Data Sheet
MSP 1000 Platform – CWDM Filter Modules

Overview

Optical filters and passive multiplexers bundle or split the light of different wavelengths and form the heart of every WDM System.
The extremely flexible MICROSENS concept allows their use in all MSP 1000 chassis and permits many combinations to realise an optimised solution to meet every customer requirement.

The matched CWDM filter dovetail into each other and guarantee seamless upgrading, while minimising start-up costs for small optical networks. In combination with the universal MICROSENS transponder modules a highly flexible system is build up.

The MICROSENS CWDM filters combine multiplexer and de-multiplexer in a joint module. Very high packing density allows realisation of the complete function within just one slot width. All connections are configured with conventional LC-plug connector technology to match the popular SFP and XFP transceivers easily.

All filter modules may be installed in any active MSP 1000 chassis or alternatively in low cost passive shelves, which does not require electrical power.

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Features

- Passive optical Multiplexer
- Up to 16 CWDM channels
- CWDM ITU Grid Standard (G.694.2)
- ITU 20 nm channel spacing
- LC connectors
- Ideally scalable concept
- Excellent optical performance
- Individual use or part of active system
- Very high packaging density
- Custom versions upon request

Insertion Loss

	FC8		**FC8X**		**FC8A**	
Channel	**Mux**	**DeMux**	**Mux**	**DeMux**	**Mux**	**DeMux**
1270 nm	-	-	-	-	1,0 dB	3,1 dB
1290 nm	-	-	-	-	1,3 dB	2,8 dB
1310 nm	-	-	-	-	1,6 dB	2,5 dB
1330 nm	-	-	-	-	1,9 dB	2,2 dB
1350 nm	-	-	-	-	2,2 dB	1,9 dB
1370 nm	-	-	-	-	2,5 dB	1,6 dB
1410 nm	-	-	-	-	2,8 dB	1,3 dB
1430 nm	-	-	-	-	3,1 dB	1,0 dB
1470 nm	1,0 dB	3,1 dB	1,3 dB	3,4 dB	-	-
1490 nm	1,3 dB	2,8 dB	1,6 dB	3,1 dB	-	-
1510 nm	1,6 dB	2,5 dB	1,9 dB	2,8 dB	-	-
1530 nm	1,9 dB	2,2 dB	2,2 dB	2,5 dB	-	-
1550 nm	2,2 dB	1,9 dB	2,5 dB	2,2 dB	-	-
1570 nm	2,5 dB	1,6 dB	2,8 dB	1,9 dB	-	-
1590 nm	2,8 dB	1,3 dB	3,1 dB	1,6 dB	-	-
1610 nm	3,1 dB	1,0 dB	3,4 dB	1,3 dB	-	-
EXP	-	-	1,0 dB	1,0 dB	-	-

All dB information represent worst case values!

Optical Parameters

Isolation	Adjacent channel:	min. 30 dB
	Non-Adjacent channel:	min. 45 dB
	Extension Port:	min. 30 dB (=> **FC8X** only)
Return Loss	min. 45 dB (without connector)	
Connector Type	LC/PC	
Fiber Type	SMF-28e, 9/125/250 µm	

Technical Specifications

Type	MSP 1000 Platform – CWDM Filter Modules
Data Security	Passive filters do not require electrical energy. They operate independent of application and data rate.
Operating Temperature	-10 °C … +70 °C
Dimensions (H x W x D)	~ 129 x 25 x 180 mm, 1 Slot
Weight	~ 200 g
Certifications	CE conform

Order Information

Description	Article No.:
MSP 1000 Platform – CWDM Filter Modules	
FC8 CWDM Mux/DeMux Module, 8 channel, 1470..1610nm, 10 x LC/PC Duplex	**MS425738-47**
FC8X CWDM Mux/DeMux Module, 8 channel 1470..1610nm + Extension port 1270..1430 nm, 10 x LC/PC Duplex	**MS425738E-47**
FC8A CWDM Mux/DeMux Module, 8 channel, 1270..1370nm, 1410nm, 1430nm, 10 x LC/PC Duplex	**MS425738A-27**

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