

**Product:** [M-SFP-10-ZR/LC EEC](#) 



SFP Fiberoptic 10 Gigabit Ethernet Transceiver SM, extended temperature range

**Product Description**

SFP Fiberoptic 10 Gigabit Ethernet Transceiver SM with LC connector, extended temperature range

**Technical Specifications**

**Product description**

Type:	M-SFP-10-ZR/LC
Description:	SFP Fiberoptic 10 Gigabit Ethernet Transceiver SM, extended temperature range
Part Number:	942213002
Port Type and Quantity:	1 x 10000 Mbit/s with LC connector

**Network size - length of cable**

Single mode fiber (SM) 9/125 µm:	40-80 km (Link budget at 1550 nm = 11-22 dB; 0.25 db/km, 19 ps/ (nm*km))
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**Power requirements**

Operating Voltage:	power supply via the switch
Power Consumption:	1 W

**Software**

Diagnostics:	Optical input and output power, transceiver temperature
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**Ambient conditions**

MTBF:	1198 years (Telcordia SR-332, Issue 2, 40°C)
Operating temperature:	-40-+85 °C
Minimum Storage Temperature:	-40-+85 °C
Relative humidity (non-condensing):	5-95 %

**Mechanical construction**

Dimensions (WxHxD):	13.4 mm x 8.5 mm x 56.5 mm
Weight:	74 g
Mount Type:	SFP+ slot
IP Protection Rating:	IP20

**Mechanical stability**

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

**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

EN 55022:	EN 55022 Class A
FCC CFR47 Part 15:	FCC 47CFR Part 15, Class A

## Approvals

Safety of information technology equipment:	EN60950
Hazardous locations:	depending on deployed switch
Shipbuilding:	depending on deployed switch

## Reliability

Guarantee:	24 months (please refer to the <a href="https://assets.belden.com/m/1424ddb7a3280e7a/original/Hirschmann-Automation-and-Control-GmbH-Terms-of-Guarantee.pdf">terms of guarantee</a> for detailed information)
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## Scope of delivery and accessories

Scope of delivery:	SFP module
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## Further Instructions

Product Documentation:	<a href="https://www.doc.hirschmann.com">https://www.doc.hirschmann.com</a>
Certificates:	<a href="https://www.doc.hirschmann.com/certificates.html">https://www.doc.hirschmann.com/certificates.html</a>

## History

Update and Revision:	Revision Number: 0.16 Revision Date: 02-20-2026
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