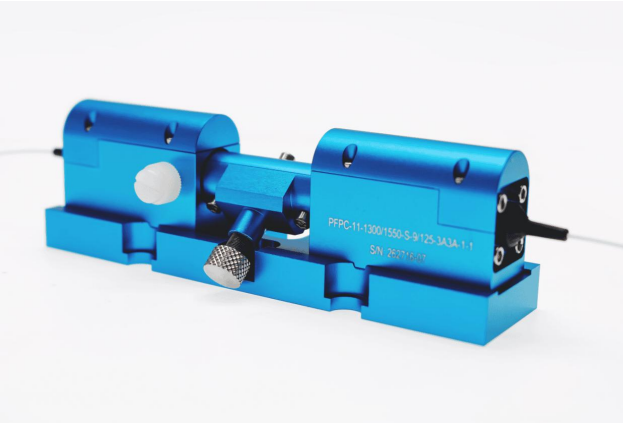
All-fiber squeezed polarization controller

1300/1550nm



Product Description

The OZ Optics polarization controller allows one to convert any input polarization state to any desired output polarization state. The device combines the compact size and ease of use of standard volume optics with low cost, low loss, and low back reflections. The polarization controller works by applying pressure via an adjustable clamp. The pressure on the fiber induces birefringence within the core, causing the fiber to act as an order wave plate. Changing the pressure changes the delay between the fast and slow polarization components. Since the clamp is rotatable, the

direction in which the stress is applied can be changed. This allows any output polarization to be achieved. The process is simple and fast. Output polarizations of over 30dB can typically be achieved in seconds.

Product features

No intrinsic losses、 No back reflections、 Compact - new: micro housing、 Easy to use、 Wavelength insensitive、 Low cost、 400–2200nm wavelength range selectable

Part Number

MP-MPC-11-1300/1550-S-9/125-3A3A-1-1

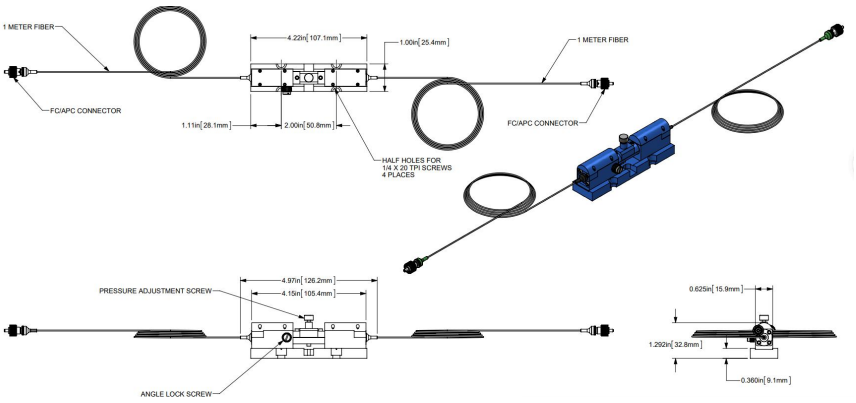
Application area

Single mode to polarization-maintaining (PM) fiber launch 、 Polarization-dependent loss (PDL) measurement 、 Launch to polarization-sensitive devices、 Fiber lasers、 Fiber interferometers、 OCT systems

Core parameters

Wavelength	Connector
1300/1550nm	FC/APC

Dimension Drawing



General Parameters

Parameter

Parameter	Indication
Wavelength	1300/1550nm
Connector Type	FC/APC
Type	Pigtail
Pigtail Length	1m
Jacket OD	0.9mm
Jacket Material	Hytrel
Experimental testing: Test conditions	
Temperature	22℃
Input	9/125/900
Output	9/125/900
Experimental test results	
Insertion loss	＜0.14dB

Parameter	Indication
Wavelength	1300/1550nm
Connector Type	FC/APC
Type	Pigtail
Pigtail Length	1m
Jacket OD	0.9mm
Jacket Material	Hytrel
Output power (mW)	N/A
Repeatability	Passed
Coupling efficiency (%)	N/A
Back reflection (return loss) (dB)	N/A
Extinction ratio (dB)	37
Stress test (dB)	N/A
PDL (dB)	N/A