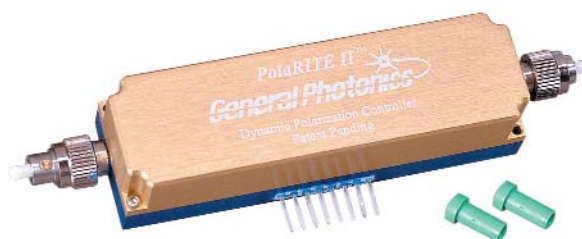


NoTail™ Dynamic Polarization Controller/Scrambler — PolaRITE™ II

General Photonics' all fiber dynamic polarization controller is specially designed for original equipment manufacturers (OEM) for integration into their fiber optic network modules and test equipment. The all fiber construction practically eliminates all insertion loss and back reflection. The device can be used as a fast electronic-driven polarization controller to convert any input polarization into any desired polarization or as a polarization scrambler to randomize the output polarization state. The low insertion loss, low back reflection, low cost, compact size, and fast response time are just few desirable features the device has. The NoTail PolaRITE™ has two FC/PC or FC/APC male connectors directly mounted on the package. This attractive feature allows direct connection with PM fibers to eliminate polarization fluctuations. Although the unit comes with FC type connectors, it can interface with ST and SC type connectors with industry standard FC/ST or FC/SC adapters.



Specifications:

Intrinsic Insertion Loss	0.05 dB
Return Loss	> 65 dB
Wavelength	1260 ~ 1650 nm standard, others specify
Rise and Fall Time	Rise time: 30 μ s max. Fall time: 30 μ s max.
3 dB Bandwidth	20 kHz min.
Scrambling Frequencies (@ 23 °C)	60, 100, 130 kHz (Consult data sheet for the accurate scrambling frequencies of each unit)
V π at DC (@ 23 °C)	35 volts max. @ 1550nm
Retardation/actuator	4 π min.
V π at Scrambling Frequencies (@ 23 °C and 1550nm)	7 volts max. at 60 kHz, 6 volts max. at 100 kHz, 3.6 volts max. at 130 kHz
Max. Activation Loss (3 axes together)	0.01 dB (P grade), 0.02 dB (A grade) with 0 ~ 150 VDC applied to all axes
Polarization Mode Dispersion	0.05 ps
Operating Temperature	-25 ~ 80 °C
Connector Type	FC/PC or FC/APC
Electrical Interface	8 pin (25 mil. square) with 100 mil. pitch connector
Dimensions	0.91" x 0.88" x 3.02" (3 axes) 0.91" x 0.75" x 3.12" (4 axes)
Maximum Applied Voltage	150 volts

(Values are referenced without connectors)

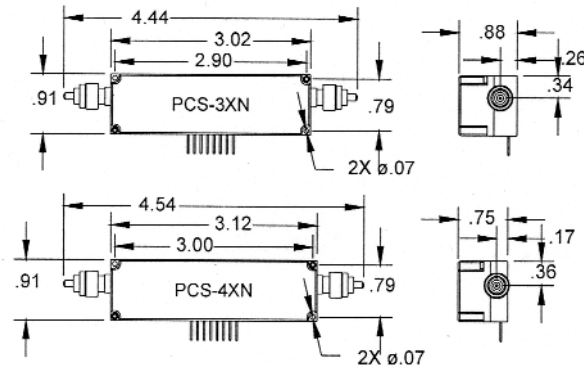
Features:

- No intrinsic insertion loss
- No intrinsic back reflection
- Works with any wavelengths
- Works with any single mode optic fibers
- Compact, ideal for integration in modules
- Fast response time

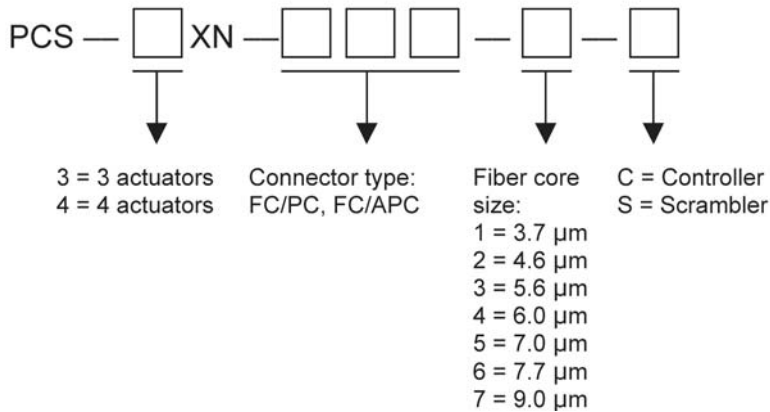
Applications:

- PMD (polarization mode dispersion) compensation
- PMD emulation
- PDL (polarization dependent loss) measurement
- PDL elimination in optical instruments, such as optical spectrum analyzers
- Automatic polarization stabilization for E/O modulator & interferometers
- Reduction of EDFA's polarization dependent gain
- Improvement of signal-to-noise ratio in long haul transmission systems
- Output stabilization in fiber laser systems

Dimensions: (Inch)



Ordering Information:



See page 12 and 14 for driver information