

80KM Passive Dispersion Compensation Module, LC/UPC

P/N: 6C-DCF80A



Product Overview

The DCM dispersion compensation launched by 6COM is a pure passive device. It can compensate the dispersion slope of standard single-mode optical fiber (G.652) in C-band. And it is used to repair the optical signal distorted by dispersion and compensate the damaged signal in optical transmission system, so as to improve the performance of the transmission system and achieve high-speed, large-capacity, long-distance communication. The dispersion range of the DCM can reach - 10 to - 2100ps/nm at 1550nm wavelength. And products with special requirements for central wavelength and dispersion can be also provided.

Function Feature

- 100% slope compensation of G.652 optical fiber in C-band
- Low insertion loss
- Low polarization mode dispersion
- Wide band Dispersion Compensation for DWDM System
- Packaging and interface types can be customized
- Comply with Telcordia GR-2854-CORE standard
- Conform to RoHS-6 (lead free)

Technical Parameters

Item	Parameter					
Equivalent G.652 compensation length	20Km	40Km	60Km	80Km	100Km	120Km

1545nm wavelength dispersion (ps/nm)	-340±20	-670±30	-1000±40	-1340±50	-1670±60	-2040±60
1545nm relative dispersion slope (nm ⁻¹)	0.004±20%					
Insertion loss (dB)	≤3.5	≤5.0	≤6.8	≤8.7	≤10.7	≤12.9
Polarization mode dispersion (ps)	≤0.5	≤0.8	≤1.0	≤1.2	≤1.3	≤1.4
Polarization dependent loss (ps)	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1
Optical reflection (dB)	-27					
Maximum permissible input power (dBm)	+23					
Working temperature range	-5°C~70°C					
Storage temperature range	-40°C~85°C					
Environmental/Reliability Testing	Conform to Telcordia GR-2854 and GR1221standard					
Interface type	LC/PC or to be customized					
Packaging	Pluggable chassis: 1U, (D)220mm×(W)442mm×(H)44mm Rack mount: 1U, (D)220mm×(W)442mm×(H)44mm					

Application

DCM is needed to fix the form of optical signals that are deformed by chromatic dispersion in long-haul transmission. It can effectively neutralize the fiber dispersion before the signal reaches the receiver, which provides a simple, reliable, and cost-effective long-haul transport solution, making signals go further without regeneration.

