

Description

Small Form Factor Pluggable Plus (SFP+) is an innovative, next-generation transceiver module. Initially, it is targeted to support higher speeds for next-generation networks. It is smaller than any of the currently shipping form factors and provides the highest density per line card.

A large part of today active networking products is already equipped with slots for modular optical transceivers. This brings the highest possible flexibility for the network configuration to the user. Because of the special construction the installation can be done even during operation (hot swap).

The new SFP+ transceivers are designed for use in links with 10G FC/10GBE/STM64 data rate.

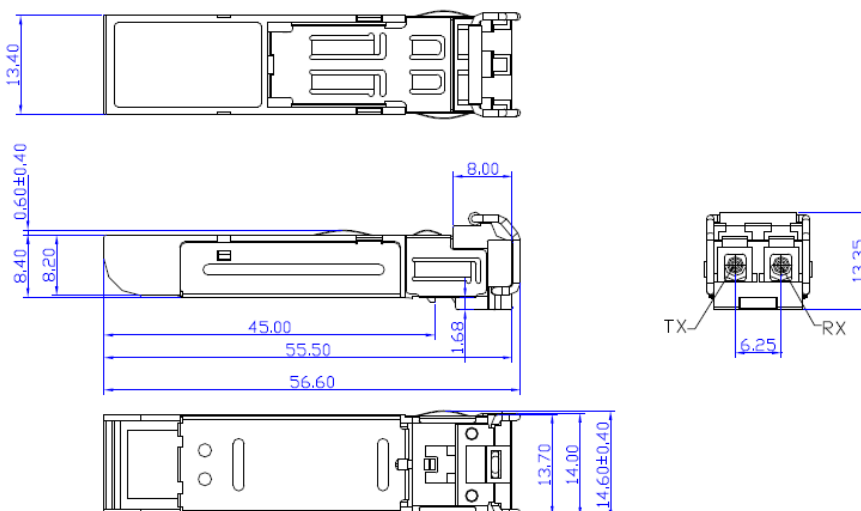
Diagnostic Function

The transceivers are available with Diagnostic function, 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.

Construction / Dimensions



DIMENSIONS ARE IN MILLIMETERS

ALL DIMENSIONS ARE ± 0.2mm UNLESS OTHERWISE SPECIFIED

Unit: mm

Technical Specifications

Article No:	MS100700D	MS100701D	MS100702D	MS100703D	MS100704D	MS100706D
Type	SFP+	SFP+	SFP+	SFP+	SFP+	SFP+
Interface	Multimode	Multimode	Singlemode	Singlemode	Singlemode	Singlemode
Wavelength TX	850nm	1310nm	1310nm	1310nm	1550nm	1550nm
Wavelength RX	850nm	1310nm	1310nm	1310nm	1550nm	1550nm
Distance	300m	220m	10km	40km	40km	80km
Powerbudget (dB)	5.10dB	3.50dB	8.40dB	14dB	14.80dB	23dB
Protocols	10Gigabit Ethernet, STM64	10Gigabit Ethernet	10Gigabit Ethernet, STM64	10Gigabit Ethernet, STM64	10Gigabit Ethernet, STM64	10Gigabit Ethernet, STM64
Bandwidth from	8.500Gbit/s	8.500Gbit/s	8.500Gbit/s	8.500Gbit/s	8.500Gbit/s	8.500Gbit/s
Bandwidth to	11.100Gbit/s	11.100Gbit/s	11.100Gbit/s	11.100Gbit/s	11.100Gbit/s	11.100Gbit/s
Laser	VCSEL	FP	DFB	DFB	EML	EML
Receiver Type	PIN	PIN	PIN	PIN	PIN	APD
Connector	LC	LC	LC	LC	LC	LC
Wavelength TX min.	840nm	1260nm	1270nm	1270nm	1480nm	1528nm
Wavelength TX max.	860nm	1355nm	1355nm	1355nm	1600nm	1565nm
Wavelength RX min.	840nm	1260nm	1260nm	1260nm	1260nm	1260nm
Wavelength RX max.	860nm	1555nm	1565nm	1565nm	1600nm	1600nm
Transmit min.	-6.00dBm	-6.50dBm	-6.00dBm	-1.00dBm	-1.00dBm	0.00dBm
Transmit max.	0.45dBm	0.50dBm	1.00dBm	4.00dBm	4.00dBm	5.00dBm
Receive min.	-11.10dBm	-10.00dBm	-14.40dBm	-15.00dBm	-15.80dBm	-23.00dBm
Receive max. (Receiver overload)	-1.00dBm	1.50dBm	0.50dBm	0.50dBm	-1.00dBm	-8.00dBm
Temperature (min)	0°C	0°C	0°C	0°C	0°C	0°C
Temperature (max)	70°C	70°C	70°C	70°C	70°C	70°C
Type of DDM / DOM	internal	internal	internal	internal	internal	internal
Extinction Ratio	5dB	0dB	3.50dB	3.50dB	3.50dB	3.50dB
Transmit and Dispersion Penalty	N/A	N/A	N/A	2dB	2dB	3dB

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
MS100700D	SFP+ Pluggable Transceiver 10GBE, 10G SONET/SDH, Multimode 850nm, 5,1dB, 300m, LC	LC duplex
MS100701D	SFP+ Pluggable Transceiver 10GBE, 10G SONET/SDH, Multimode 1310nm, 3,5dB, 220m, LC	LC duplex
MS100702D	SFP+ Pluggable Transceiver 10GBE, 10G SONET/SDH, Single Mode 1310nm, 8,4dB 10km, LC	LC duplex
MS100703D	SFP+ Pluggable Transceiver 10GBE, 10G SONET/SDH, Single Mode 1310nm, 14dB, 40km, LC	LC duplex
MS100704D	SFP+ Pluggable Transceiver 10GBE, 10G SONET/SDH, Single Mode 1550nm, 14,8dB, 40km, LC	LC duplex
MS100706D	SFP+ Pluggable Transceiver 10GBE, 10G SONET/SDH, Single Mode 1550nm, 23dB, 70/80km,	LC duplex

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