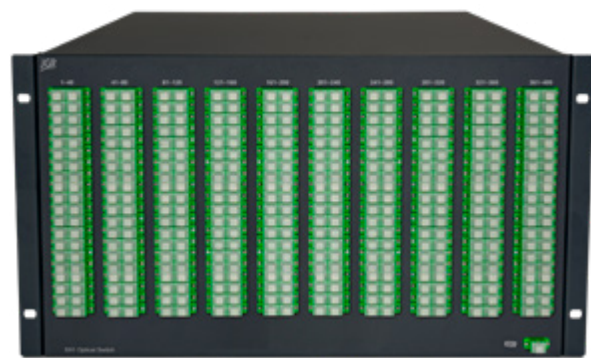




Product Description

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 1x400. 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 185 bulkheads. Larger channel counts move to a 6U chassis.



KEY FEATURES

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

APPLICATIONS

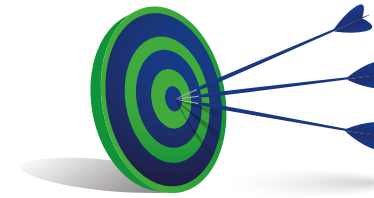
- High-volume production testing
- Multiple device testing
- Test automation
- Paired with RL1 for multi-fiber testing

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



Optimized for Performance

The SX1 is optimized for repeatability, BR & IL. With a repeatability of ± 0.005 dB, BR of <-60dB & IL <0.7dB, the SX1 is nearly invisible within your application.

Benchtop or Rackmount

The SX1 is available in 3 form factors:

- 2U half rack benchtop up to 48ch, (rack ears available)
- 3U full rack up to 185ch
- 6U full rack up to 400ch

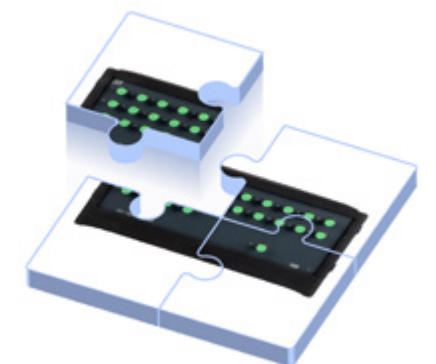


Connect directly to RL1 Return Loss Meter

The RL1 can be connected directly to an additional SX1 switch for multi-fiber testing. The RL1 takes full control of the switch, automating measurements while storing all references and results. If desired, a second SX1 switch can be connected to measure insertion loss, return loss, and verify mapping of multi-fiber connectors or complex assemblies.

