

## Product Overview

### SFP-Transceiver for extended temperature range



## Description

The majority of all active network devices are now equipped with modular optical interfaces in the form of SFP ports. For the user this permits the highest possible flexibility in terms of network configuration.

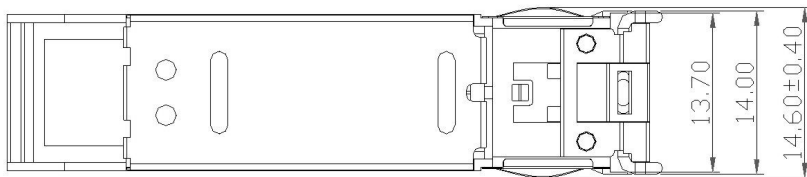
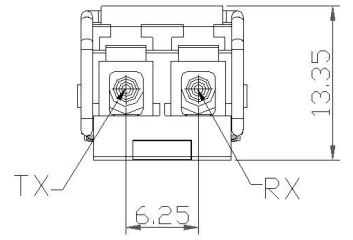
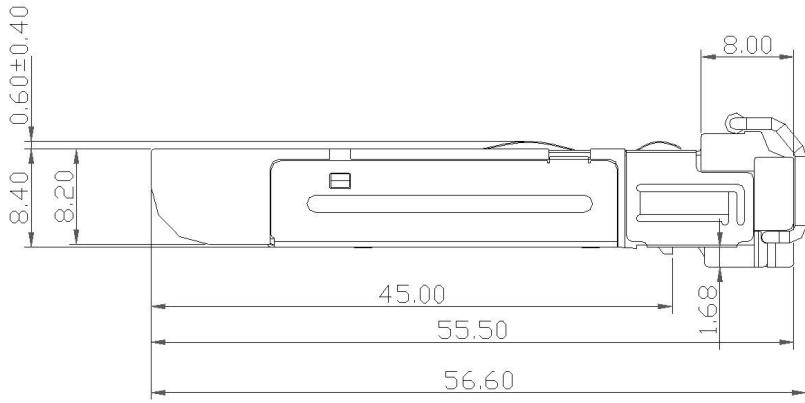
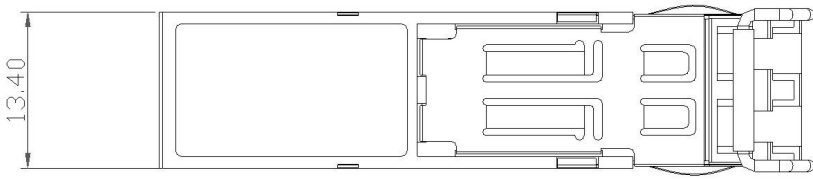
MICROSENS provides a special range of SFP transceivers with extended temperature range especially for the insertion into network devices intended for operation in rough environments. The temperature range for operation is from -40 to +85 °C.

These SFP transceivers generally have an integrated digital diagnostics function and, depending on the version, are designed for Fast Ethernet (100Base-FX) or Gigabit Ethernet (1000Base-SX/LX). Multimode and single mode versions with different optical budget are available.

## Properties

- Extended temperature range -40..+85 °C
- Installation during operation (hot swap)
- Versions for Fast Ethernet and Gigabit Ethernet
- Simplex WDM option (simplex fiber)
- Digital diagnostic functions

# Dimensions



# Specifications

## General

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<b>Type</b>	Small form-factor pluggable (SFP) Transceiver with extended temp. range
<b>Performance</b>	Fast Ethernet or Gigabit-Ethernet (see article-no.)
<b>Management</b>	Digital diagnostic functions

## Power Supply (DC)

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<b>Input Voltage</b>	3,3 V
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## Mechanical

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<b>Dimensions</b>	56,6 mm x 14 mm x 8,4 mm (L x H xW)
<b>Weight</b>	17 g
<b>Mounting</b>	For SFP slots

## Optical Parameter

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<b>Number of Ports</b>	1
<b>Fiber Cable Type</b>	Multimode: 50 or 62.5/125 $\mu$ m fiber Single Mode: 9/125 $\mu$ m fiber
<b>Connector</b>	1x LC duplex

## Environment

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<b>Operating Temperature</b>	-40..+85°C
<b>Storage Temperature</b>	-40..+85°C

## Standards Compliance

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<b>Other</b>	CDRH IEC 825-1 class 1 eye safety MultiSource Agreement (MSA)
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## Order Information

Description	Article Number
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### Fast Ethernet

SFP Fast Ethernet Transceiver 100Base-FX, Multimode 1310nm, digital Diagnostics, -40..85°C	<b>MS100190DX</b>
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SFP Fast Ethernet Transceiver 100Base-FX, Monomode 1310nm, digital Diagnostics, -40..85°C	<b>MS100191DX</b>
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### Gigabit Ethernet

SFP Gigabit Ethernet Transceiver 1000Base-SX, Multimode 850nm, digital Diagnostics, exten. temp.-range: -40..85°C	<b>MS100200DX</b>
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SFP Gigabit Ethernet Transceiver 1000Base-LX, Single Mode 1310nm, digital Diagnostics, -40..85°C	<b>MS100210DX</b>
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SFP Gigabit Ethernet Transceiver 1000Base-LX, Single Mode 1310nm, min. 25km, digital Diagnostics, -40..85°C	<b>MS100211DX</b>
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### WDM (Simplex)

SFP Pluggable Transceiver Fast Ethernet BiDi WDM Monomode LC simplex Tx: 1310nm Rx: 1550nm, min 20km, -40..75°C	<b>MS100191DXA</b>
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SFP Pluggable Transceiver Fast Ethernet BiDi WDM Monomode LC simplex Tx:1550nm Rx: 1310nm, min 20km, -40..75°C	<b>MS100191DXB</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, Single Mode 11dB/10km, Tx: 1310nm, Rx: 1550nm, digital Diagnostics, -40..85°C	<b>MS100221DXA</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, Single Mode 11dB/10km, Tx: 1550nm, Rx: 1310nm	<b>MS100221DXB</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, Single mode 11dB/10km, Tx: 1310nm, Rx: 1490nm, -40..+85°C	<b>MS100222DXA</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, Single mode 11dB/10km, Tx: 1490nm, Rx: 1310nm, -40..+85°C	<b>MS100222DXB</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, Single mode 13dB/20km, Tx: 1310nm, Rx: 1490nm, -40..+85°C	<b>MS100223DXA</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, Single Mode 13dB/20km, Tx: 1490nm, Rx: 1310nm digital Diagnostics, -40..85°C	<b>MS100223DXB</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, Single Mode 19dB/40km, Tx: 1310nm, Rx: 1550nm, digital Diagnostics, -40..85°C	<b>MS100224DXA</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, LC-simplex Single Mode 19dB/40km, Tx: 1550nm, Rx: 1310nm, digital Diagnostics, -40..85°C	<b>MS100224DXB</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, Single Mode 23dB/60km, Tx: 1310nm, Rx: 1550nm digital Diagnostics, -40..85°C	<b>MS100225DXA</b>
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SFP Gigabit Ethernet Transceiver 1000Base-BX, Single Mode 23dB/60km, Tx: 1310nm, Rx: 1550nm digital Diagnostics, -40..85°C	<b>MS100225DXB</b>
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