

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.



Key Features

- High speed scrambling
- All single mode fiber configuration (Low loss, Low PMD)
- Wide operating wavelength range : > 40 nm
- Input polarization independent
- GPIB, RS232, USB remote interface.
- Plug & Play

Specifications

Model	PS3010	PS3110	PS3210
Output DOP	< 5%		
Polarization modulation frequencies	~ 1MHz ¹⁾		
Center wavelength ²⁾	1310 nm	1550 nm / 1590 nm	980 nm
	1480 nm		1570 nm
	1550 nm		
	1590 nm		
Operating wavelength range	> 40 nm	> 40 nm each	> 80 nm
Insertion loss	< 1.0 dB (with connectors)		
Average PMD	< 0.3 ps		
PDL	< 0.05 dB (with connectors)		
Back reflection	< -65 dB (without connectors)		
	< -50dB (FC / SPC)		
	< -60dB (FC / APC)		
Operating temperature range	5°C ~ 35°C ³⁾ (DOP < 5%)		
Input / Output connectorization	FC / PC ⁴⁾ (standard)		
Interface	GPIB / RS232 / USB		
Power input	100 ~ 250 V, 50Hz / 60Hz Free Voltage		
Dimensions (W X H X D)	211 X 86 X 378 mm ³		

1) It is fine-tuned for optimum operation at the factory.

2) PS3110 have band selection function.

3) In the range of 0°C ~ 50°C, the output DOP slightly increases, however it is less than 10%.

4) Other connectorization is available. Specify when you order.

Ordering Codes

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

1. Model No. ➡ 3010 / 3110 / 3210

2. Center Wavelength

PS3010 ➡ 131 : 1310 nm

148 : 1480 nm

155 : 1550 nm

159 : 1590 nm

PS3110 ➡ X

PS3210 ➡ 098 : 980nm

157 : 1570nm

3. Connector Type ➡ F / P : FC / PC

F / A : FC / APC

S / P : SC / PC

S / A : SC / APC



We welcome your inquiry of
OEM PS module.
Please contact us.

LEA-PS3000-01



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