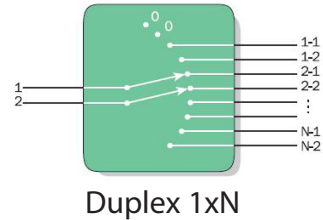
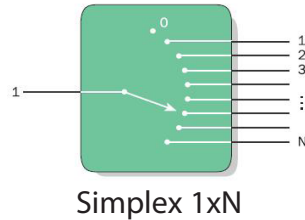


# VX 1xN OPTICAL SWITCH

DiCon's VX Optical Switch utilizes a high resolution stepper motor to automate fiber connections. The VX optical switch can be built with single mode, multi-mode or polarization maintaining fiber. The switch is available in simplex 1xN sizes up to 1x50 or in a duplex configuration up to 1x25.



## FEATURES

- Low Crosstalk
- Available in Large Core Fiber Types
- Available up to 1x120 in a Rackmount

## APPLICATIONS

- Test and Measurement
- Secure Communications
- Fiber Sensing



# VX 1XN OPTICAL SWITCH

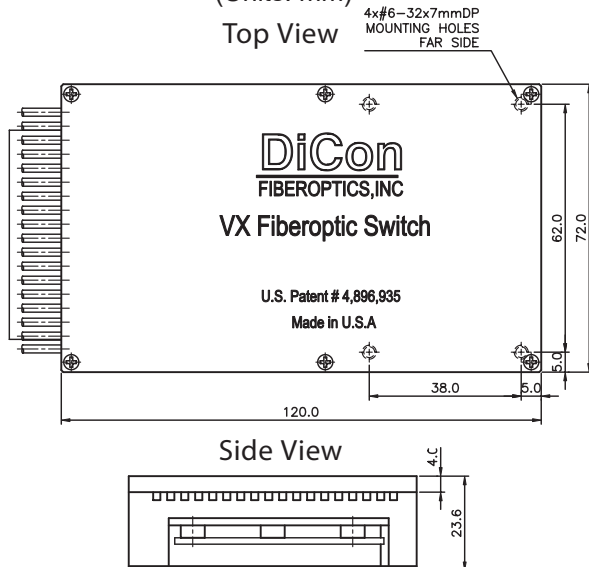
## OPTICAL SPECIFICATIONS<sup>1</sup>

PARAMETER		RATING
Insertion Loss <sup>2,3</sup>		1.0 dB max
Crosstalk		-80 dB max.
Back Reflection	Singlemode	-55 dB max.
Reflection	Multimode 50µm	-25 dB max.
	Multimode 62.5µm	-20 dB max.
PDL <sup>4,5</sup>		0.10 dB max.
Extinction Ratio <sup>6</sup>		18 dB min.
Switching Time		300 ms + 16 ms per channel max.
Repeatability <sup>7</sup>		±0.02 dB max.
Durability		10 million cycles min.
Optical Power <sup>8</sup>		300 mW max.
Operating Temp		0 to 50°C
Storage Temp		-20 to 70°C

- Specifications are without connectors.
- IL is measured at CWL, 23°C. (Wavelength #6, measured at 632nm.)
- IL is for single-band. Dual-band adds 0.2 dB.
- Singlemode only.
- PDL is for single-band. Dual-band adds 0.05 dB.
- Corning Panda PM 1550 fiber only
- Repeatability is defined after 100 cycles.
- High power version (1.5W) available as special order

## MECHANICAL DIMENSIONS CHASSIS #1

(Units: mm)



## HOUSING SPECIFICATIONS

Chassis	Channel Count		Width W	Height H	Depth D
	Simplex	Duplex			
#1	1 to 17	1 to 8	72.0 mm	23.6 mm	120.0 mm
#2	18 to 32	9 to 16	140.0 mm	23.6 mm	140.0 mm
#3	33 to 50	17 to 25	190.0 mm	23.6 mm	175.0 mm

## ORDERING INFORMATION

VX - □ - □ - □ - □ - □ - □ - □

### Product Code

VX VX Switch

### Control Interface

5 TTL  
 5C I<sup>2</sup>C  
 5R RS-232  
 5/HJ TTL with half jumper  
 5C/HJ I<sup>2</sup>C with half jumper  
 5R/HJ RS-232 with half jumper

### Switch Configuration

1xN Simplex 1xN  
 1xN/DS Synchronous Duplex 1xN

### Fiber Type

9 9 µm core Corning SMF-28  
 50 50 µm core  
 62 62.5 µm core  
 100 100 µm core  
 PM Panda 1550 with 400 µm jacket

### Wavelength Range

6 500 - 800 nm<sup>1</sup>  
 8 850 nm<sup>1</sup>  
 13 1290 - 1330 nm<sup>2</sup>  
 15 1530 - 1570 nm<sup>3</sup>  
 16 1570 - 1610 nm<sup>2</sup>  
 8/13 850 nm & 1310 nm<sup>1</sup>  
 13/15 1290 - 1330 & 1530 - 1570 nm<sup>2</sup>  
 15/16 1530 - 1570 & 1570 - 1610 nm<sup>2</sup>

### Connector

FC/SPC FC/SPC  
 FC/APC FC/APC  
 N NONE  
 Also Available: SC, SC/UPC, SC/APC, ST, ST/UPC, LC

### Fiber Jacket

2 2.0 mm, loose tube  
 9 0.9 mm, tight buffer<sup>4</sup>  
 9LT 900 µm, loose tube

### Pigtail Length

1 1 Meter  
 X Specify X Meters

Tolerance is +/- 0.05 m

- Multi-mode fiber only
- 9/125µm SMF-28 fiber only
- 9/125µm SMF-28 and Panda 1550 fiber only
- 9/125µm SMF-28 and 62.5µm core fiber only

## ELECTRICAL SPECIFICATIONS

PARAMETER		RATING
Latching Type		non-latching
Control Type		TTL, I <sup>2</sup> C or RS-232
Vcc Voltage		12 VDC
Power Consumption		3.6W max.
Connector Type	TTL	Molex 22-12-2124
	I <sup>2</sup> C, RS-232	Molex 87833-1620