

60km Dispersion Compensation Fiber

DCF model is a negative dispersion optical fiber launched by Sintai Communication Co. , Ltd. , which is a new type of single mode optical fiber designed for presently laid G.652& G.655standard single-mode optical fiber; the dispersion of G.652 optical fiber in the vicinity of 1550nm wavelength is positive (17-20) ps/nm (km), and the dispersion of G.655 standard optical fiber in the vicinity of 1550nm wavelength is positive (4-6) ps/nm (km), with a positive dispersion slope. So we need to add dispersion compensation fiber with negative dispersion into the optical fiber then conduct the dispersion compensation and make sure that the total dispersion of the whole optical fiber links is near zero, so as to realize high speed, large capacity and long distance communication.

Product Feature

- Enables 2.5, 10, 40, and 100 G C-band DWDM applications
- Compensates 9/125 G.652 (NDSF) and G.655 (NZDSF) single-mode optical fiber at wide ranging compensation lengths
- Enables per-channel dispersion compensation with integrated Circulator • Improves deployment flexibility with low end-to-end insertion loss
- Simplifies mounting with compact LGX or single Wave Ready slot-mounting options
- Reduces power requirements: passive optics require no power

Application

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

Product Specification

Product Model	DCF60A
Equivalent G.652 compensation length	60km
1545nm wavelength dispersion(ps/nm)	-1000±40

1545nm wavelength relative dispersion slope	$0.004 \pm 20\%(\text{nm}^{-1})$
Insertion loss	$\leq 6.8 \text{ dB}$
Polarization mode dispersion	$\leq 1 \text{ ps}$
Nominal single-wave input optical power	$\leq 0 \text{ dBm}$
Optical interface	All interfaces are LC type
Typical power consumption	0W (passive components)
MTBF	> 200000 hours
Occupied slot number	2 slots (dispersion compensation board over 40km need to be configured individually with the DCF passive frame)