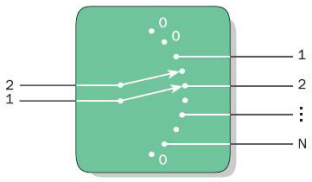
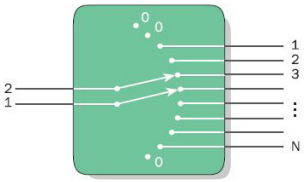
VX 2XN OPTICAL SWITCH

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 blocking 2xN sizes up to 2x16 or in a non-blocking 2xN configuration up to 2x32.



Blocking 2xN



Non-Blocking 2xN

FEATURES

- Low Crosstalk
- Available in Large Core Fiber Types
- Available with RS-232, I^2C or TTL control options

APPLICATIONS

- Test and Measurement
- Secure Communications
- Fiber Sensing

DiCon
FIBEROPTICS, INC

VX 2XN OPTICAL SWITCH

OPTICAL SPECIFICATIONS[1]

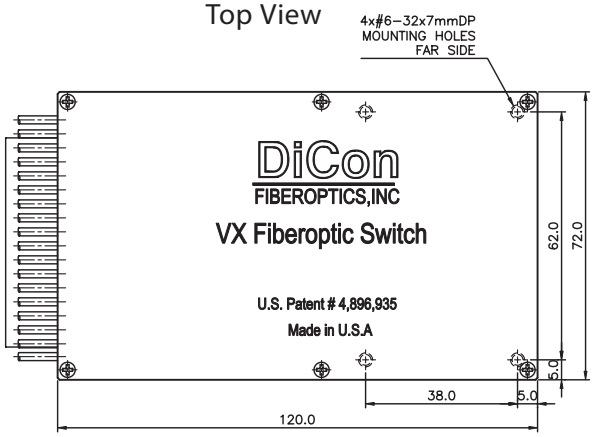
PARAMETER		RATING
Insertion Loss[2,3]		1.0 dB max
Crosstalk		-80 dB max.
Back Reflection	Singlemode	-55 dB max.
	Multimode 50µm	-25 dB max.
	Multimode 62.5µm	-20 dB max.
PDL[4,5]		0.10 dB max.
Extinction Ratio[6]		18 dB min.
Switching Time		300 ms + 16 ms per channel max.
Repeatability[7]		±0.02 dB max.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

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

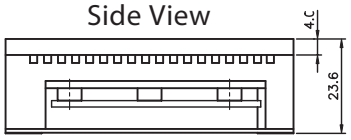
MECHANICAL DIMENSIONS CHASSIS #1

(Units: mm)

Top View



Side View



ORDERING INFORMATION

VX - □ - □ - □ - □ - □ - □ - □

Product Code

VX	VX Switch

Control Interface

5	TTL
5C	I²C
5R	RS-232
5/HJ	TTL with half jumper
5C/HJ	I²C with half jumper
5R/HJ	RS-232 with half jumper

Switch Configuration

2xN/LB	Blocking 2xN
2xN/LN	Non-Blocking 2xN

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[1]
8	850 nm[1]
13	1290 - 1330 nm[2]
15	1530 - 1570 nm[3]
16	1570 - 1610 nm[2]
8/13	850 nm & 1310 nm[1]
13/15	1290 - 1330 & 1530 - 1570 nm[2]
15/16	1530 - 1570 & 1570 - 1610 nm[2]

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[4]
9LT	900 µm, loose tube

Pigtail Length

1	1 Meter
X	Specify X Meters

Tolerance is +/- 0.05 m

1. Multi-mode fiber only
2. 9/125µm SMF-28 fiber only
3. 9/125µm SMF-28 and Panda 1550 fiber only
4. 9/125µm SMF-28 and 62.5µm core fiber only

HOUSING SPECIFICATIONS

Chassis	Channel Count		Width W	Height H	Depth D
	Non-Blocking	Blocking			
#1	2 to 14	4 to 8	72.0 mm	23.6 mm	120.0 mm
#2	16 to 32	10 to 16	140.0 mm	23.6 mm	140.0 mm

ELECTRICAL SPECIFICATIONS

PARAMETER		RATING
Latching Type		non-latching
Control Type		TTL, I²C or RS-232
Vcc Voltage		12 VDC
Power Consumption		3.6W max.
Connector Type	TTL	Molex 22-12-2124
	I²C, RS-232	Molex 87833-1620

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