

In-Line Electronically Addressed Polarization Controller

The FiberLogix all-fiber optical State of Polarization (SOP) controller (IEPC) provides electronic control of any arbitrary input SOP to any other state. The device is based on unique Integrated Fiber Optic Solutions (IFOS™) with Side Polish technology on specialty fiber. One control stage provides closed circle control on Poincare sphere, two stages gives a linear polarization, three stages provides complete coverage and four stages provide no-reset full continuous coverage. The IEPC is electrically controlled through input/output pins using a manual control unit or a programmed automation interface. Devices parameters can be further tailored and/or integrated with In Line Fiber Polarizer or other PM devices on request. Multi channels and rack mounting are also available.

Features

- In-Line, Ideal for Integration
- Low Insertion Loss
- Low Back Reflection
- High Stability
- Dynamic Polarization State Control
- Low Cost

Applications:

- Telecom Polarization Optimization
- Polarization Dependent Imaging
- Sensing Instrumentation
- Polarization Control in Lasers Source and Interferometers
- PDG Control
- Low Speed Scrambling

Specifications

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| Wavelength Range | 1060, 1300, 1480, 1570nm |
| Configuration | 1, 2, 3 or 4 Stages Selectable |
| Response Time | < 50 msec |
| Insertion | < 1 dB |
| PDL | 0.2 dB |
| Back Reflection | > 60 dB |
| Storage Temperature | -40 to 85 °C |
| Operating Temperature | -5 to 50 °C |
| Input/Output Fiber Type | SMF 28, or Others Selectable |
| Pigtail Option | 1m Fiber Standard, 0.5 m, 900 μm Optional |
| Drive Current Range, Power Consumption | 80 - 120 mA, 0.3 W per Stage Typical |
| Package Dimension | 220x15x11mm Standard, Smaller Size Is Possible |

