# 3-Paddle Fiber Polarization Controller

Opneti's mechanical polarization controller's unique user-friendly design utilizes stress-induced birefringence, can be equal to λ/2 and λ/4 optical wave plate. The state-of-polarization (SOP) provided by adjusting the angels of paddles can achieve complete coverage of the Poincare sphere. Flexible structure design is easy to remove to accept different fiber with different wavelength.

## Features

- All Fiber Structure, Simple Operation, High Reliability
- Based on Theory of Stress-Induced Birefringence
- Equal to λ/2 and λ/4 Optical Wave Plate
- Complete Coverage of the Poincare Sphere
- Low Loss, Wide Operating Wavelength
- Well-Made, Competitive Price
- Easy Top-Down Fiber Loading with Paddles

## Applications

- Coherent Optical Fiber Communication Systems
- Fiber-Optic Gyroscope
- Coherent Detection
- Optical Fiber Transmission System
- Optical Fiber Sensor
- PDL Measurement

## Specifications

| Parameters | Unit | Values |
|---|---|---|
| Operating Wavelength Range | nm | 1260~1625 |
| Design Wavelength | nm | 1310, 1550 |
| Number of Paddles | pcs | 3 |
| Loop Diamter | mm | 56 |
| Paddle Rotation | Deg | ±117.5 |
| Mode Filed Diameter | μm | 8.6±0.4 @ 1310nm |
| | | 9.7±0.5 @ 1550nm |
| Cladding Diameter | μm | 125±0.7 |
| Coating Diameter | μm | 242±5 |
| Bend Loss | dB | ≤0.1 |
| Operating Temperature | ℃ | -10 ~ +75 |
| Storage Temperature | ℃ | -40 ~ +84 |

## Package Dimensions

## Ordering Information

**POC-** ①①①①-②②②-③③

| | | |
|---|---|---|
| ① | Wavelength | 1310; 1550; |
| ② | Pigtail Type | 250=250μm Bare Fiber; 900=900μm Loose Tube; 3000=3mm Loose Tube; XXX=Specify; |
| ③ | Connector Type | FC=FC/UPC; FA=FC/APC; XX=Specify |