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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# FL SWITCH MM HS/M


Order No.: 2832522

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2832522>

Modular switch system, head station, can be expanded to 24 ports,  
with GL rating



## Commercial data

GTIN (EAN)	 4 046356 044059
sales group	K000
Pack	1 pcs.
Customs tariff	85176200
Catalog page information	Page 187 (AX-2009)

<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

## Technical data

### Interfaces

Interface	Ethernet
No. of ports	8 (Can be extended to a maximum of 24 ports)
Type of connection	8 ports via FL IF (interface) modules
Transmission physics	Copper
Transmission speed	10/100 MBit/s
No. of ports	8 (Can be extended to a maximum of 24 ports)
Type of connection	100BASE-FX
Transmission physics	Multimode glass fiber

Transmission speed	100 MBit/s (full duplex)
Transmission length	Up to 10000 m (depending on the fiber used)
	1300 nm
Interface	Serial (V.24 (RS-232))
Type of connection	V.24 (RS-232-C), 6-pos. MINI-DIN female connector (PS/2)

**Function**

Basic functions	Store and forward switch complies with IEEE 802.3 2 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), port security, PROFINET-IO-device, DHCP option 82 relay agent
Management	Integrated Management Agent, SNMP protocol (private MIB, MIB-2, RMON MIB, Bridge MIB), integrated Web server function
Supported browsers	Internet Explorer 5.5 or higher
Redundancy	Spanning Tree 802.1d, Rapid Spanning Tree 802.1w, Fast Ring Detection, Media Redundancy Protocol (MRP) as per IEC 62439
Status and diagnostic indicators	Per Ethernet 2 status LEDs: LINK and switch-over Status Activity, 100, full duplex, supply voltage $U_{S1}$ und $U_{S2}$ (redundant supply voltage) and FAIL, two-digit 7-segment display

**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 <sub>PP</sub> (within the permitted voltage range)
Supply voltage range	18.5 V DC ... 30.5 V DC
Typical current consumption	350 mA (Up to 3500 mA, depending on the configuration)

**General data**

Weight	1350 g
Width	214 mm
Height	95 mm
Depth	107 mm
Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 55 °C (no condensation)
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Permissible humidity (operation)	10 % ... 95 % (no condensation)

Permissible humidity (storage/transport)	10 % ... 95 % (no condensation)
Air pressure (operation)	80 kPa ... 108 kPa (2000 above sea level)
Air pressure (storage/transport)	70 kPa ... 108 kPa (3000 above sea level)
Housing material	Zinc die-cast, surface bronzed and nickel-plated
Noise emission	EN 61000-6-3/-4
Noise immunity	EN 61000-6-2:2005

#### Mechanical tests

Type of test	Shock test in acc. with IEC 60068-2-27
Test result	Operation: 25 g, 11 ms duration, semi-sinusoidal shock impulse
Type of test	Shock test in acc. with IEC 60068-2-27
Test result	Storage/Transport: 50 g, 11 ms duration, semi-sinusoidal shock impulse
Type of test	Vibration resistance in acc. with IEC 60068-2-6
Test result	Operation/Storage/Transport: 5 g, 150 Hz, Criterion 3
Type of test	Free fall in acc. with IEC 60068-2-32
Test result	1 m

#### Conformity with EMC directives

Test standard	IEC 61000-4-2 (ESD)
Test result	Criterion B
Test standard	IEC 61000-4-3 (immunity to radiated interference)
Test result	Criterion A
Test standard	IEC 61000-4-4 (burst)
Test result	Criterion A
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 standard	EN 55022 (emitted interference)
Test result	Class A

#### Certificates / Approvals



Certification

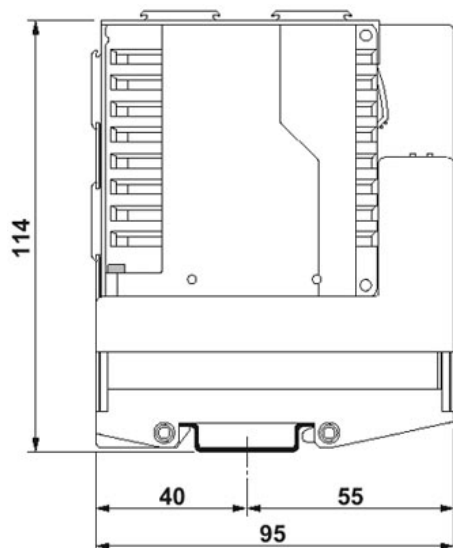
ABS, BV, DNV, GL, GOST, LR

**Accessories**

Item	Designation	Description
<b>General</b>		
2832425	FL IF 2FX SC-D	FO media module for connecting 100Base-FX multimode glass fibers (1300 nm), connection direction downwards
2832205	FL IF 2FX SM SC-D	FO interface module for connecting single mode (monomode) glass fibers (1300 nm) to the Factoryline Modular Managed Switch, output downwards
2832357	FL IF 2TX VS-RJ-D	Media module with two twisted pair ports for the modular managed switch system
2832344	FL IF 2TX VS-RJ-F	Media module with two twisted-pair ports for the modular managed switch system, output towards the front
2832483	FL IF MEM 2TX-D	Memory module, 2 port twisted pair module for saving the switch configuration
2832535	FL MXT/M	Expansion, 8 Ethernet ports, with GL rating

**Diagrams/Drawings**

Dimensioned drawing



The illustration shows the head station FL SWITCH MM HS with interface module

**Address**

PHOENIX CONTACT Deutschland GmbH  
Flachmarktstr. 8  
32825 Blomberg, Germany  
Phone +49 5235 3 12000  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.de>



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