This version of the PolaRITE™ manual polarization controller is conveniently pigtailed with or without connectors. It can be spliced to other components with minimal loss, and is ideal for controlling the polarization state of light in any single mode fiber optic system. It is available in a regular (PLC-002) or miniature (PLC-M02) size for maximum flexibility.

### Specifications:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Insertion Loss</td>
<td>&lt; 0.05 dB</td>
</tr>
<tr>
<td>Return Loss</td>
<td>&gt; 65 dB</td>
</tr>
<tr>
<td>Operating Wavelength¹</td>
<td>480 nm, 633 nm, 780 nm, 820 nm, 980 to 1310 nm, 1260 to 1650 nm</td>
</tr>
<tr>
<td>Extinction Ratio</td>
<td>&gt; 40 dB</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40 to 85 °C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40 to 85 °C</td>
</tr>
<tr>
<td>Dimensions</td>
<td>PLC - 002: 4.00” (L) x 1.00” (W) x 1.06” (H)</td>
</tr>
<tr>
<td></td>
<td>PLC - M02: 3.00” (L) x 1.00” (W) x 1.09” (H)</td>
</tr>
</tbody>
</table>

Note: Values are referenced without connectors

1. 1260 to 1650nm and 980 to 1310 nm are the standard wavelength ranges for this product. Please contact General Photonics for information on other wavelength options.

### Features:

- Low Loss
- Low back reflection
- Compact
- Easy to connect
- Low cost
- Insensitive to wavelength variations

### Applications:

- High speed telecommunication systems
- WDM systems
- CATV systems
- Fiber laser
- Fiber sensor systems
- PM fiber systems
- Antenna remoting systems

### Dimensions (in inches):

![PLC-002 Dimension Diagram](image1)

![PLC-M02 Dimension Diagram](image2)

### Ordering Information:

**PLC -**

Configuration:  
- 002 = regular size 900 µm jacket  
- M02 = miniature version 900 µm jacket

Operation Wavelength:
- 1 = 480 nm  
- 2 = 633 nm  
- 3 = 780 nm  
- 4 = 820 nm  
- 6 = 980 - 1310 nm*  
- 7 = 1260 - 1650 nm

Connector Type:
- FC/PC, SC/PC, SC/APC, or NC = no connectors

*This fiber can handle wavelengths up to 1650nm, but if it is coupled to SMF-28 fiber, the performance may not be quite as good as normal due to mode mismatch.

See page 57 for fully connectorized polarization controller, page 56 for drop-in polarization controller.