

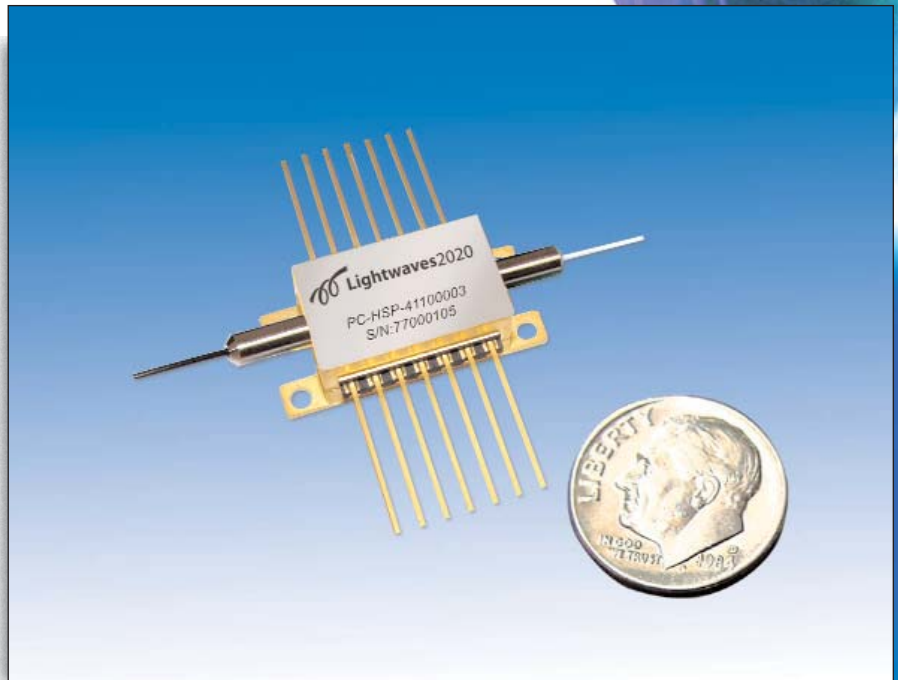
High Speed Polarization Controller

Features / Benefits

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

Applications

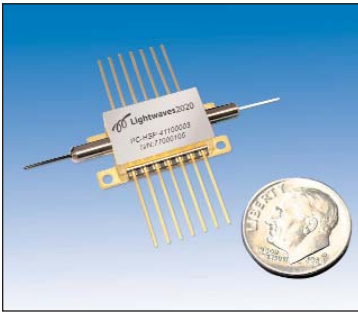
- PMD compensation
- Polarization generator
- Polarization scrambler
- Polarization Mux / DeMux
- Polarization instrumentation
- Fiber sensing
- Polarization dependent imaging
- Polarization coded optical security



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 $0 - \pi$ 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.



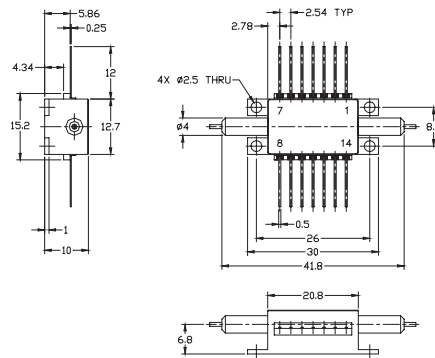
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Specifications

Parameters	Unit	Performance
Operational Wavelength Range	nm	1528 to 1610
Response Speed	μ s	< 10
Maximum Insertion Loss	dB	< 1.2
PMD	ps	< 0.05
Maximum Back-Reflection	dB	< -50
Driving Voltage (with driver)	VDC	0 - 5
Dimensions (L x W x H)	mm	46 x 38 x 13.3

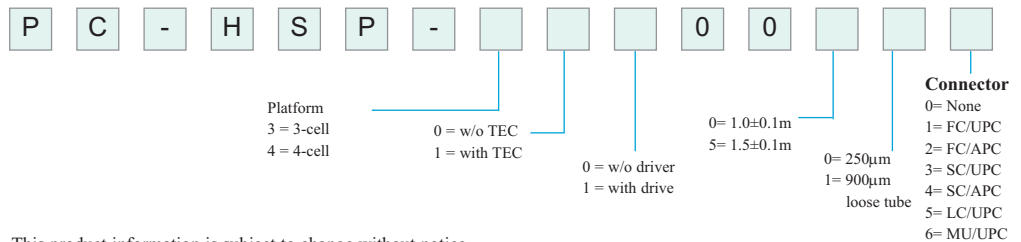
Note: 1. all specification referred without connectors.
2. measured at wavelength 1550nm.

Dimensions



Units: mm

Ordering Information



This product information is subject to change without notice.



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