359C Series 1550 nm Dispersion Compensation Module

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Applications

- Radar Testing/Calibration
- Signal Processing
- Phased Array Antennas
- Phase Noise Processing
- Antenna Site Diversity

Features

- Delays Up to 127 microseconds
- 24 km
- Small Size
- Flat RF Amplitude Response and Phase

The 359C Series Dispersion Compensation Module provides a solution for dealing with existing high dispersion legacy installations. By providing a negative dispersion, fiber with high positive dispersion can be fully compensated. Typical dispersion compensation modules can increase the total fiber length by as much as 65%, while these highly efficient high dispersion fibers only increase the total fiber length of the system by approximately 13%. Thus lessening the requirement on the EDFA modules required to compensate for the total fiber loss.

The 359X platform works with a wide range of fiber optic transport products for satellite and microwave communications from 1 MHz to 40 GHz. These units can be used to construct transparent inter- and intra-facility links from 1 meter to >200 km for RF and microwave signal transport, antenna remoting, video transport, electronic warfare systems and other high-dynamic-range applications.

Delay Length & Dispersion Specifications

359C 1 RU	110 µs	24 km	-1.6*10⁵ ps/nm

Note: Max length of SMF-28 brought to 0 dispersion is 183.4 km.



Optical Specifications

Parameter	Typical	Units
Attenuation @ 1550 nm	<u>≤</u> 0.5	dB/km
Index of Refraction (IOR) @ 1550 nm	1.469	
Typical Total Dispersion @ 1550 nm	-130	ps/nm-km
Additional Loss (@ two bridge fiber interfaces)	<4.0	dB

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Mechanical Specifications

Description	Value	Units
Body Dimensions 1 RU	13 (330.2) x 16.6 (421.6) x 1.72 (43.7)	in (mm)
Faceplate Dimensions 1 RU	19 (482.6) x 1.75 (44.5)	in (mm)
Storage Temperature	-60 to +85	°C
Operating Temperature	-40 to +85	°C

Ordering Information

Product Number		
359C-WW-XXXXX-YY-ZZ		

When ordering replace "WW" with one of the Rack Unit Size Options

When ordering replace "XXXXXX" with one of the Delay Options

When ordering replace "YY" with one of the Connector Type Options

■ When ordering replace "ZZ with one of the Optional Features

Coil Type	Rack Unit Size	Delay in µS	Connector Type	Optional Features*
"C	"WW"	"XXXXXX"	"YY"	"ZZ"
C = Zero Compensation Dispersion	1U = 19" x 1.75" (1 RU)	001000 = 10 μs Delay 010000 = 100 μs Delay	SA = SC/APC FA = FC/APC LA = LC/APC EA = E2000/APC	P = Pigtail Leads B = Bulkhead

Pigtail Leads - If preferred, the standard bulkhead connector input and output of the 359C Series Delay and Dispersion Compensation Modules can be replaced with a one meter long pigtail with a male connector on the end.

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