MICROSENS

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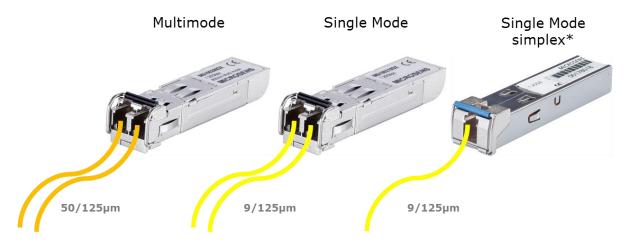
The SFP is selected depending on the cable type (multimode, single mode, simplex, twisted pair) and the bandwidth used.

MICROSENS low power SFP+ modules consume up to 30% less power while delivering the same level of performance as conventional SFPs. These SFP+ 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

Multimode   Single Mode   Single Mode simplex*

50/125µm   9/125µm   9/125µm

* 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

	MS100700DX-V2	MS100702DX-V2	MS100702DXB-V2	MS100702DXA-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
Distande (typ.) (in km)	0,3	10	10	10
Power consumption max. (in W)	0,65	0,7	0,67	0,67
Operating Temperature Range (in °C)	-40..+85	-40..+85	-40..+85	-40..+85
Bandwidth (in GBit/s)	1..10,5	1..10.31	1..10.31	1..10.31
Wavelength TX (typ.) (in nm)	850	1310	1270	1330
Wavelength RX (typ.) (in nm)	850	1310	1330	1270
Wavelength Range TX (in nm)	840.. 860	1270.. 1355	1260.. 1280	1320.. 1340
Wavelength Range RX (in nm)	840.. 860	1260.. 1600	1320.. 1340	1260.. 1280
Powerbudget min. (in dB)	5,1	6,2	9	9
Transmit MIN/MAX (in dBm)	-6 / -1	-8,2 / +0,5	-5 / 0	-5 / 0
Receiver MIN/MAX (overload)	-11,1 / -1	-14,4 / 0	-14 / +0,5	-14 / 0
Extinction Ratio (in dB)	3	3,5	3,5	3,5
Laser Type	VCSEL	DFB-LD	DFB	DFB
Protocolls	10 Gigabit Ethernet	10 Gigabit Ethernet	10 Gigabit Ethernet	10 Gigabit Ethernet

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+ 10G Transceiver SR Multimode 850nm, DDM, LC duplex, -40..+85°C	**MS100700DX-V2**
LPC SFP+ 10G Transceiver LR SingleMode 1310nm, 10km, DDM, LC duplex, -40..+85°C	**MS100702DX-V2**
LPC SFP+ 10G Transceiver LR SingleMode TX 1270nm, RX 1330nm, 10km, DDM, LC simplex, -40..+85°C	**MS100702DXA-V2**
LPC SFP+ 10G Transceiver LR SingleMode TX 1330nm, RX 1270nm, 10km, DDM, LC simplex, -40..+85°C	**MS100702DXB-V2**