30 mm	205 mm / 115.3 mm / 30 mm
IP20	
0°C ... 55°C	
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Technical data	
FL SWITCH SF 4TX/3FX ST	
4 (RJ45 ports)	
10/100 Mbps	
3 (ST multimode)	
100 Mbps (full duplex)	
1300 nm	
6400 m (fiberglass with F-G 50/125 0.7 dB/km F1200)	
Plug-in/screw connection via COMBICON	
Unmanaged Switch / auto negotiation, complies with IEEE 802.3, store and forward switching mode	
LEDs: U _{S1} , U _{S2} (redundant voltage supply), link and activity per port	
24 V DC (redundant)	
3.6 V _{PP}	
18.5 V DC ... 30.2 V DC	
240 mA (at U _S = 24 V DC)	
135 mm / 115.3 mm / 30 mm	
IP20	
0°C ... 55°C	
5% ... 95% (non-condensing)	
EN 61000-6-4	
EN 61000-6-2:2005	
Class A product, see page 527	

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SF 7TX/FX	2832726	1
FL SWITCH SF 7TX/FX ST	2832577	1
FL SWITCH SF 15TX/FX	2832661	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SF 6TX/2FX	2832933	1
FL SWITCH SF 6TX/2FX ST	2832674	1
FL SWITCH SF 14TX/2FX	2832593	1

Ordering data		
Type	Order No.	Pcs./Pkt.
FL SWITCH SF 4TX/3FX ST	2832603	1