



## MM4-4TX/SFP

Industrial Networking:Industrial Ethernet:MICE:Gigabit ETHERNET Media Modules

### Delivery informations

Availability	available
Document created at	30.01.2009

### Product description

Description	Media module for MICE Switch MS4128, 10/100/1000BASE-TX und 1000BASE-SX/LX
Port type and quantity	4 x 1000BASE-fiber with SFP modules, or 4 x 10/100/1000BASE-TX, TP cable, RJ45-sockets, autocrossing, autoneg., autopolarity, any combination TX or SFP, 1 SFP deactivates 1TX, up to 4 ports
Type	MM4-4TX/SFP
Order No.	943 010-001

### Network size - length of cable

Twisted pair (TP)	0 - 100 m
Multimode fiber (MM) 50/125 µm	cf. SFP module M-SFP-SX/LC and M-SFP-LX/LC
Multimode fiber (MM) 62.5/125 µm	cf. SFP module M-SFP-SX/LC and M-SFP-LX/LC
Single mode fiber (SM)9/125 µm	cf. SFP module M-SFP-LX/LC
Single mode fiber (LH)9/125 µm (long haul transceiver)	cf. SFP FO module M-SFP-LH/LC and M-SFP-LH+/LC

### Power requirements

Operating voltage	power supply via the backplane of the MICE switch
Power consumption	2 W

### Service

Diagnostics	LEDs (power, link status, data, 1000 Mbit/s, auto-negotiation, full duplex, ring port, LED test)
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### Ambient conditions

Operating temperature	0 °C bis +60 °C standart ( optional -40°C to +70°C)
Storage/transport temperature	-40 °C to +70 °C
Protective paint on PCB	optional
Relative humidity (non-condensing)	10% to 95%
MTBF	163 years; MIL-HDBK 217F: Gb 25 °C

### Mechanical construction

Dimensions (W x H x D)	38 mm x 134 mm x 118 mm
Mounting	Backplane
Weight	180 g
Protection class	IP 20

### Mechanical stability

IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks
IEC 60068-2-6 vibration	1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7g, 13.2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.

### EMC interference immunity

EN 61000-4-2 electrostatic discharge (ESD)	6 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field	10 V/m (80 - 1000 MHz)
EN 61000-4-4 fast transients (burst)	2 kV power line, 1 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth), 1 kV (line/line), 1kV data line
EN 61000-4-6 conducted immunity	3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)

### EMC emitted immunity

FCC CFR47 Part 15	FCC CFR47 Part 15 Class A
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EN 55022	EN 55022 Class A
<b>Approvals</b>	
Safety of industrial control equipment	cUL 508 (E175531)
Hazardous locations	cUL 1604 Class 1 Div 2 (E203960)
Germanischer Lloyd	optional
Railway norm	optional
Substation	optional
<b>Scope of delivery and accessories</b>	
Scope of delivery	module, operating manual
Accessories to order separately	ML-MS2/MM labels