

SFP Transceiver 155 Mbps

MICROSENS

Description

The actual SFP transceivers from MICROSENS offer an optical transmission over multimode or single mode fiber. Depending on the model the transceiver can cover distances up to 120 km.

The SFP (Small Form Factor Pluggable) is based on the same principle as the GBIC. The main difference is the size of the transceiver with only half of the width (mechanical dimensions) due to the use of the LC connector.

The optical transceiver from MICROSENS comply to the SFP specifications Revision 5.4.. Additional they are compliant to all common ATM (OC-3) and Sonet (SDH STM-1) standards.

The transceivers are available with different wavelengths. For multimode applications a wavelength of 1310 nm is used. This allows realising distances up to 2 km using a multimode fiber.

For single mode applications there are FP and DFB lasers with the wavelengths of 1310 and 1550 nm available. Depending on the model it is possible to cover distances from 10 km up to 120 km. The transceivers offer the highest flexibility and can be installed during operation (hot swap).

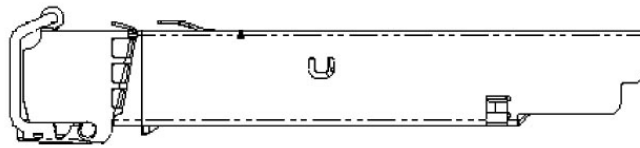
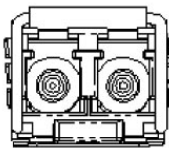
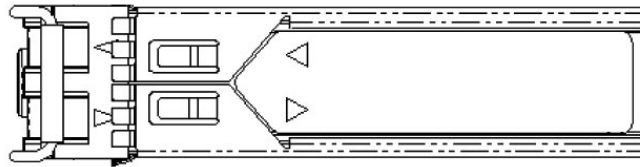
Technical Specifications

Type	SFP (Small Form Factor Pluggable) Transceiver for data transmission up to 155 Mbps
Fiber type	Multimode 62,5/125 or 50/125 µm, duplex, Single Mode 9/125 µm duplex, LC-connector
Data Rates	up to 155 Mbps
Standards	CDRH and IEC 825-1 class 1 eye safety
Operating temperature	0°C to 60° C
Extended temperature	-40°C up to +85°C
Supply Voltage	3.3 V

Optical Parameters

Article No.	Wavelength	Min opt. Power	Min. opt. Sensitivity	Min. Distance
MS100190*	1310 nm	-19 dBm	-32 dBm	2 km
MS100191*	1310 nm	-15 dBm	-34 dBm	25 km
MS100193*	1310 nm	-20 dBm	-30 dBm	40 km
MS100010*	1310 nm	-15 dBm	-34 dBm	30 km
MS100011*	1310 nm	-5 dBm	-36 dBm	50 km
MS100012*	1550 nm	-5 dBm	-34 dBm	80 km

Construction



Diagnostic Function (optional)

Optional the transceivers are available with Diagnostic function (Extension of article number with "D", e.g. MS100010D), to monitor detailed all operating information.

This offers to read information such as optical transmit power, receive power, the optical budget, the resulting possible distances and the real used data rate via the management system.

This feature is particular useful in combination with the MICROSENS xWDM systems, because it increases the functionality significant.

Eye Safety

Attention: Visible and invisible light emitted from fiber optical component may cause permanent damage to your eyes!

To avoid damage to the eyes

- *never look straight into the output of fiber optic components – danger of blinding!*
- *cover all unused optical connections with caps.*
- *commission the transmission link only after completing all connections.*

The active laser components used with this product comply with the provisions of **Laser Class 1**.

Order Information

Art.-No.	Description	Connectors
MS100190*	SFP, SDH STM-1, ATM OC-3, Fast Ethernet 1310 nm Multimode Transceiver, max. 125 Mbps	LC duplex
MS100191*	SFP, SDH STM-1, ATM OC-3, Fast Ethernet 1310 nm Single Mode Transceiver, max. 125 Mbps, min. 25 km	LC duplex
MS100193*	SFP, SDH STM-1, ATM OC-3, Fast Ethernet 1310 nm Single Mode Transceiver, max. 155 Mbps, min. 40 km	LC duplex
MS100010*	"SFP Transceiver, 1310nm Single Mode, max. 30km, 19dB Budget, LC connector, OC-3/STM-1, 155 Mbps"	LC duplex
MS100011*	"SFP Transceiver, 1310nm Single Mode, max. 50km, 29dB Budget, LC connector, OC-3/STM-1, 155 Mbps"	LC duplex
MS100012*	"SFP Transceiver, 1550nm Single Mode, max. 80km, 29dB Budget, LC connector, OC-3/STM-1, 155 Mbps"	LC duplex

*) Option "D" for Diagnostic Function (e.g. MS100190D)

*) Option "X" for extended Temperature -40°C up to +85°C (e.g. MS100190DX)

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