SX8 Rackmount Optical Switch

Product Description
The SX8 Rackmount Optical Switch is a customizable benchtop/rackmount instruments ideal for high-volume manufacturing production testing. Available in single-mode or multimode, the switch configurations range from 1×2 up to 1×360. Optional 2×1 or 4×1 built-in switches can provide additional common inputs. The switch may be controlled through remote interface (GPIB, RS232, or USB*) or locally via the user-friendly front panel keypad and display.

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.

*USB interface via-USB-DB9 adapter

KEY FEATURES
• Low IL < 0.7 dB
• Up to 360 outputs
• Many configuration possibilities

APPLICATIONS
• High-volume production testing
• Multiple device testing
• R&D applications
• System compliance testing

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

IN THE BOX
• SX8 Switch
• AC power cord
• Test report

Configuration Options

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

Ordering Scheme


** Configuration Options **
1A
- 1 input, A-config.
2A
- 2 inputs, A-config.
2B
- 2 inputs, B-config.
2C
- 2 inputs, C-config.

** Outputs **
- D2, D3, D4...

** Fiber Type **
- 9/125 µm
- 62.5/125 µm
- 50/125 µm
- 62.5/100 µm
- 100/125 µm

** Pigtails **
- Front option only

** Connector Type **
- FC/UPC
- FC/APC
- SC/UPC
- SC/APC
- LC/UPC
- LC/APC

** Fiber Length **
- 1.0 m
- 2.0 m
- 3.0 m
- 5.0 m
- 10.0 m
## Optical/Electrical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
<th>Single-mode</th>
<th>Multimode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength Range (nm)</td>
<td></td>
<td>1250 to 1670</td>
<td>840 to 1350</td>
</tr>
<tr>
<td>Insertion Loss (dB)</td>
<td></td>
<td>&lt; 0.7</td>
<td>N/A</td>
</tr>
<tr>
<td>Backreflection (dB)</td>
<td></td>
<td>&lt; -60</td>
<td>&lt; -40</td>
</tr>
<tr>
<td>PDL (dB)</td>
<td></td>
<td>0.05</td>
<td>N/A</td>
</tr>
<tr>
<td>Repeatability (dB)</td>
<td></td>
<td>± 0.005</td>
<td>N/A</td>
</tr>
<tr>
<td>Crosstalk (dB)</td>
<td></td>
<td>&lt; -80</td>
<td>N/A</td>
</tr>
<tr>
<td>Maximum Input Power (dBm)</td>
<td></td>
<td>23</td>
<td>300</td>
</tr>
<tr>
<td>Switching Time (ms)</td>
<td></td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td>Front Panel / GPIB / RS232 / USB²</td>
<td>Front Panel / GPIB / RS232 / USB²</td>
</tr>
<tr>
<td>Input Voltage</td>
<td></td>
<td>100 to 240 V AC, 50 to 60 Hz</td>
<td>100 to 240 V AC, 50 to 60 Hz</td>
</tr>
<tr>
<td>Power Consumption (VA)</td>
<td></td>
<td>150 maximum</td>
<td>150 maximum</td>
</tr>
<tr>
<td>Switch Life (cycles)</td>
<td></td>
<td>10³</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Notes:

1. Excluding connectors.
2. Sequential switching; add ±0.02 dB for random.
3. USB interface via USB-DB9 adapter.

## Mechanical/Environmental Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>3U Unit Dimensions W x H x D (cm)</td>
<td>48 x 13.5 x 37.5</td>
</tr>
<tr>
<td>6U Unit Dimensions W x H x D (cm)</td>
<td>48 x 27 x 37.5</td>
</tr>
<tr>
<td>3U Shipping Box Dimensions W x H x D (cm)</td>
<td>53 x 32 x 57</td>
</tr>
<tr>
<td>6U Shipping Box Dimensions W x H x D (cm)</td>
<td>53 x 55 x 55</td>
</tr>
<tr>
<td>Unit Weight (kg)</td>
<td>14 (depending on configuration)</td>
</tr>
<tr>
<td>Total Shipment Weight (kg)</td>
<td>15 (depending on configuration)</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>