

### 3 Paddle Mechanical Polarization Controller

# Description:

3 Paddle Mechanical Polarization Controller is use fiber outside pressure and birefrigent 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 Birefrigent'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 Insertion Loss
- 4. Easy to roll fiber

#### Application

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

### Specification



Polarization Controller's Single Paddle Delay and Wavelength, Roll relationship-(Measure unit: Fiber roll diameter 56mm, Fiber cladding diameter 125um) For example:

When $\lambda$ =1550nm, Loop =1, its paddle is equal $\lambda$ /2 waveplate When  $\lambda$ =1550nm, Loop=3, its paddle is equal  $3\lambda$ /2 waveplate

## **Ordering Information**

3PMPC=3 Paddle Mechanical Polarization Controller