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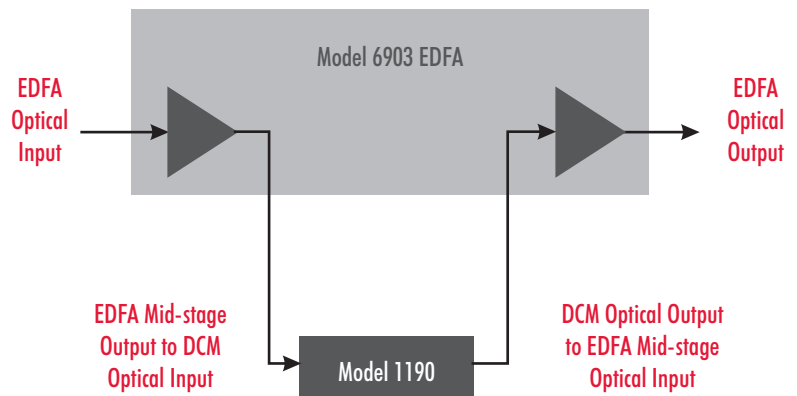
Dispersion Compensation Module

- 100% slope compensation typical (80-120% range) for use with standard SM fiber.
- Low loss and low polarization mode dispersion for high performance.
- High FOM (figure of merit).
- Ideal for long-haul transmission using DWDMs.



Model 1190 DCM Front View

The Force Model 1190 Dispersion Compensation Module (DCM) is designed to manage the dispersion that occurs in long-haul optical transmission systems. Dispersion, the temporal spreading of light pulses due to light signals traveling at different speeds through the fiber, can accumulate in a long-haul system, causing the signal to break down and reducing transmission range and signal quality. The Model 1190 addresses this phenomena, allowing a DWDM or long-haul system to maintain signal integrity over great distances and providing 100% dispersion slope compensation (typical). Low insertion loss and low polarization mode distortion (PMD) loss make the Model 1190 ideal for long-haul telecommunications systems as well as DWDM transport.



Specifications and Ordering Information

Optical Characteristics

	Min	Typ	Max	Units
Operating Wavelength	1525		1565	nm
n_e/A_{eff}		1.1×10^9	1.7×10^9	1/W
Fiber Effective Area (1)	19	21		μm^2
SMFG652 (2)		60		km
Dispersion (3)		-1020 \pm 30		ps/km
Dispersion Slope (3)		-3.5		ps/nm ²
Ratio of Disp. & Disp. Slope (3)	0.0034 \pm 20%			nm ⁻¹
Insertion Loss (1)		≤ 6.8		dB
Insertion Loss (Typical)		5.4		dB
PMD (4)		≤ 0.9		ps
PMD (4) (Typical)		0.4		ps
PDL		≤ 0.1		dBp-p
SBS Threshold		7		dBm

(1) Specification is given at 1550 nm.

(2) Specification is given at 1545 nm.

(3) Specification assumes a dispersion of 17 ps/nm/km and dispersion slope of 0.058 ps/nm²/km at 1545 nm of the standard single-mode fiber.

(4) PMD is an averaged value over a wavelength range from 1525 nm to 1565 nm using the Jones Matrix method.

Physical Characteristics

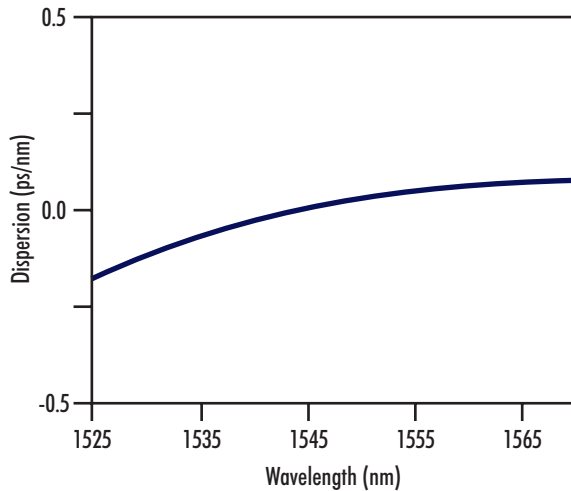
	Min	Typ	Max	Units
Weight		45		lbs
		2.0		kg
Dimensions	19.0 x 1.75 x 9.25			in.
	483 x 45 x 235			mm

Environmental Characteristics

	Min	Typ	Max	Units
Operating Temp. Range	-5		+70	°C
Storage Temp. Range	-40		+75	°C
Humidity	5		90	%



Model 1190 DCM Rear View



Typical Dispersion of a Link Normalized to Length of Conventional SM Fiber (G.652)

DCM P/N

DCM Options	SC/APC	FC/APC
1RU, SM, 1525-1565 nm, 60 km	1190GA-SDSP/60	1190GA-SDAP/60



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