

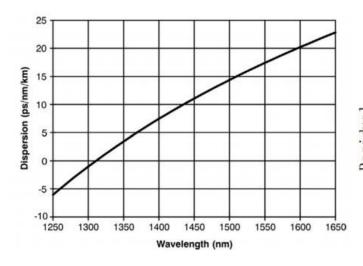
oWAVE15xx Series Dispersion Compensation Module



Dispersion compensation module is required especially in fiber optical high bit rate (such as 10G or 40G bit/s) long-haul transmission systems. oWAVE15xx series is a device that being placed near the optical amplifier spaced some 25 to 50 miles apart to remove pulse distortion in an optical fiber network. A wide range of compensating distances is available to adjust the dispersion compensation to the specific link requirements. Greater reach and lower cost is achieved.

Dispersion

406



0.6 0.4 (ps/nm/km) 1550 1540 1545

DCF+G. 652 Fiber Residual dispersion

Wavelength(nm)

Figure 1: Dispersion Compensation for NDSF

Figure 2: Residual Dispersion for typical link

Technical Specification

| DCM Type | oWAVE1520 | oWAVE1540 | oWAVE1560 | oWAVE1580 | oWAVE15100 |
|----------------------------|-------------------|-----------|-----------|-----------|------------|
| Insert loss | ~ 3.3 | ~ 4.8 | ~ 6.8 | ~ 8.7 | ~ 10.7 |
| Dispersion @1545nm | -340 ±3% | -680 ±3% | -1020 ±3% | -1360 ±3% | -1700 ±3% |
| PDL* (dB) | ~ 0.15 | ~ 0.15 | ~ 0.15 | ~ 0.15 | ~ 0.15 |
| PMD` (ps) | ~ 0.6 | ~ 0.8 | ~ 1.0 | ~ 1.2 | ~ 1.3 |
| Compensation distance (km) | 20 | 40 | 60 | 80 | 100 |
| Fiber Type | Single Mode Fiber | | | | |
| Connectors | SC | | | | |

^{*} Polarization Dependent Loss



[`] Polarization Mode Dispersion