



## Product information MM3-2FXS2/2TX1-RT-EEC

Industrial Ethernet:Modular Industrial Switches:Media modules:Realtime Modules:MM3-2FXS2/2TX1-RT-EEC  
<http://e-catalog.hirschmann.com/link/57078-24455-49860-81778-24483-40607/en/conf/uisstate>

Name MM3-2FXS2/2TX1-RT-EEC



Media module for MICE Switches (MS...),100BASE-TX and 100BASE-FX single mode F/O,support of PTP (IEEE1588)

### Delivery informations

Availability available

### Product description

Description Media module for MICE Switches (MS...),  
100BASE-TX and 100BASE-FX single mode F/O,  
support of PTP (IEEE1588)

Port type and quantity 2 x 100BASE-FX, SM cables, SC sockets  
2 x 10/100BASE-TX, TP cables, RJ45 sockets, auto-crossing, auto-negotiation, auto-polarity

Type MM3-2FXS2/2TX1-RT-EEC

Order No. 943 955-003

### Network size - length of cable

Twisted pair (TP) 0 -100 m

Single mode fiber (SM) 9/125 µm 0 -32.5 km  
16 dB link budget at 1300 nm  
A = 0.4 dB/km, 3 dB reserve, D = 3.5 ps/(nm x km)

### Power requirements

Operating voltage power supply via the backplane of the MICE switch

Power consumption 3.4 W

### Service

Diagnostics LEDs (power, link status, data, 100 Mbit/s, auto-negotiation, full duplex, ring port, LED test)

Other services support of PTP (IEEE1588) precision between 2 modules <80ns

### Ambient conditions

Operating temperature -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 33,9 Jahre; 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



**Industrial Ethernet:Modular Industrial Switches:Media modules:Realtime Modules:MM3-2FXS2/2TX1-RT-EEC**

<http://e-catalog.hirschmann.com/link/57078-24455-49860-81778-24483-40607/en/conf/ui/state>

<b>EN 55022</b>	EN 55022 Class A
<b>Approvals</b>	
<b>Safety of industrial control equipment</b>	cUL 508
<b>Hazardous locations</b>	cUL 1604 Class1 Div 2 (pending)
<b>Railway norm</b>	EN 50121-4 (pending), EN50155 (pending)
<b>Scope of delivery and accessories</b>	
<b>Scope of delivery</b>	module, operating manual
<b>Accessories to order separately</b>	ML-MS2/MM labels

For more information please contact:

**Hirschmann Automation and Control GmbH**

Stuttgarter Strasse 45-51

72654 Neckartenzlingen

Germany

Phone: +49 7127/14-1809

E-Mail: [inet-sales@belden.com](mailto:inet-sales@belden.com)

The information published in the websites has been compiled as carefully as possible. It is subject to alteration without notice in technical as well as in price-related/commercial respect. The complete information and data were available on user documentation. Mandatory information can only be obtained by a concrete query.