Micro Polarization Controller

This OEM micro polarization controller integrates General Photonics' all-fiber dynamic polarization control technology with miniature electronic drive/control circuitry into a compact, self-contained device that provides full polarization control functionality while minimizing volume, power consumption, and cost. The state of polarization (SOP) of the output signal can be controlled via three analog 0 to 5V control voltages. This device is ideal for integration into OCT or sensor systems to maximize signal output. It requires only ±12VDC power supplies, and its low power consumption enables use in battery-powered handheld devices.

Preliminary Specifications:

Operating Wavelength Range	1260 to 1650 nm standard, others specify
Number of Control Waveplates	× 3
Control Voltage	0 – 5V
Rise and Fall Time	< 5 ms/V (or 12.5 ms/V_π)
V_π	2.5 V (typical), 3 V (max) @1550 nm
Frequency of Input Sine Wave	10 Hz max.
Insertion Loss	Control grade: 0.1 dB, excluding connectors Measurement grade: 0.05 dB, excluding connectors
Return Loss	> 65 dB excluding connectors
Activation Loss	Control grade: 0.1 dB Measurement grade: 0.01 dB
PDL	Control grade: < 0.1 dB Measurement grade: < 0.01 dB
PMD	< 0.05 ps
Optical Power Handling	300 mW
Fiber Pigtail	9/125 μm single mode fiber standard, others specify
Electrical Interface	8-wire flat cable
Power Supply	±12 VDC/ 25 mA
Power Consumption[1]	< 0.6 W typical
Operating Temperature	-10 to 70 °C
Storage Temperature	-40 ~ 85 °C
Dimensions	2.58"(L) × 1.25"(W) × 0.63"(H)

Notes:
1. 5 V input on all 3 axes at 25 °C.

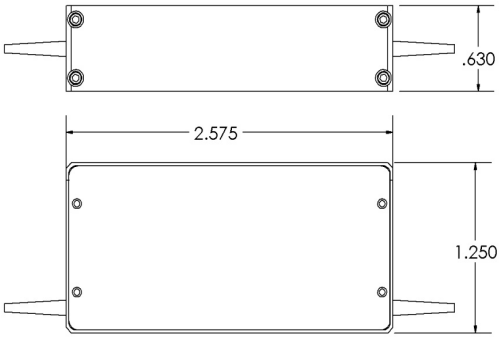
Features:

- Compact
- Low power consumption
- Low cost
- Plug and play

Applications

- Polarization control in OCT systems
- Polarization control in sensor systems
- Polarization control in measurement systems

Dimensions:



Ordering Information:

PSM – 003 – C – □□ – □ – □

Connector Type:	Wavelength:	Grade:
FC/PC, FC/APC	7=1260-1650nm	C = Control
SC/PC, SC/APC	6=980-1300nm	M = Measurement
NC=no connector		