This is a fully connectorized polarization controller that comes with either male (PLC-005) or female (PLC-004) connectors, thus eliminating the headaches of fiber pigtails. Customers can use the bulkhead connectors of their choice. 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. The device is especially suitable for interconnecting polarization maintaining (PM) fibers using standard connectors without having to align the birefringent axes of the PM fibers. Optional scales allow easy replication of earlier settings, a feature highly desirable in laboratories for repeating polarization adjustments.

### Specifications:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss</td>
<td>&lt; 0.5 dB with connectors</td>
</tr>
<tr>
<td>Return Loss</td>
<td>&gt; 55 dB for APC connectors, &gt; 45 dB for PC connectors</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>4.00&quot; (L) x 1.00&quot; (W) x 1.09&quot; (H)</td>
</tr>
</tbody>
</table>

### 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

### Ordering Information:

PLC — 00

4 = Female connectors
5 = Male connectors

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

Connector Type: FC/PC, FC/APC

### Notes:

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

### Dimensions (in inches):

- **PLC-004**
- **PLC-005**

See page 56 for drop-in polarization controller, page 55 for pigtailed polarization controller.

*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.