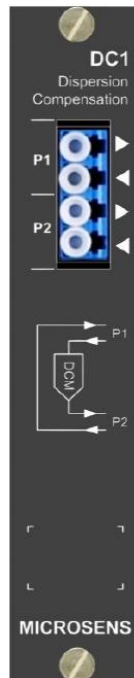


# Datasheet

## MSP 1000

### Dispersion Compensation Module



#### General

The assortment of passive dispersion compensation modules of the MICROSENS MSP1000 platform is designed to compensate for the light distortion that can occur within fiber optic networks and certain conditions.

Light distortion is caused by pulses resulting from non-linearity of fibers. Compensation causes the resulting signal to be optically deformed, allowing the receiver to better decode it. This drastically reduces the bit error rate.

The distortion is called chromatic dispersion.

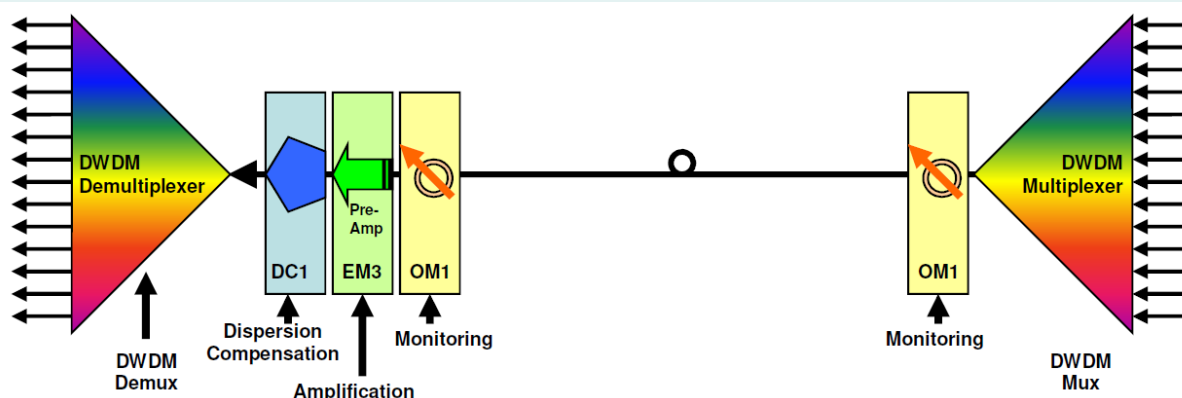
From 10Gbit/s per channel and from about 40km this distortion starts to get a practical significance. These effects can only be partially reduced even with a completely clean laser, which requires the use of dispersion compensators.

The MICROSENS dispersion compensator is based on the fiber Bragg grating technology.

## Technical Details

<b>Type</b>	Dispersion Compensation Module MSP1000
<b>Opt. Connections</b>	LC/PC duplex Only one direction is compensated, the opposite direction is only looped through. A separate dispersion compensator is used to compensate the opposite direction
<b>Wavelength Range</b>	1527..1567 nm (ITU 100 GHz DWDM Channels 13..63)
<b>Versions</b>	40km, 60km, 80km, 100km (other models available on request) Distances do not have to be EXACT
<b>Insertion Loss</b>	< 3.5 dB incl. plug connector
<b>Dimensions</b>	Space requirement 1 Slot in MSP1000-Chassis, <b>can only be used in passive chassis MS425505M</b>
<b>Operating temp.</b>	0..+40 °C
<b>Storage temp.</b>	-40..+85 °C
<b>Humidity</b>	5% up to 80 % non-condensing

## Example of application



## Order Information

Description	Art.-No.
MSP1000 Dispersion Compensation Module 40km G.652 Fiber, Multichannel Fiber bragg grating, 1527..1567nm (100GHz Channels 13..63), unidirectional	<b>MS425750-40</b>
MSP1000 Dispersion Compensation Module 60km G.652 Fiber, Multichannel Fiber bragg grating, 1527..1567nm (100GHz Channels 13..63), unidirectional	<b>MS425750-60</b>
MSP1000 Dispersion Compensation Module 80km G.652 Fiber, Multichannel Fiber bragg grating, 1527..1567nm (100GHz Channels 13..63), unidirectional	<b>MS425750-80</b>
MSP1000 Dispersion Compensation Module 100km G.652 Fiber, Multichannel Fiber bragg grating, 1527..1567nm (100GHz Channels 13..63), unidirectional	<b>MS425750-100</b>

## Accessoires MSP1000 (Auswahl)

Description	Art.-No
<b>MSP1000 1U Chassis</b>	
MSP1000 1U Chassis 19" passiv 3 Moduleslots for passive application modules	<b>MS425505M</b>

\* For more information on the MSP1000 portfolio, please refer to our document [„Technical Description MICROSENS MSP1000 Optical Platform.pdf“](#).

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