The SX1 Optical Switch is a customizable benchtop/rackmount instrument ideal for high-volume manufacturing production testing. Available in single-mode or multimode, the switch configurations range from 1x2 up to 1x360. Optional 2x1 or 4x1 built-in switches can provide additional common inputs. The switch may be controlled through remote interface (USB or Ethernet).

A variety of configuration options offers additional flexibility. The front panel bulkheads can be fitted with FC, SC or LC connector types. The 3U chassis can contain up to 96 bulkheads for FC or 120 for SC and LC. Larger channel counts move to a 6U chassis.

**KEY FEATURES**
- Low IL <0.7dB
- ±0.005dB repeatability
- Up to 360 outputs
- Chassis modular
- Customization available

**APPLICATIONS**
- High-volume production testing
- Multiple device testing
- Test automation
- Paired with RL1 for multi-fiber testing

**COMPLIANCE**
- UL/CSA 61010
- IEC 61010
- FCC Part 15 (Class A)
- EN 61326 (Class A)

**IN THE BOX**
- SX1 Switch
- AC power cord
- Test Report

### Ordering Scheme

#### SX1 -

**Configuration Options**

1. **A Configuration** - Single input, switched to any output
2. **2A Configuration** - Two switchable inputs, switched to any output
3. **2B Configuration** - Two inputs, switched to synchronized outputs
4. **2C Configuration** - Two inputs, switched to any output with second input trailing first input

#### SX1 -

**1A x N**

Position 0

1A Configuration - Single input, switched to any output

**2A x N**

Position A, 0

2A Configuration - Two switchable inputs, switched to any output

**2B x N**

Position 0

2B Configuration - Two inputs, switched to synchronized outputs

**2C x N**

Position 0

2C Configuration - Two inputs, switched to any output with second input trailing first input

**TOPICS**

- Fiber Type
- Optical Switch
- Connector Type
- Port Position
- Pigtails Length
- Pigtails Position

**Discipline**

- Fiber Types
- Optical Switches
- Connector Types
- Port Positions
- Pigtails Lengths
- Pigtails Positions

**Ports**

- A
- B
- C

**Configuration**

- A
- B
- C

**Output Configurations**

- Single
- Dual
- Synchronized

**Port Positions**

- Front
- Rear

**Compliance**

- UL/CSA 61010
- IEC 61010
- FCC Part 15 (Class A)
- EN 61326 (Class A)

**In The Box**

- SX1 Switch
- AC power cord
- Test Report

**Options**

- Front option only
**Optical/Electrical Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single-mode</strong></td>
<td><strong>Multimode</strong></td>
</tr>
<tr>
<td>Wavelength Range (nm)</td>
<td>1250 - 1670</td>
</tr>
<tr>
<td></td>
<td>840 - 1350</td>
</tr>
<tr>
<td>Insertion Loss (dB)</td>
<td>&lt;0.7</td>
</tr>
<tr>
<td>Backreflection (dB)</td>
<td>≤ -60</td>
</tr>
<tr>
<td></td>
<td>≤ -40</td>
</tr>
<tr>
<td>PDL (dB)</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Repeatability (dB)</td>
<td>± 0.005</td>
</tr>
<tr>
<td>Crosstalk (maximum) (dB)</td>
<td>-80</td>
</tr>
<tr>
<td>Maximum Input Power (mW)</td>
<td>300</td>
</tr>
<tr>
<td>Switch Life</td>
<td>1.0º cycles</td>
</tr>
<tr>
<td>Switching Time (ms)</td>
<td>300</td>
</tr>
<tr>
<td>Control</td>
<td>USB or Ethernet</td>
</tr>
<tr>
<td>Input Voltage</td>
<td>100 - 240 V AC, 50 - 60 Hz</td>
</tr>
<tr>
<td>Power Consumption (VA)</td>
<td>60 maximum</td>
</tr>
<tr>
<td>Display</td>
<td>Optional 5” touch screen</td>
</tr>
</tbody>
</table>

**Notes:**
1. Excluding connectors
2. Sequential switching. Add ±0.02 for random

**Mechanical/Environmental Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2U half rack</strong></td>
<td><strong>3U full rack</strong></td>
</tr>
<tr>
<td>Max Output Channels</td>
<td>up to 1x36</td>
</tr>
<tr>
<td>Without Touchscreen</td>
<td>up to 1x96</td>
</tr>
<tr>
<td>With 5” Touchscreen</td>
<td>up to 1x48</td>
</tr>
<tr>
<td>Unit Dimensions W x H x D (cm)</td>
<td>23.5 x 12 x 32.5</td>
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<tr>
<td></td>
<td>44.5 x 13.5 x 45</td>
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<tr>
<td>Shipping Box Dimensions W x H x D (cm)</td>
<td>36.5 x 39 x 53</td>
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<tr>
<td></td>
<td>53 x 32 x 57</td>
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<tr>
<td>Unit Weight (kg)</td>
<td>8</td>
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<tr>
<td></td>
<td>14</td>
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<tr>
<td>Total Shipment Weight (kg)</td>
<td>9</td>
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<tr>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Operating Temperature (°C)</td>
<td>0 to 55</td>
</tr>
<tr>
<td>Storage Temperature (°C)</td>
<td>-40 to 70</td>
</tr>
<tr>
<td>Humidity (Non-condensing)</td>
<td>Maximum 95% RH from 0 to 40°C</td>
</tr>
</tbody>
</table>