

In-Line Optical Fiber Depolarizers

Intelmac's in-line depolarizers are an all-fiber Lyot type device producing a very low degree of polarization (DOP) for any random input state of polarization (SOP). Intelmac's depolarizers is specifically designed for applications in which the level of residual polarization is critical to system performance and can match the narrowest FWHM line width spectrum of ASE, SLD, ELED and Fabry-Perot laser sources.

The depolarizers can be spliced into SM fiber, PM fiber or an integrated polarizer to meet a range of performance tailored specifications to meet the customer's requirements. Depolarizers can also be recoated to fit onto optical coils for optical fiber gyro applications.

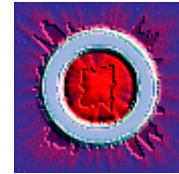


FEATURES:

- ◆ Low Degree of Polarization (DOP)
- ◆ Near zero back reflection
- ◆ Low insertion loss
- ◆ Large operating bandwidth
- ◆ All-fiber configuration
- ◆ Robust OEM packaging available

APPLICATIONS:

- ◆ Reduce PDL in SLD, ELED and FP laser sources
- ◆ Reduce PDG in ASE sources and amplifiers
- ◆ Randomize residual polarization for low coherence sources
- ◆ Optical transmission systems
- ◆ Instrumentation
- ◆ Polarization measurement systems
- ◆ Optical fiber sensors



Specifications.

Type:	A		B		C	D	E
Source FWHM Line Width	>10nm	>20nm	>2.5-10nm	>10nm	>1.0-2.5nm	>0.4-2.5nm	>0.2-0.4nm
Residual extinction ratio (RER)(typical)	<0.1dB	<0.01dB	<0.1dB	<0.01dB	<0.1dB	<0.1dB	<0.1dB
DOP	<2.5%	<0.5%	<2.5%	<0.5%	<2.5%	<2.5%	<2.5%
Insertion loss (max)*	<0.5dB		<0.5dB		<1.0dB	<1.0dB	<1.0dB
Operating Bandwidth	1250 - 1625 nm						
Return Loss **	>70dB						
Operating Temperature	-20 °C to 70 °C						
Transportation &Storage	-40 °C to 85 °C						
Pigtail Options	1m fiber standard, 900um tube optional						
Dimensions (mm) LxWxH ***	150x106x32						
Connectors	Optional						

Notes to Specifications:

- * Insertion loss specification is worst case without connectors. Significant improvements in performance can be made if required.
- ** Return loss specification is worst case without connectors.
- *** Packaging is designed to provide a rugged product. Alternative smaller/larger packaging to your specification is available.
- Due to ongoing improvements Intelmac reserves the right to change any specifications without prior notice - please discuss your specific requirement with Intelmac.

ORDERING INFORMATION:



Depolarizer Type:	Wavelength:	Packaging:	Cable type:	Connectors:
A - FWHM > 10nm	13 - 1300nm	11 - OEM	1 - SM in/out	0 - None
B - FWHM > 2.5nm	14 - 1480nm	12 - Boxed with connectors	2 - PM in/out	1 - FC/UPC
C - FWHM > 1.0nm	15 - 1550nm	13 - Boxed with leads in/out	3 - Polarizer in	2 - FC/APC
D - FWHM > 0.4nm				3 - LX 5/APC
E - FWHM > 0.2nm				4 - E2000/APC
				5 - SC/APC
				6 - ST/UPC