

Fiber Polarization Controller



FEATURES:

- Electronic and manual polarization control
- Simple operation
- Any output SOP achievable
- Low insertion loss
- High return loss
- High extinction ratio maintenance

APPLICATIONS:

- Polarization control
- State of polarization scanning
- Component testing
- Sensor systems
- Optical fiber polarimetry
- PMD emulation

Based on the **Phoenix Photonics** polarization scanner, the controller offers the option of three section manual control or external analogue voltage control. Full state of polarization control is achieved by three cascaded variable fiber waveplates. The controller is all-fiber giving return loss, insertion loss and PDL advantages. Default condition is manual control through three independent adjustment knobs on the top of the device offering a direct replacement for the standard mechanical three-loop controller. Connection to three analogue voltages via a standard 9 pin D-type connector enables remote independent electronic control of each of the fiber sections. Control of each individual waveplate describes a complete circle on the Poincaré sphere. The unit allows any SOP to be generated from any arbitrary input SOP.

