SX1 Optical Switch

Product Description
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

1 - Configuration Options

1A x N
A Configuration - Single input, switched to any output

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

2B x N
2B Configuration - Two inputs switched to synchronized outputs

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

Ordering Scheme

SX1 -

- CONFIGURATION  
  1A 2 inputs, A-config  
  2A 2 inputs, B-config  
  2B 2 inputs, C-config  
  2C 2 inputs, E-config

- OUTPUTS  
  00 4 2 16 32 70 360

- FIBER TYPE  
  02 50/125um 5250/125um 100/125um 200/225um 300/325um

- PIGTAIL LENGTH  
  03 bulkheads 40 70 100 130 150 200 300 360

- PIGTAIL POSITION  
  04 bulkheads 2B 3C 3B 1B 1C 3A 1A 3B 1A

- CONNECTOR TYPE  
  EP FC/UPC  
  FA SC/APC  
  SP SC/UPC  
  SA LC/APC  
  LB LC/UPC

* front option only
### Optical/Electrical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wavelength Range (nm)</strong></td>
<td><strong>Single-mode</strong></td>
</tr>
<tr>
<td></td>
<td>1250 to 1670</td>
</tr>
<tr>
<td><strong>Insertion Loss (dB)</strong></td>
<td>&lt;0.7</td>
</tr>
<tr>
<td><strong>Backreflection (dB)</strong></td>
<td>&lt; -60</td>
</tr>
<tr>
<td><strong>PDL (dB)</strong></td>
<td>&lt;0.05</td>
</tr>
<tr>
<td><strong>Repeatability (dB)</strong></td>
<td>± 0.005</td>
</tr>
<tr>
<td><strong>Crosstalk (dB)</strong></td>
<td>&lt; -80</td>
</tr>
<tr>
<td><strong>Maximum Input Power (mW)</strong></td>
<td>300</td>
</tr>
<tr>
<td><strong>Switching Time (ms)</strong></td>
<td>300</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>USB or Ethernet</td>
</tr>
<tr>
<td><strong>Input Voltage</strong></td>
<td>100 to 240 V AC, 50 to 60 Hz</td>
</tr>
<tr>
<td><strong>Power Consumption (VA)</strong></td>
<td>60 maximum</td>
</tr>
<tr>
<td><strong>Switch Life (cycles)</strong></td>
<td>10^6</td>
</tr>
</tbody>
</table>

**Notes:**
- 1 Excluding connectors.
- 2 Sequential switching, add ±0.02 dB for random

### Mechanical/Environmental Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit Dimensions W x H x D (cm)</strong></td>
<td><strong>1x2, 1x4, 1x12, 1x24, 1x32, 1x48</strong></td>
</tr>
<tr>
<td></td>
<td>23.5 x 12 x 32.5 (2U half rack)</td>
</tr>
<tr>
<td><strong>Shipping Box Dimensions W x H x D (cm)</strong></td>
<td>36.5 x 39 x 53</td>
</tr>
<tr>
<td><strong>Unit Weight (kg)</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Shipment Weight (kg)</strong></td>
<td>9</td>
</tr>
<tr>
<td><strong>Operating Temperature (°C)</strong></td>
<td>0 to 55</td>
</tr>
<tr>
<td><strong>Storage Temperature (°C)</strong></td>
<td>-40 to 70</td>
</tr>
<tr>
<td><strong>Humidity (Non-condensing)</strong></td>
<td>Maximum 95% RH from 0 to 40°C</td>
</tr>
</tbody>
</table>