## **ROF Polarization controller**

## **Key Advantage**

High response speed
High return loss
Low Polarization Dependent Loss
Low insertion loss
Dynamic real-time adjustment
Small size, easy to integrate

## **Typical Applications**

- 1. Fiber polarization control
- 2. Polarization state perturbation
- 3. Fiber optic sensor
- 4. Fiber laser
- 5. Polarization detector



This product is a dynamic polarization controller with independent property rights, which can dynamically adjust polarization at high speed and in real time. It has the characteristics of low insertion loss, small size, and high degree of integration, and is widely used in fiber lasers, fiber sensing, high-speed optical communication, and quantum secure communication.

This product is composed of a piezoelectric three axis PZT, with a built-in high-voltage amplification drive circuit, which does not require high-voltage input. It only needs to be controlled by a simple Supervisory Control and Data Acquisition software to dynamically transform the given polarization state into any other polarization state in real-time, and maintain stability for any polarization state. Its unique all fiber structure design makes its insertion loss<0.5dB and return loss>50dB.

Technical Parameters	Technical Indicators
Working Wavelength	1260nm-1650nm
Channel Value	3cps
Insertion Loss	≤0.7dB
Polarization Dependent Loss	≤0.3dB
Supply Voltage	12V
Return Loss	>50dB
Type of Optical Fiber Connector	FC/APC
Communication Interface	Serial port
Working Temperature	(-10~+50°C)
Storage Temperature	(-45~+85°C)
Working Humidity	20%~85%
Storage Humidity	10%~90%