

80km Dispersion Compensation Fiber

Dispersion compensation modules are available for any dispersion values from 10km to 140km compensation distance for transparent data rates between 10Mbps and 40Gbps, with this DCF80A for dispersion up to 80 km. They can be used both for single channel and multi-channels DWDM optical fiber communication systems and typically connects to an Optical Amplifier. Sintai Dispersion Compensation modules (DCF) are purely passive modules that based on dispersion slope compensating fiber in 19-inch single slot Rack Mount configuration. They serve at optical communication nodes to compensate the dispersion with optimized residual dispersion for standard single-mode fiber (G.652) in the C-band in optical transmission systems.

Product Feature

Dispersion Compensation lengths 10km, compensation levels of 10 to 140km in 10km steps are available

Purely passive component supporting high reliability

Compensates standard single-mode G.652 optical fiber

Compatible with C-Band DWDM optical channels

Protocol transparent ranging from 10 Mbps to 40 Gbps

Operation with a booster amplifier or a pre-amplifier to get excellent character

Single-slot 1U 19" rack mount design

Low end-to-end insertion loss

Operating Temperature: $-5^{\circ}\text{C} \sim 55^{\circ}\text{C}$

Storage Temperature: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$

CE ROHS compliant

Application

- Provides dispersion compensation for extended reach applications
- Provides pre- and post-compensation
- Provides single- or multi-channel dispersion compensation

Product Specification

Item	Petemeter					
	20Km	40Km	60Km	80Km	100Km	120Km
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 \pm 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					