

SWITCHES

VX500 2xN SWITCH

DiCon's VX500 2xN Switch offers accurate connection of two input fiber channels to a maximum of 30 output fiber channels. The 2xN switch is available in blocking and non-blocking configurations. The VX500 2xN Switch is available in compact housings for up to 14 or 30 output channels. The housings are designed for mounting on printed circuit boards or within enclosures. DiCon's VX500 2xN Switch can be built with Corning SMF-28, Flexcor 1060 or Polarization Maintaining Panda fiber.

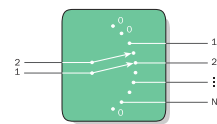


FEATURES

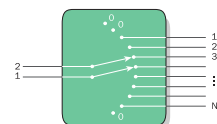
- Very low insertion loss
- Low back-reflection
- Compact housings with up to 30 output channels
- Parallel TTL interface
- Flexible fiber types and wavelength ranges

APPLICATIONS

Applications for 2xN switches include component testing and measurement, remote fiber test systems, and fiber network monitoring.



Blocking 2xN



Non-Blocking 2xN

Blocking 2xN switches have two inputs aligned with only one output. The components switch in half-channel increments. Non-blocking 2xN switches have two inputs aligned with two outputs. They switch in two-channel increments.



SWITCHES

SPECIFICATIONS¹

Insertion loss ²	0.6 dB typ., 1.0 dB max.	
Back-reflection	singlemode	-60 dB typ., -55 dB max.
	multimode	-20 dB typ.
Repeatability ³	±0.02 dB max.	
PDL ⁴	0.05 dB max.	
Cross-talk	-80 dB max.	
Extinction ratio ⁵	18 dB min.	
Switching time	300ms+16ms per channel max.	
Durability	10 million cycles min.	
Power requirements	±12 VDC ±5% power in, 300 mA max.	
Optical power ⁶	300 mW max.	
Operating temperature	0°C to +50°C max.	
Storage temperature	-20°C to +70°C	
Humidity	40°C/90%RH/5 days	

1. All specifications referenced without connectors.
2. 1.2 dB max. for multiple wavelength ranges.
3. Sequential repeatability for 100 cycles at constant temperature after warm-up.
4. Singlemode only. Measured at 1550 nm.
5. Corning Panda PM 1300 fiber type only.
6. High power version (2W) available as special order.

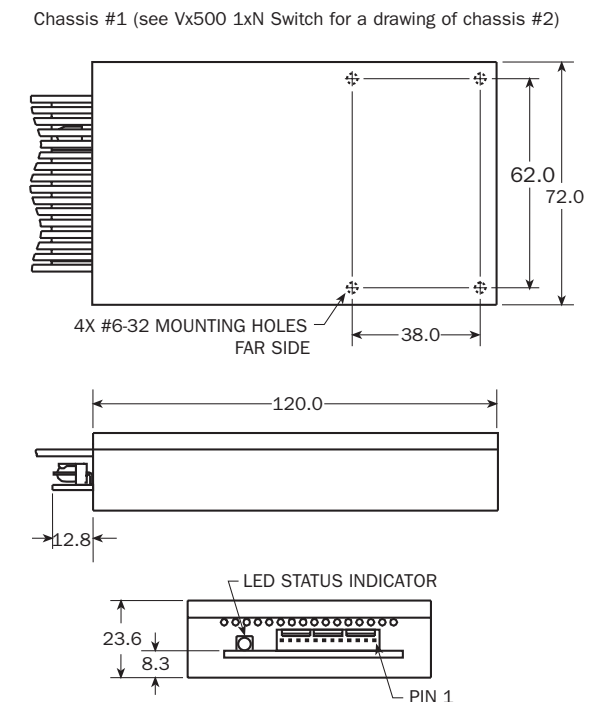
PIN ASSIGNMENTS

Pin Number	Signal Type	Description
1	Power	Signal Ground
2	Power	Power Ground
3	Input	Data bit 0
4	Input	Data bit 1
5	Input	Data bit 2
6	Input	Data bit 3
7	Input	Data bit 4
8	Input	Strobe
9	Output	Busy/ready status
10	Output	Error Status
11	Input	Reset
12	Power	+12 VDC power in

HOUSING SPECIFICATIONS

Chassis	Channel count		Width W	Height H	Depth D
	Non Blocking & Duplex	Blocking			
#1	2 to 14	4 to 8	72.0 mm	23.6 mm	120.0 mm
#2	16 to 32	10 to 24	140.0 mm	23.6 mm	140.0 mm

HOUSING DIMENSIONS



Units: mm
Electrical connector is 12-pin right-angle header (Molex part number 22-12-2124). Mate with Molex part number 22-01-3127 or equivalent.

SWITCHES

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Switch Configuration¹

1xN	Simplex 1xN
1xN/DS	Synchronous Duplex 1xN
2xN/LB	Blocking 2xN
2xN/LN	Non-blocking 2xN

Fiber Type

9	9/125 ²
50	50/125
62	62.5/125
10	Flexcor 1060 ³
PM	Panda 1300 ⁴

Wavelength Range⁵

10	960 - 1000 nm ⁶
8/13	780 - 1350 nm ⁷
13/15	1290 - 1360 nm and 1530 - 1560 nm ⁸
13/16	1290 - 1360 nm and 1530 - 1610 nm ⁸
15	1530 - 1560 nm ⁹
16	1530 - 1610 nm ⁸

Connector Type

FC	FC/SPC
FC/APC	FC/APC
FC/UPC	FC/UPC
SC	SC/SPC
SC/APC	SC/APC
SC/UPC	SC/UPC
ST	ST/SPC
ST/UPC	ST/UPC
LC	LC/UPC
N	None

Fiber Jacket¹⁰

2	2.0 mm, loose tube
9	0.9 mm, tight buffer

Pigtail Length

1	1 meter
X	Specify X meters

1. Specify N.
2. Corning fiber SMF-28.
3. Corning Flexcor 1060 fiber with 250 μm jacket.
4. Corning Panda PM 1300 fiber with 400 μm jacket.
5. All wavelengths referenced to vacuum.
6. Flexcor only.
7. Multimode fiber only.
8. 9/125 fiber only.
9. 9/125 fiber and Panda 1300 fiber only.
10. Tight buffer fiber jacket not available for Flexcor or Panda fiber.

