

3 Paddle Mechanical Polarization Controller

Description:

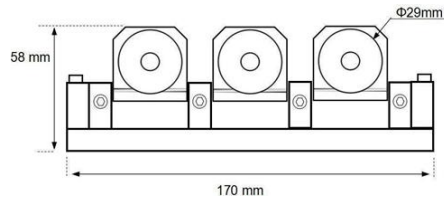
3 Paddle Mechanical Polarization Controller is use fiber outside pressure and birefringent effect theory. Its 3 Paddle is respectively equal $\lambda/4$ 、 $\lambda/2$ 、 $\lambda/4$ plate. When light wave enters $\lambda/4$ waveplate is transfer line polarization, then use $\lambda/2$ is adjust Polarization direction, finally it enters to $\lambda/4$ waveplate and line polarization state is change to any polarization. Due to Birefringent' s delay effect is come from fiber cladding, roll fiber, and wavelength. It can generate all polarization change.

Feature:

1. Equal to $\lambda/2$ 、 $\lambda/4$ plate
2. Adjust any polarization
3. Low Insert Loss
4. Easy to roll fiber

Application:

1. SM to PM fiber system application
2. Measurement PDL
3. Fiber Laser
4. Fiber Interferometer



Parameters	Unit	Values
Operation Wavelength	nm	780/1060/1550
Max. Insertion Loss	dB	0.5
Min. Return Loss	dB	50
Fiber Type	-	Corning SMF-28 or Hi 1060
Number of Paddles	-	3
Dimension(L×W×H)	mm	170×25×58
Fiber Ring Diameter	mm	29
Operating Temperature	°C	0~+70
Storage Temperature	°C	-40~+85
For device with connector, IL is 0.3dB higher, RL is 5dB lower.		

Polarization Controller' s Single Paddle Delay and Wavelength, Roll relationship-

(Measure unit: Fiber roll diameter 29mm, Fiber cladding diameter 125um)

For example:

When $\lambda=1550\text{nm}$, Loop =1, its paddle is equal $\lambda/2$ waveplate

When $\lambda=1550\text{nm}$, Loop=3, its paddle is equal $3\lambda/2$ waveplate



Ordering Information

3PMPC	Wavelength	00	Fiber Type	Pigtail Type	Length	Connector
	0850=850nm 1064=1064 1550=1550		0=No fiber 1=hi1060 2=HI780 3=SMF-28e	1=900um loose tube	H=0.5m 8=0.8m 1=1.0m	0=None 1=FC/UPC 2=FC/APC S=Specify