

Datasheet

SFP+ Transceiver



General Information

Small Form Factor Pluggable (SFP) is an exchangeable transceiver module which is used in compatible active devices. It is smaller than any of the currently available form factors and offers the highest density per line interface.

A large proportion of today's active network products are already equipped with slots for modular optical transceivers. This gives the user the greatest possible flexibility in network configuration. 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.

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 SFP+ with a maximum bandwidth up to 11.1 GBit/s supports 10 Gigabit Ethernet, versions for 8 Gigabit Fiber Channel and STM-64 are also available.

Technical Specifications

	MS100700D	MS100700DX	MS100701D	MS100702D	MS100702DX	MS100704D	MS100706D
Type:	SFP+	SFP+	SFP+	SFP+	SFP+	SFP+	SFP+
Connection	LC duplex	LC duplex	LC duplex	LC duplex	LC duplex	LC duplex	LC duplex
Interface	Multimode	Multimode	Multimode	Singlemode	Singlemode	Singlemode	Singlemode
Digital Diagnostic Interface	Internal	Internal	Internal	Internal	Internal	Internal	Internal
Distance (typ.) (in km)	0,3	0,3	0,22	10	10	40	80
Operating Temperature Range (in °C)	0..+70	-40..+85	0..+70	0..+70	-40..+85	0..+70	0..+70
Bandwidth (in GBit/s)	8.500.. 11.100	8.500.. 11.100	8.500.. 11.100	8.500.. 11.100	8.500.. 11.100	8.500.. 11.100	8.500.. 11.100
Wavelength TX (typ.) (in nm)	850	850	1310	1310	1310	1550	1550
Wavelength RX (typ.) (in nm)	850	850	1310	1310	1310	1550	1550
Wavelength RangeTX (in nm)	840.. 860	840.. 860	1260.. 1355	1270.. 1350	1270.. 1350	1480.. 1600	1528.. 1565
Wavelength RangeRX (in nm)	840.. 860	840.. 860	1260.. 1355	1260.. 1565	1260.. 1565	1260.. 1600	1260.. 1600
Powerbudget (in dB)	5,1	5,1	3,5	8,4	8,4	14,8	23
Transmit MIN/MAX (in dBm)	-6 / +0,45	-6 / +0,45	-6,5 / +0,5	-6 / +1	-6 / +1	-1 / +4	0 / +5
Receiver MIN/MAX (overload)	-11,1 / -1	-11,1 / -1	-10 / +1,5	-14,4 / +0,5	-14,4 / +0,5	-15,8 / -1	-23 / -8
Extinction Ratio (in dB)	5	5	0	3,5	3,5	3,5	3,5
Laser type	VCSEL	VCSEL	FP	DFB	DFB	EML	APD
Protocols	10 Gigabit Ethernet, STM-64		10 Gigabit Ethernet	10 Gigabit Ethernet, STM-64			

Safety Note

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

To avoid damage to your eyes

- Never look directly into the outlets of fiber 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	Art. – No.
SFP+ 10G Transceiver SR Multimode 850nm, DDM, LC	MS100700D
SFP+ 10G Transceiver SR Multimode 850nm, DDM, LC, -40..+85°C	MS100700DX
SFP+ 10G Transceiver LRM Multimode 1310nm, DDM, LC	MS100701D
SFP+ 10G Transceiver LR SingleMode 1310nm, 10km, DDM, LC	MS100702D
SFP+ 10G Transceiver LR SingleMode 1310nm, 10km, DDM, LC, -40..+85°C	MS100702DX
SFP+ 10G Transceiver ER SingleMode 1550nm, 40km, DDM, LC	MS100704D
SFP+ 10G Transceiver ZR SingleMode 1550nm, 80km, DDM, LC	MS100706D

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