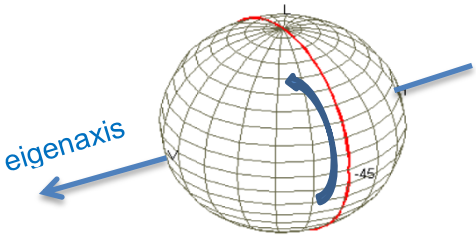
All-Fiber Polarization Scanner-Controller

Product Overview

Phoenix Photonics state of polarization (SOP) scanner utilizes three variable all-fiber waveplates to provide full coverage of the Poincare sphere enabling conversion of any input SOP to any required output SOP. Designed to allow continuous variation of the output SOP the device can also be used for polarization control either within a feedback circuit or in open loop configuration.

Rotation of the SOP around the WP Eigenaxis



Features & Applications

FEATURES

- All-fiber
- Simple current control
- Full cycle of Poincare sphere
- Low insertion loss
- High return loss

EXAMPLE APPLICATIONS

- Polarization control
- State of polarization scanning
- Component testing
- Sensor systems
- Optical fiber polarimetry

For more information please contact Phoenix sales:
sales@phoenixphotonics.com or visit us at
www.phoenixphotonics.com

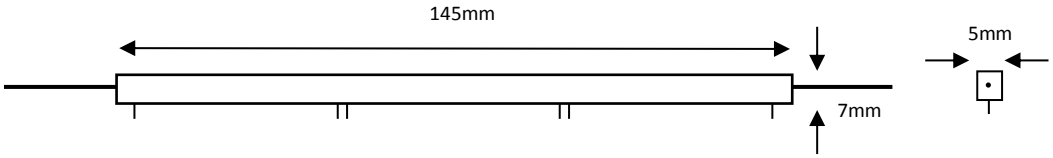
SPECIFICATION	Units	
Wavelength range[1]	nm	1300-1610
Insertion Loss[2]	dB	<0.8
PMD	ps	<0.15
Return Loss	dB	>70
Maximum current[3]	mA	70
Maximum Voltage[3]	V	10
Scan rate[4]	deg./s	360
Operating Temperature Range	^{0}C	-5 to 70
Storage Temperature	^{0}C	-40 to +85
Fiber type		SMF28
Input & Output Fiber Lengths	mm	1000

Specification Notes

1. *Devices will operate over full wavelength range, higher current is required at longer wavelengths to achieve switching.*
2. *Losses do not include connectors.*
3. *Maximum current and voltage for each section of the controller*
4. *Scan rate is the rate of polarization change for a cycle of the Poincare sphere for each section*

PACKAGING STYLE

All dimensions are approximate and may vary slightly



Ordering Information

P	S	C	-			-			-	

Wavelength:
20 – 2000 nm
15 – 1530 - 1610 nm
14 – 1480 - 1530 nm
13 – 1280 - 1330 nm
10 – 980 - 1060 nm

Connectors:
0 – none
1 – FC/SPC
2 – FC/APC
* Others available

Cable type:
0 – none
1 – 900um loose tube