

## Industrial Ethernet Switch - FL SWITCH SMCS 14TX/2FX - 2700997

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Ethernet Smart Managed Compact Switch with 14 10/100 Mbps RJ45 ports and two 100 Mbps FX-SC multi-mode ports



### Product Description

The Smart Managed Compact Switch (SMCS) is an Ethernet switch suitable for industrial applications with 14 Fast Ethernet ports in RJ45 format and two fiber optic ports in SC multi-mode format.

### Product Features

- Web-based management, SNMP
- Extended temperature range
- VLANs
- MRP (client and master)
- SNMP
- RSTP



Ethernet



EtherNet/IP

### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	1340.0 g
Custom tariff number	85176200
Country of origin	Germany

### Technical data

#### Dimensions

Width	214 mm
Height	110 mm
Depth	69 mm

#### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C (non-condensing)

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## Technical data

### Ambient conditions

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)	86 kPa ... 108 kPa (2000 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (3500 m above sea level)

### Interfaces

Interface 1	Ethernet (RJ45)
No. of ports	14 (RJ45 ports)
Connection method	RJ45
Note on connection method	Auto negotiation and autocrossing
Transmission physics	Copper
Transmission speed	10/100 MBit/s
Transmission length	100 m (per segment)
Signal LEDs	Supply voltage, data transmission, error, link, activity
Interface 2	Ethernet FO
No. of ports	2 (SC multi-mode)
Connection method	SC
Transmission physics	multi-mode fiberglass
Transmission speed	100 MBit/s (full duplex)
Transmission length	10000 m (depending on the fiber used)
	6400 m (fiberglass with F-G 50/125 0.7 dB/km F1200)
	3000 m (fiberglass with F-G 62.5/125 2.6 dB/km F600)
	2800 m (fiberglass with F-G 50/125 1.6 dB/km F800)
Wavelength	1310 nm
Interface 5	Serial (RS-232)
Connection method	RS-232-C, 6-pos. MINI-DIN socket (PS/2)

### Function

Basic functions	Store-and-forward switch complies with IEEE 802.3 4 priority classes in acc. with IEEE 802.1 P TCP/IP protocol, BootP-capable, port-mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP), PROFINET Device, Media Redundancy Protocol (MRP).
Management	Web-based management (HTTP)
	SNMP v1/v2
	Serial interface (V.24)
Diagnostic functions	RMON History
	N:1-Portmirroring
	LLDP (Link Layer Discovery Protocol)

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## Technical data

### Function

	SNMP-Traps
	ACD (Address Conflict Detection)
Filter functions	Quality of Service (4 priority classes)
	Port-Priorisierung
	VLAN
	IGMP Snooping (128 groups)
	IGMP Query
	Auto-Query-Port
	Extended Multicast Filtering
	Static Multicast Filtering
Supported browsers	Internet Explorer 5.5 or higher
MAC address table	16000
Redundancy	MRP (Media Redundancy Protocol)
	RSTP (Rapid Spanning Tree Protocol)
	FRD (Fast Ring Detection)
	Large Tree Support
PROFINET IO device function	PROFINET device
	Fast Startup
PROFINET IO conformance class	Conformance-Class B
Time synchronization	SNTP
Additional functions	BootP
	DHCP-Client
Status and diagnostic indicators	LEDs: US1, US2 (power supply), Fail (alarm contact), 2 LEDs per Ethernet port (Link and switchable Activity/Speed/Duplex)
Signal contact control voltage	24 V (typical)
Signal contact control current	260 mA (maximum)

### Security functions

Link Layer Discovery Protocol (LLDP)	As per protocol 802.2
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### 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	18 V DC ... 32 V DC
Typical current consumption	260 mA (at U <sub>S</sub> = 24 V DC)

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## Technical data

### Supply voltage

Current consumption	260 mA DC
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### General

Mounting type	DIN rail
Type AX	Block design
Net weight	1035 g

### Connection data

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	7 mm

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Developed in acc. with standard	IEC 61000-6.2
Test standard	IEC 61000-4-2 (ESD)
Test result	Criterion B
Test standard	IEC 61000-4-3 (electromagnetic fields)
Test result	Criterion A
Test standard	IEC 61000-4-4 (burst)
Test result	Criterion B
Test standard	IEC 61000-4-5 (surge)
Test result	Criterion B
Test standard	IEC 61000-4-6 (immunity to conducted interference)
Test result	Criterion A
Test section	For one minute 500 V DC
Noise emission	EN 61000-6-3
Noise immunity	EN 61000-6-2:2005
Vibration (storage/transport)	5g, 150 Hz, in acc. with IEC 60068-2-6
Free from substances that could impair the application of coating	Yes
Vibration (operation)	In acc. with IEC 60068-2-6: 5g, 150 Hz

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## Classifications

### eCl@ss

eCl@ss 4.0	27250501
eCl@ss 4.1	27250501
eCl@ss 5.0	27250501
eCl@ss 5.1	27250501
eCl@ss 6.0	19170106
eCl@ss 7.0	19170106
eCl@ss 8.0	19170106

### ETIM

ETIM 3.0	EC000734
ETIM 4.0	EC000734
ETIM 5.0	EC000734

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201410
UNSPSC 13.2	43201410

## Approvals

### Approvals

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Approvals

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

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Ex Approvals

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Approvals submitted

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### Approval details

UL Listed 
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## Approvals

cUL Listed 

EAC

EAC

cULus Listed 