

Data sheet

LPC SFP Transceiver (Low Power Consumption) Extended Temperature -40..+85°C



General

The Small Form Factor Pluggable (SFP) Transceiver is an exchangeable transceiver module which is used in compatible active devices. Due to the special design, the installation can also be carried out during operation (hot swap).

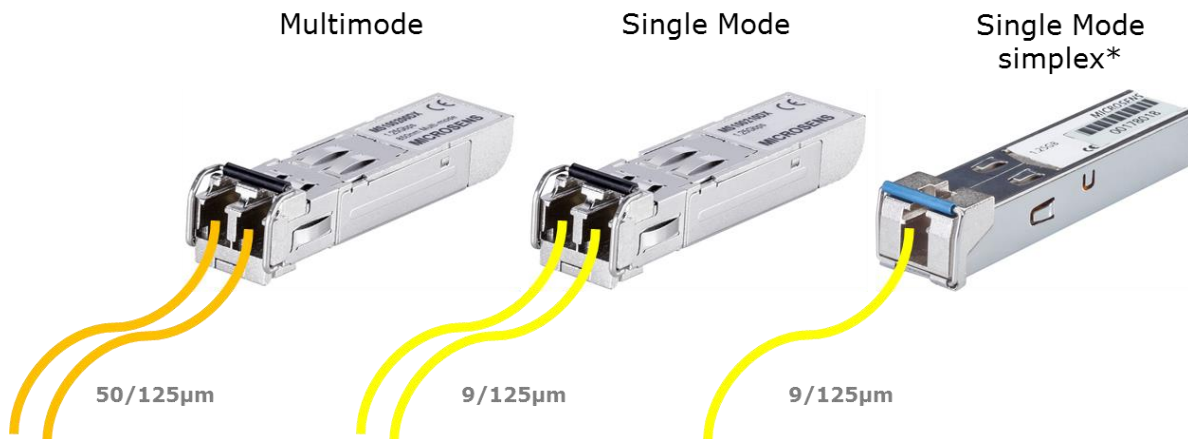
The SFP is selected depending on the cable type (multimode, single mode, simplex, twisted pair) and the bandwidth used.

MICROSENS low power SFP modules consume up to 30% less power while delivering the same level of performance as conventional SFPs. These SFPs are compatible with a wide range of network environments that rely on fiber optic communication, including data centers, fiber-to-the-office, enterprise networks, and more.

This decrease in power consumption translates into substantial cost savings for network equipment, as it leads to reduced power requirements and cooling expenses.

The Multi Source Agreement (MSA) and SFF-8472 guarantee the standardized design and Benefits of the SFP transceivers in terms of design and optional digital diagnostic function. The SFPs with a maximum bandwidth of up to 1.25Gbit/s support Gigabit Ethernet as well as Gigabit Fiber Channel.

Transceiver Type / Cable Type



* Attention: for simplex (fiber-optic or bi-directional communication), make sure that the appropriate wavelengths are used (TX/RX transmit and receive direction) and that the transceivers are used in pairs (A<->B).

Technical Specifications

	MS100200DX-V2	MS100210DX-V2	MS100221DXA-V2	MS100221DXB-V2
Type:	SFP	SFP	SFP	SFP
Connection	LC duplex	LC duplex	LC simplex	LC simplex
Interface	Multimode	Singlemode	Singlemode	Singlemode
Digital Diagnostic Interface	Intern	Intern	Intern	Intern
Distance (typ.) (in km)	0.3	10	20	20
Power consumption max. (in W)	0.6	0.6	0.6	0.6
Operating Temperature Range (in °C)	-40..+85	-40..+85	-40..+85	-40..+85
Bandwidth (in MBit/s)	1063..1250	1063..1250	1063..1250	1063..1250
Wavelength TX (typ.) (in nm)	850	1310	1310	1550
Wavelength RX (typ.) (in nm)	850	1310	1550	1310
Wavelength Range TX (in nm)	830..860	1260..1360	1260..1360	1530..1570
Wavelength Range RX (in nm)	830..860	1260..1360	1530..1570	1290..1330
Powerbudget min. (in dB)	7,5	12	15	15
Transmit MIN/MAX (in dBm)	-9.5 / -3	-9 / -3	-9 / -3	-9 / -3
Receiver MIN/MAX (overload)	-17 / -3	-21 / -3	-24 / -3	-24 / -3
Extinction Ratio (in dB)	6	6	6	6
Laser Type	VCSEL	FP-Laser	FP-Laser	DFB
Protocolls	Gigabit Ethernet, Gigabit Fiber Channel	Gigabit Ethernet, Gigabit Fiber Channel	Gigabit Ethernet, Gigabit Fiber Channel	Gigabit Ethernet, Gigabit Fiber Channel

Safety Note

Attention: visible and invisible light emitted by a fibre-optic component can cause permanent damage to your eyes!

To avoid damage to your eyes

- Never look directly into the outlets of fibre optic components – danger of blinding!
- Cover all unused optical connectors with plugs!
- Commissioning of the transmission line only after completion of all connections!

The active laser Components used in this product comply with **laser class 1** regulations.

Order Information

Description	Article No.
LPC SFP GbE Transceiver 1.25G SX Multimode 850nm, DDM, LC, -40..+85°C	MS100200DX-V2
LPC SFP GbE Transceiver 1.25G LX SingleMode 1310nm, 10km, DDM, LC, -40..+85°C	MS100210DX-V2
LPC SFP GbE WDM-Transceiver 1.25G BX SingleMode TX1310nm / RX1550nm, 20km, DDM, LC simplex, -40..+85°C	MS100221DXA-V2
LPC SFP GbE WDM-Transceiver 1.25G BX SingleMode TX1550nm / RX1310nm, 20km, DDM, LC simplex, -40..+85°C	MS100221DXB-V2

This document in whole or in part may not be duplicated, reproduced, stored or retransmitted without prior written permission of MICROSENS GmbH & Co. KG. All information in this document is provided 'as is' and subject to change without notice. MICROSENS GmbH & Co. KG disclaims any liability for the correctness, completeness or quality of the information provided, fitness for a particular purpose or consecutive damage. MICROSENS is a trademark of MICROSENS GmbH & Co. KG. Any product names mentioned herein may be trademarks and/or registered trademarks of their respective companies. 15/2024/MG DAT610c_MS1002xx-V2_1G LPC SFP_EN_0524