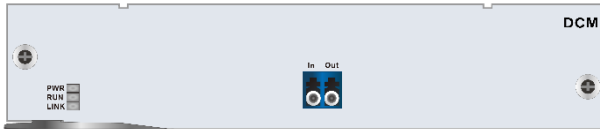




DCM (Dispersion Compensation Module) Card

Part Number: F520-DCMxxC-xx



Overview

Dispersion Compensation Modules (DCMs) are designed to compensate the dispersion of conventional G.652 fiber or other transmission fibers having a positive dispersion that occurs in long-haul optical transmission systems. These products offer superior polarization mode dispersion (PMD) performance and a negative dispersion slope, allowing a DWDM or long-haul system to maintain signal integrity over great distances. Low insertion loss and PMD make the product ideal for long-haul telecommunication systems as well as DWDM transport. The compact 2-Slot size card can be installed in all F520 Chassis.

Applications

- High speed transmission system
- Long-haul telecommunication system
- Dispersion limit extension of DWDM system

Features

- DWDM system dispersion compensation and Broadband low residual dispersion
- G.652 fiber C-Band 100% slope compensation
- Low insertion loss
- Low polarization model dispersion
- Conform to Telcordia GR-2854-CORE standard
- Reliability tested by Telcordia GR-1221-CORE



Specification 1

Parameter	Min	Max	Unit
Operating Wavelength Range	1525	1565	nm
Brillouin Scattering Threshold	6	-	dBm
Non-linear Coefficient	-	1.4*10 ⁻⁹	(n ² /A _{eff}) (W ⁻¹)
Effective Area (A _{eff})@1550nm	20	-	um ²
Maximum Input Power	-	23	dBm
Operating Temperature Range	-5	60	°C
Storage Temperature Range	-40	85	°C
Relative Humidity	<85%	85	RH%
Environmental / Reliability Testing	Comply with Telcordia GR-2854 and GR-1221 standard		
Size*	191(W) x 253(D) x 41(H) mm		

Note: The Width size includes the hanging ear, the Depth size does not include adaptors on the panel.



Specification 2

Parameters / Model No.	DCM10	DCM20	DCM30	DCM40
Compensated Distance (km)	10	20	30	40
1545nm Dispersion (ps/nm)	-170+/-5	-340+/-10	-500+/-15	-680+/-20
1545nm Relative Dispersion Slope	0.0036 +/- 10%			
Insertion Loss (dB)	≤2.6	≤3.3	≤3.9	≤4.7
Insertion Loss (typ) (dB)	2.0	2.7	3.2	4.0
Polarization Mode Dispersion (ps)	≤0.5	≤0.6	≤0.7	≤0.7
Polarization Mode Dispersion (typ)(ps)	0.2	0.2	0.3	0.3
Polarization Dependent Loss (dB)	≤0.1	≤0.1	≤0.1	≤0.1
Parameters / Model No.	DCM50	DCM60	DCM70	DCM80
Compensated Distance (km)	50	60	70	80
1545nm Dispersion (ps/nm)	-825+/-25	-1000+/-30	-1170+/-35	-1340+/-40
1545nm Relative Dispersion Slope	0.0036 +/- 10%			
Insertion Loss (dB)	≤5.2	≤6.4	≤6.9	≤8.0
Insertion Loss (typ) (dB)	4.4	5.4	5.7	6.7
Polarization Mode Dispersion (ps)	≤0.8	≤0.8	≤0.9	≤0.9
Polarization Mode Dispersion (typ)(ps)	0.4	0.4	0.5	0.5
Polarization Dependent Loss (dB)	≤0.1	≤0.1	≤0.1	≤0.1



Ordering Information

F520-DCM C-

Compensation Distance

10: 10km	50: 50km
20: 20km	60: 60km
30: 30km	70: 70km
40: 40km	80: 80km

Connector Type

SP: SC/UPC	LP: LC/UPC *default
SA: SC/APC	LA: LC/APC
FP: FC/UPC	
FA: FC/ACP	