

1xN Optical Switch

SCN Series

**Key Features**

- Low insertion loss
- Built-in position monitor
- Latching and non-latching configurations
- High durability

Applications

- Configurable optical add/drop multiplexing
- Optical network protection and restoration
- Network monitoring
- Transmitter and receiver equipment protection

Compliance

- Telcordia GR-1073

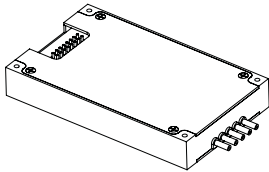
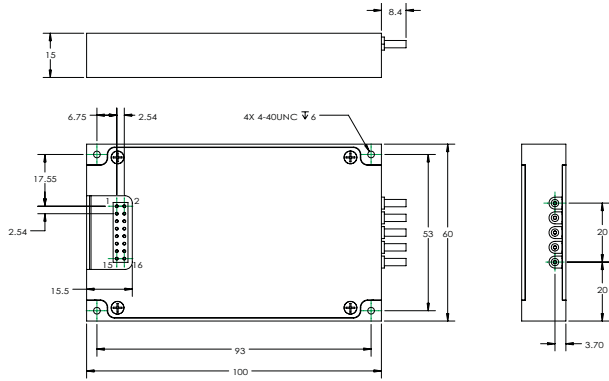
JDSU SCN series 1xN Optical Switch is the ideal switching solution to increase network flexibility. The switch can be mounted directly on printed circuit boards (PCBs). Its advanced mirror and prism design minimizes insertion loss and provides maximum reliability under demanding central office conditions. The switch is also equipped with status contacts, providing an electrical readout of the switch position to facilitate monitoring, and a latching configuration to ensure the switch remains in position following a power loss.

On request, JDSU provides customized modular assemblies that incorporate taps, WDMs, splitters, and other components.

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Dimensions Diagram

(Specifications in mm unless otherwise noted.)

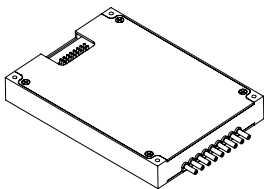
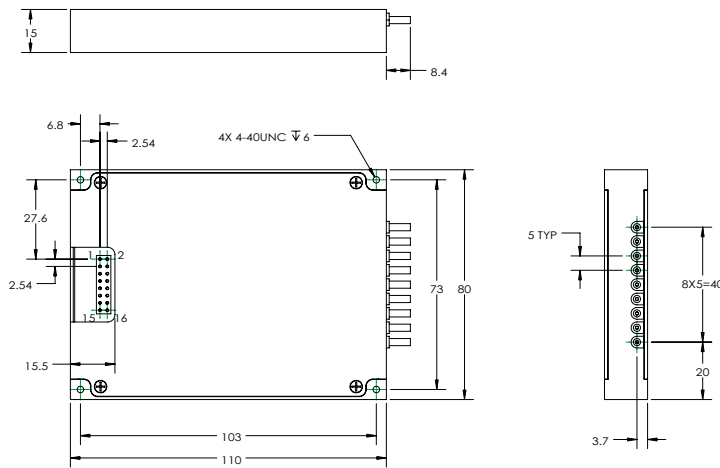


1x4 Switch

Pinout

Pin	Description	Function
1	+5 V DC	Power supply
2	AGND	Analog ground
3	NC	No connection
4	NC	No connection
5	A0	Control input
6	A1	Control input
7	A2	Control input
8	NC	No connection
9	NC	No connection
10	NC	No connection
11	B0	Status output
12	B1	Status output
13	B2	Status output
14	NC	No connection
15	NC	No connection
16	NC	No connection

Note: Pins 7 and 13 are not used for 1x4 switch



1x8 Switch

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Configurations

Selected Port	1	2	3	4	5	6	7	8
Control Signals								
A2	0	0	0	0	1	1	1	1
A1	0	0	1	1	0	0	1	1
A0	0	1	0	1	0	1	0	1
Status Signals								
B2	0	0	0	0	1	1	1	1
B1	0	0	1	1	0	0	1	1
B0	0	1	0	1	0	1	0	1

Specifications

Parameter		1x4 Switch	1x5, 1x6, 1x7, 1x8 Switch
Wavelength range		1290 to 1330 nm and/or 1525 to 1610 nm	
Insertion loss ^{1,2}	Maximum	0.9 dB	1.3 dB
Switching time	Maximum	6 ms	8 ms
Crosstalk ¹	Minimum	55 dB	55 dB
Return loss ¹	Minimum	50 dB	50 dB
Polarization dependent loss (PDL) ¹	Maximum	0.1 dB	0.2 dB
Repeatability	Maximum	0.05 dB	0.05 dB
Supply voltage		4.5 to 5.5 V DC	4.5 to 5.5 V DC
Drive frequency	Maximum	10 Hz	10 Hz
Operating temperature		0 to 70 °C	0 to 70 °C
Storage temperature		-40 to 85 °C	-40 to 85 °C
Fiber type		900 μm tight buffer	900 μm tight buffer
Dimensions		100 x 60 x 15 mm	110 x 80 x 15 mm

1. Excluding connectors.

2. Defined at room temperature and 1310/1550 nm. Add additional 0.5 dB over whole temperature and wavelength range.

Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Sample: SCN-0013L10
