DCM-xx Continuous Dispersion Compensation plug-in module (DCM) G.652, 3.7dB, LC

OVERVIEW

The DCM-xx dispersion compensation units are based on the Fiber Bragg Grating (FBG) technology which provides a full-band and channel plan independent compensation.

FBG-based DCMs only have a fraction of the total loss compared to fiber-based equivalents. FBG also provides a latency in the order of nanoseconds as compared to microseconds in fiber-based solutions. The FBG based DCMs are designed to perfectly mimic the dispersion and dispersion slope characteristic of G.652 fiber type. Low residual dispersion is crucial when migrating to higher bit rates.

The DCM-xx products tolerate high optical power without suffering from penalties caused by non-linear effects. Non-linear effects are not introduced even at the highest power level present throughout any traditional network.

Six versions of the DCM-xx modules are provided, ranging from 20km up to 120km. Two DCM-xx plug-in modules can be mounted in the 1RU mechanical holder DCM-MB-2-19.

TECHNICAL DATA

| Parameter | Value |
|--------------------------|-------------------------------|
| Technology | Fiber Bragg Grating (FBG) |
| Connector type | LC |
| Fiber type | G.652 |
| Compensation lengths | 20, 40, 60, 80, 100, 120km |
| Frequency range | C-band |
| Operating temperature | -5°C to +70°C |
| Storage temperature | -40°C to +85°C |

| Parameter | Value |
|-----------------|--------------------------|
| Insertion loss | ~3.7dB (for all lengths) |
| Channel spacing | NA |
| Dimensions | 197 x 212 x 22.5mm |



ORDERING INFORMATION

| Part number | Description |
|-------------|--|
| DCM-MB-2-19 | 1RU, 2-slot, 19" Mounting brackets for DCM |
| DCM-20 | 20km continuous dispersion compensation plug-in module (DCM) G.652, Attenuation 3.7dB, LC |
| DCM-40 | 40km continuous dispersion compensation plug-in module (DCM) G.652, Attenuation 3.7dB, LC |
| DCM-60 | 60km continuous dispersion compensation plug-in module (DCM) G.652, Attenuation 3.7dB, LC |
| DCM-80 | 80km continuous dispersion compensation plug-in module (DCM) G.652, Attenuation 3.7dB, LC |
| DCM-100 | 100km continuous dispersion compensation plug-in module (DCM) G.652, Attenuation 3.7dB, LC |
| DCM-120 | 120km continuous dispersion compensation plug-in module (DCM) G.652, Attenuation 3.7dB, LC |

Smartoptics makes no warranties or representations, expressed or implied, of any kind relative to the information or any portion thereof contained in this document or its adaptation or use, and assumes no responsibility or liability of any kind, including, but not limited to, indirect, special, consequential or incidental damages, for any errors or inaccuracies contained in the information or arising from the adaptation or use of the information or any portion thereof. The information in this document is subject to change without notice.

Subject to change without notice. For more information visit smartoptics.com.

1.1

smartoptics