Polatis introduces the powerful new touch screen line of Optical Switch Tray (OSD) products.

The OSD product enables stand-alone front panel operation of all switching functions, without the need for network connectivity or external devices. Operated through an intuitive page-driven graphical user interface, the front panel allows setting and viewing port connections, recalling stored switch connection patterns and setting the switch IP address.

The OSD product provides remote and local operation, and is ideal for both network and test environments. In production and system test environments, the OSD delivers automated, high quality test capabilities. In networks, the OSD permits central office operators the ability to locally access fiber connections for service provisioning and restoration, while maintaining control via the network operations center.

Like all Polatis products, the OSD offers the highest performance and reliability, with ultra-low insertion loss and minimal optical impairments. The full range of Polatis’ optical switch matrices are available in the OSD platform.

The touch screen line of products is also available with power monitoring and VOA options, as part of the VSD product.

DirectLight® Technology

The OSD products are based on the patented DirectLight beam-steering technology, setting the benchmark for reliable, high performance optical switching.

**KEY FEATURES**

- Touch screen control
- Easy to use GUI
- Remote or stand-alone control
- Ultra-low insertion loss
- High repeatability
- Low polarization dependent loss
- USB, RS232, Ethernet, GPIB interface options
- Easy visual inspection of switch state
- Dark fiber switching
- Handles high optical power

**APPLICATIONS**

- Production test automation
- Systems verification testing
- Interoperability testing
- Secure communications networks
- Centralized network monitoring
- PON/FTTx test and switching
- Service provisioning and restoration
- Pro-AV
- RF over fiber
- High power laser switching

**High performance optical switch solutions**
## PERFORMANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Fiber Count Designator</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss @ 1550nm</td>
<td>&lt;1.0dB</td>
<td>&lt;1.4dB</td>
</tr>
<tr>
<td>Polarization Dependent Loss</td>
<td>&lt;0.05dB</td>
<td>&lt;0.1dB</td>
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<tr>
<td>Crosstalk</td>
<td>&lt;70dB</td>
<td>&lt;60dB</td>
</tr>
<tr>
<td>Operating Wavelength Range</td>
<td>1260-1625nm</td>
<td></td>
</tr>
<tr>
<td>Wavelength Dependent Loss</td>
<td>&lt;0.3dB (C+L Band)</td>
<td></td>
</tr>
<tr>
<td>Repeatability</td>
<td>&lt;50dB</td>
<td></td>
</tr>
<tr>
<td>Return Loss</td>
<td>&gt;55dB</td>
<td></td>
</tr>
<tr>
<td>Switching Time</td>
<td>&gt;17ms</td>
<td></td>
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<tr>
<td>Maximum Optical Power</td>
<td>&gt;100mW</td>
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<tr>
<td>Switch Lifetime</td>
<td>100 cycles</td>
<td></td>
</tr>
<tr>
<td>Operating Temp (Normal)</td>
<td>+10°C to +40°C, &lt;85% RH non-condensing</td>
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</tr>
<tr>
<td>Operating Temp (Extended)</td>
<td>-5°C to +55°C, &lt;85% RH non-condensing</td>
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<tr>
<td>Storage Temp (Normal)</td>
<td>-30°C to +70°C, &lt;40% RH non-condensing</td>
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<tr>
<td>Storage Temp (Extended)</td>
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</tr>
<tr>
<td>Qualification (Normal)</td>
<td>Designed to meet EN60950</td>
<td></td>
</tr>
<tr>
<td>Qualification (Extended)</td>
<td>Designed to meet Telcordia GR63 EN60950</td>
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</table>

All parameters are measured excluding connectors at 1550nm and 20°C with an unpolarized source after thermal equalization unless stated.
1. Measured using a 3 patch-cord method as defined in TIA/EIA-526-14A.
2. With APC connectors return loss >70dB without connectors.
3. Switch will operate on dark fiber.
4. Maximum absolute humidity equivalent to 85% at 40°C.
5. Long term storage within +10°C to +35°C, <40% RH to preserve display performance.

### Fiber Count

<table>
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<tr>
<th>Fiber Count</th>
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<th>16</th>
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</table>

### Performance Specifications

- **Fiber Count Designator**
  - **G**: Standard
  - **H**: High Performance

- **Insertion Loss**:<br>  - @ 1550nm: <1.0dB
  - @ 1310nm: <1.4dB
- **Polarization Dependent Loss**:<br>  - <0.05dB (C+L Band)
- **Crosstalk**:<br>  - <70dB
- **Operating Wavelength Range**: 1260-1625nm
- **Wavelength Dependent Loss**:<br>  - <0.3dB
- **Repeatability**:<br>  - <50dB
- **Return Loss**:<br>  - >55dB
- **Switching Time**:<br>  - >17ms
- **Maximum Optical Power**:<br>  - >100mW
- **Switch Lifetime**:<br>  - 100 cycles
- **Operating Temp (Normal)**: +10°C to +40°C, <85% RH non-condensing
- **Operating Temp (Extended)**: -5°C to +55°C, <85% RH non-condensing
- **Storage Temp (Normal)**: -30°C to +70°C, <40% RH non-condensing
- **Storage Temp (Extended)**: -30°C to +70°C, <40% RH non-condensing
- **Qualification (Normal)**: Designed to meet EN60950
- **Qualification (Extended)**: Designed to meet Telcordia GR63 EN60950

### Ordering Information

The part numbering scheme for Polatis products is as follows:

- **OSD**
- **x**
- **-**
- **1**

### Packaging Information

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Tray Dimensions</th>
<th>Power Dissipation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-32</td>
<td>19&quot; rack mount, 3 rack units high</td>
<td>22 W</td>
</tr>
<tr>
<td>33-64</td>
<td></td>
<td>35 W</td>
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</tbody>
</table>

### Power Dissipation

- 4-32: 22 W
- 33-64: 35 W

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**FOR MORE INFORMATION**

- Visit our website: [www.jdsu.com](http://www.jdsu.com)
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- Phone us:
  - North American Sales: 1 866 228 3762
  - Latin American Sales: +55 11 5503 3800
  - Asia Pacific Sales: +852 2892 0990
  - EMEA Sales: +49 7121 86 2222

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