

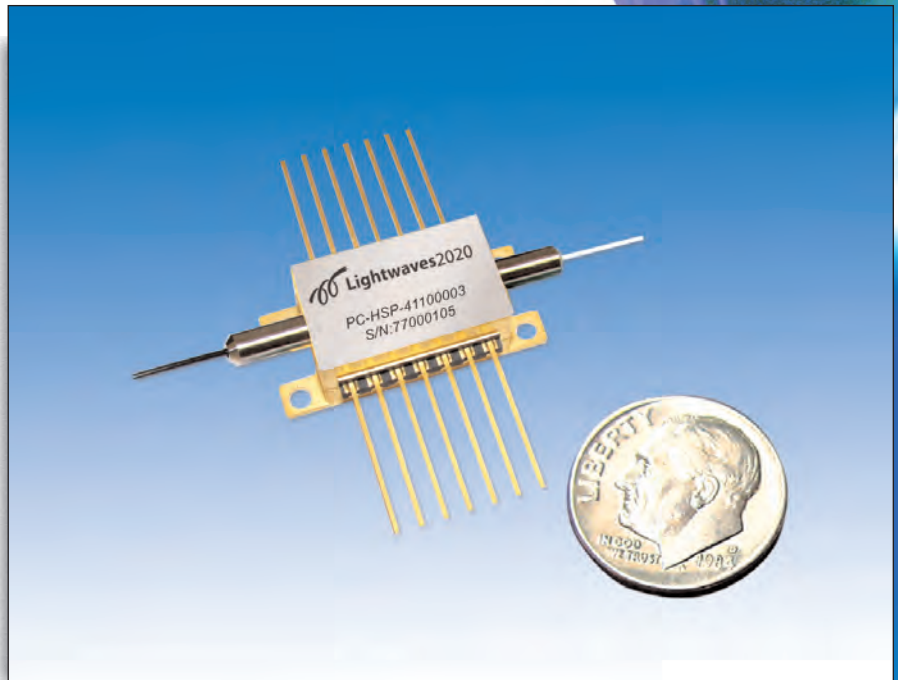
High Speed Polarization Controller

Features / Benefits

- High speed (μs)
- Broadband wavelength ranges
- No moving parts
- Low insertion loss
- Low PDL over operating wavelength range
- Solid state technology

Applications

- PMD compensation
- Polarization generator
- Polarization scrambler
- Polarization Mux / DeMux
- Polarization instrumentation
- Fiber sensing
- Polarization dependent imaging
- Polarization coded optical security



The Lightwaves2020's high-speed polarization controller (PC) is based on novel optical material offering fast response in μs , in contrast with conventional polarization controllers with speed in ms . The dramatic increase in response speed enables the new polarization controller suitable for demanding 40Gbs PMDC application as well as polarization Mux / DeMux. In addition, the new high-speed polarization controller is ideal for fiber sensing in optical security, spectroscopy and polarization dependent imaging in biomedical applications.

An optional driver-PCB, on which the polarization controller is mounted, is provided. The device is driven by 0-5 VDC voltage to produce 0 - π phase retardation of polarization state.

The high-speed polarization controller (PC) has options of three or four cell design. The fourth cell is added for faster searching and controlling.

