



## MM2-2FXS2

Industrial Networking: Industrial Ethernet: MICE: ETHERNET / Fast-ETHERNET Media Modules

| Product description                        |                                                                                                                                                               |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                                | Media module for MICE Switches (MS...), 100BASE-FX single-mode F/O                                                                                            |
| Port type and quantity                     | 2 x 100BASE-FX, SM cable, SC sockets                                                                                                                          |
| Type                                       | MM2-2FXS2                                                                                                                                                     |
| Order No.                                  | 943 719-101                                                                                                                                                   |
| Network size - length of cable             |                                                                                                                                                               |
| Single mode fiber (SM) 9/125 µm            | 0 - 32.5 km,<br>16 dB link budget at 1300 nm,<br>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                          | 5 W                                                                                                                                                           |
| Service                                    |                                                                                                                                                               |
| Diagnostics                                | LEDs (power, link status, data, 100 Mbit/s, full duplex, ring port, LED test)                                                                                 |
| Ambient conditions                         |                                                                                                                                                               |
| Operating temperature                      | 0 °C to +60 °C                                                                                                                                                |
| Storage/transport temperature              | -40 °C to +70 °C                                                                                                                                              |
| Relative humidity (non-condensing)         | 10% to 95%                                                                                                                                                    |
| MTBF                                       | 67 years; MIL-HDBK 217F: Gb 25 °C                                                                                                                             |
| Mechanical construction                    |                                                                                                                                                               |
| Dimensions (W x H x D)                     | 38 mm x 134 mm x 77 mm                                                                                                                                        |
| Mounting                                   | DIN Rail 35 mm                                                                                                                                                |
| Weight                                     | 170 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,<br>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), 1 kV 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                                                                                                                                     |
| EN 55022                                   | EN 55022 Class A                                                                                                                                              |
| Approvals                                  |                                                                                                                                                               |
| Safety of industrial control equipment     | cUL 508 (E175531)                                                                                                                                             |
| Hazardous locations                        | cUL 1604 Class 1 Div 2 (E203960)                                                                                                                              |
| Germanischer Lloyd                         | Germanischer Lloyd (43 109-02 HH)                                                                                                                             |
| Scope of delivery and accessories          |                                                                                                                                                               |
| Scope of delivery                          | module, operating manual                                                                                                                                      |
| Accessories to order separately            | ML-MS2/MM labels                                                                                                                                              |