Polarization Scrambler

PS3000 Series

FIBERPRO's Polarization Scramblers perform polarization scrambling at high speed and make Degree Of Polarization (DOP) zero on time average. It is based on all fiber technology that has enabled us to build very low insertion loss, back reflection free and a compact polarization scrambler.

Polarization dependence is one of the biggest issues in fiber-optic measurement, communications and sensors. PDL in components and equipments, Polarization Dependent Gain (PDG) in EDFA are typical examples.

Depolarizing is one of the solutions for the polarizing problems. Polarization Scrambler provides the best solution for most situations in which the depolarization is needed.

This equipment provides you with an excellent way to characterize / qualify optical property of optical devices. Furthermore, our PS can solve the problems associated with PDG of EDFAs by scrambling polarization of the optical signal.

Features

- High speed scrambling (~1MHz)
- All single mode fiber configuration (Low loss, Low PMD)
- Wide operating wavelength range
- Input polarization independent
- GPIB, RS232, USB remote interface.
- Plug & Play

Distribution in the UK & Ireland



Characterisation. Measurement & **Analysis**

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Specifications

Model	PS3010	PS3210
Output DOP	< 5%	
Polarization Modulation Frequencies	~ 1MHz 1)	
Center Wavelength	1310nm	1310nm
	1480nm	1550nm
	1550nm	1570nm
	1590nm	
Operating Wavelength Range	> 40nm	> 80nm
Insertion Loss	< 1.0dB (with connectors)	
Average PMD	< 0.3 ps	
PDL	< 0.05dB (with connectors)	
Return Loss	> 40dB (PC connector)	
	> 60dB (APC connector)	
Operating Temperature Range	5 °C ~ 35 °C ²) (DOP < 5%)	
Input / Ouput Connectorization	FC / PC 3) (standard)	
Interface	GPIB / RS232 / USB	
Power Input	100 ~ 250V, 50Hz / 60Hz free voltage	
Dimensions (W x D x H)	234mm x 410mm x 108mm (With rubber cover)	
	212mm x 380mm x 86mm (Without rubber cover)	

- 1) It is fine-tuned for optimum operation at the factory.
- 2) In the range of 0° C ~ 50° C, the output DOP slightly increases, however it is less than 10° M.
- 3) Other connectorization is available. Specify when you order.

Ordering Codes

PS(1) - (2) - (3)

1. Model No. - 3010 / 3210

2. Center wavelength

PS3010 → 131 : 1310nm PS3210 → 131: 1310nm

148 : 1480nm 155 : 1550nm 155 : 1550nm 157 : 1570nm

159: 1590nm

3. Connector type → F / P : FC / PC

F/A:FC/APC S/P:SC/PC

S/A:SC/APC



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