



Optical Delay Line

Optical Delay Line



Features & Benefits

- Enhanced transmission performance
- Customizable compact fiber spool
- High-quality fiber with a low bend radius
- Versatile use for multiple applications
- Compatible with Foxcom Satellite transmitters

Product Description

Global Foxcom's Optical Delay Line is implemented for multiple testing purposes, such as diversity sites, radar applications, distance simulation and signal processing. By simulating signal transmissions using our Delay Line, you can enhance the performance between transmitters and receivers. The new Foxcom Optical Delay Line is compatible with the Foxcom Sat-Light/Platinum line.

Foxcom Optical Delay Line is customizable in fiber length and size, and boasts a compact, miniature fiber spool design that is easily incorporated into any situation. This product is made from sophisticated, high-quality fiber with a minimal bend loss and a low bend radius.

Optical Delay Line is available as a standalone unit. You can also consider combining our rack mount Delay Line unit with a receiver and transmitter to produce a complete RF-over-Fiber Delay System.

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Optical Specifications

Attenuation	
Attenuation at 1310 nm	≤ 0.35 dB/km
Attenuation at 1383 nm	
Attenuation at 1550 nm	≤ 0.22 dB/km
Attenuation at 1625 nm	≤ 0.24 dB/km
Attenuation at 1310 nm	≤ 0.35 dB/km
Cutoff Wavelength	
Cable Cutoff wavelength (λccf)	≤ 1260 nm
Mode Field Diameter	
Wavelength (nm)	MFD (μm)
1310	8.8 ± 0.4
1550	9.8 ± 0.5
Chromatic Dispersion	
Wavelength (nm)	Chromatic Dispersion (ps/[nm.km])
Zero Dispersion Wavelength (λ0)	1300-1324 nm
Slope (S0) at λ0	≤ 0.092 ps/(nm² .km)
Miscellaneous Typical Values	
Nominal Zero Dispersion Slope	0.089 ps/(nm² .km)
Effective group index @ 1310 nm	1.467
Effective group index @ 1550 nm	1.467
Effective group index @ 1625 nm	1.468
Rayleigh Backscatter Coefficient for 1 ns pulse width:	
@ 1310 nm	-79.0 dB
@ 1550 nm	-81.3 dB
@ 1625 nm	-82.0 dB
Environmental and Mechanical Specifications	
Attenuation	
Environmental Test	
Temperature cycling	
Temperature-humidity cycling	
Unit Size	