

**Product: [M-SFP-LH+/LC EEC](#)**

**SFP Fiberoptic Gigabit Ethernet Transceiver LH, extended temperature range**
**Product Description**

SFP Fiberoptic Gigabit Ethernet Transceiver LH, extended temperature range

**Technical Specifications**
**Product description**

Type:	M-SFP-LH+/LC EEC, SFP Transceiver LH+
Part Number:	942119001
Port Type and Quantity:	1 x 1000 Mbit/s with LC connector

**Network size - length of cable**

Single mode fiber (LH) 9/125 $\mu$ m (long haul transceiver):	62 - 138 km (Link Budget at 1550 nm = 13 - 32 dB; A = 0,21 dB/km; D = 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**

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:	30 g
Mount Type:	SFP slot
Protection class:	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

Laser Protection: class 1 according to IEC60825-1

Hazardous locations: depending on deployed switch

Shipbuilding: depending on deployed switch

## Reliability

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

## Scope of delivery and accessories

Scope of delivery: SFP module

## Further Instructions

Product Documentation: <https://www.doc.hirschmann.com>

Certificates: <https://www.doc.hirschmann.com/certificates.html>

## History

Update and Revision: Revision Number: 0.45 Revision Date: 05-07-2025

## Variants

Item #	Type
942119001	M-SFP-LH+/LC EEC

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