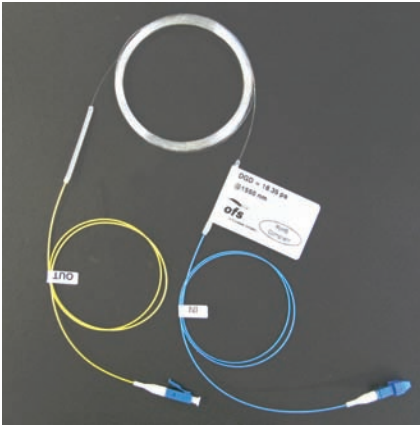


Specification Sheet



Polarization-Maintaining Fiber TruePhase® Interleaver



power goes up, and the system performance is significantly increased.

The OFS ClearLite TruePhase Fiber Coil 1550 enables the use of time-interleaved return-to-zero (RZ) optical symbols by using a polarization maintaining (PM) fiber coil with customer specified differential group delay (DGD) between slow and fast axis propagation. The optical properties are optimized for broadband operation with low insertion loss, low PDL, high return loss, and high polarization extinction ratio. The fiber coil comes in two pigtail configurations, namely PM fiber pigtails or with a PM fiber pigtail input and SSMF pigtail output. The PM fiber length is designed to meet customer requirements of the DGD to within ± 0.3 ps at 1550 nm at 25°C, or ± 1.0 ps over the full wavelength range and at appropriate operating temperatures. For representative product information see table below:

Coherent detection is a key enabling technology for optical communication networks as the telecommunication industry migrates to 40G and 100G systems with advanced modulation formats. Time-interleaving is an efficient method to improve the nonlinear performance of coherent systems. By reducing the nonlinear coupling between the polarization states, the optimum input

	Value	Unit
Optical Properties		
Operating wavelength	1528-1610	nm
Insertion loss	<0.5	dB
Return loss	>35	dB
PDL	<0.1	dB
Polarization extinction ratio	>20	dB
DGD* range	1→50	ps
DGD at 25°C at 1550 nm	± 0.3	ps
DGD over full wavelength and temperature range	± 1.0	ps
Dimensions/Geometric Properties		
Coil diameter	>50	mm
Mechanical and Testing Data		
Operating temperature	0 to 60	°C

Several types of connectors and packaging are available, such as loose coil, spool or module. Please contact sales representative for further information.

Related Products: TruePhase 1550

*DGD value is specified by customer

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