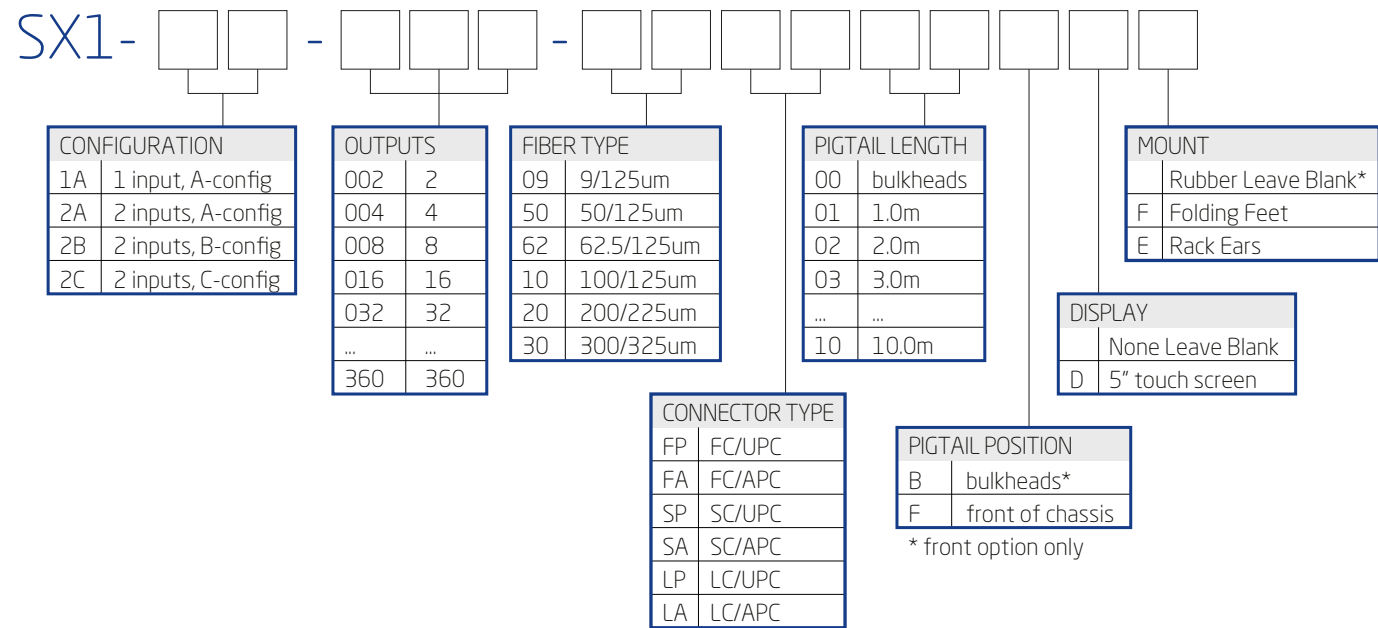
Customizable

The SX1 switch can be customized to suit your needs at no additional cost. If you need multiple switches of different configurations within one chassis or a custom spliced schematic including couplers or various output connector types, talk to us and we'll make it happen!



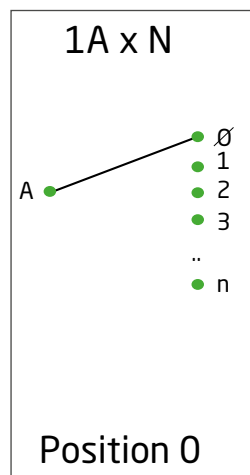
Ordering Scheme

1 - Configure SX1

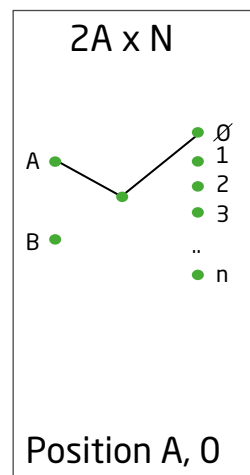


* Rubber bezel only available in 2U half rack

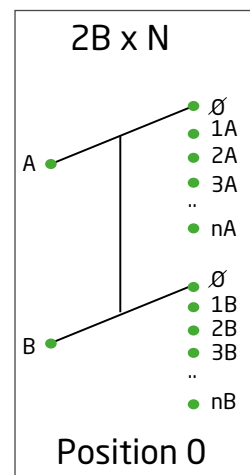
Configuration Options



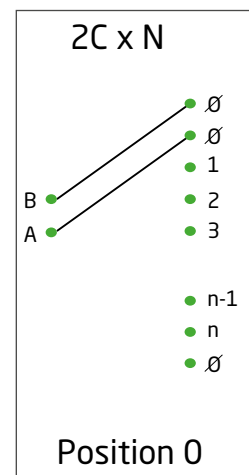
1A Configuration - Single input, switched to any output



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



2B Configuration - Two inputs switched to synchronized outputs



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

2 - Add accessories

2U Rack Short ear
2U-RACK-SHORT-EAR



2U rubber bezels
2U-BEZEL



2U Rack Long ear filler plate
2U-RACK-LONG-EAR



Flip-out Feet
CHASSIS-FEET



2U chassis connector plate
2U-CONNECTOR-PLATE



Optical/Electrical Specifications

Parameter	Specification	
	Single-mode	Multimode
Wavelength Range (nm)	1250 - 1670	840 - 1350
Insertion Loss (dB) ¹	<0.7	
Backreflection (dB) ¹	≤ -60	≤ -40
PDL (dB)	0.05	N/A
Repeatability (dB) ²	± 0.005	
Crosstalk (maximum) (dB)	-80	
Maximum Input Power (dBm)	23	
Switch Life	10 ⁸ cycles	
Switching Time (ms)	300	
Control	USB or Ethernet	
Input Voltage	100 - 240 V AC, 50 - 60 Hz	
Power Consumption (VA)	60 maximum	
Display	Optional 5" touch screen	

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

Mechanical/Environmental Specifications

Parameter	Specification					
	2U half rack		3U full rack		6U full rack	
	FC	SC	FC	SC	FC	SC
Max Output Count						
Without Touchscreen	1x48		1x185	1x135	1x400	
With 5" Touchscreen	1x12	1x24	1x125	1x95	1x360	
Unit Dimensions W x H x D (cm)	23.5 x 12 x 32.5		44.5 x 13.5 x 45		44.5 x 26.6 x 49.6	
Shipping Box Dimensions W x H x D (cm)	36.5 x 39 x 53		53 x 32 x 57		53 x 45 x 57	
Unit Weight (kg)	8		14		18	
Total Shipment Weight (kg)	9		15		20	
Operating Temperature (°C)	0 to 55					
Storage Temperature (°C)	-40 to 70					
Humidity (Non-condensing)	Maximum 95% RH from 0 to 40°C					

