

# MEMS 1X2 OPTICAL SWITCHING SYSTEM

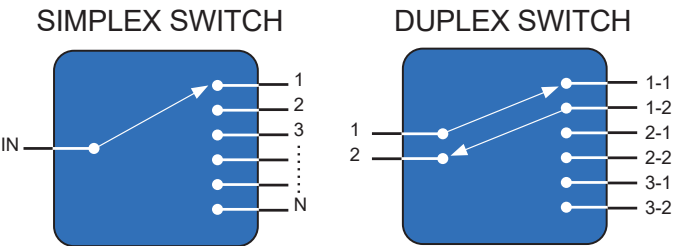
## GP800 Model, Singlemode Fiber



DiCon's **GP800 1x2 Optical Switching System** enables the automated connection of one common fiber to any of N output fibers.

The **GP800 System** comes with multiple control interfaces for users to choose from and there are many options to customize the product, including adding other optical components to meet unique requirements.

- Interfaces - Web GUI, SSH, RS232, REST API, Telnet
- Optical Transition Time < 25 ms
- Lifetime > 1 billion switch cycles
- Low power consumption
- Proven MEMS platform - commercial deployment since 2001
- Low MEMS drive voltage - simple and reliable electronics
- Intelligent hardware - field serviceable electronics



### ORDERING INFORMATION

**GP800 - ☐ - M - ☐ - ☐ - 9 - ☐ - ☐ - ☐ - N - ☐**

Chassis Type	
<b>1U</b>	1U
<b>2U</b>	2U
<b>3U</b>	3U
<b>4U</b>	4U
<i>*Please consult DiCon</i>	
Device Type	
<b>M</b>	MEMS Switch
Configuration	
<b>X/1x2</b>	# of Switches / 1x2 Simplex
<b>X/1x2/DS</b>	# of Switches / 1x2 Duplex
Alignment Type	
<b>T</b>	Transparent
<b>P</b>	Opaque
Fiber Type	
<b>9</b>	9/125 $\mu$ m SMF
<i>*Other fiber options are available upon request</i>	
Test Wavelength	
<b>O</b>	1310 nm
<b>C</b>	1550 nm
<b>L</b>	1590 nm
<i>*Use "/" to add multiple wavelengths. E.g., O/C or O/C/L</i>	
Power-On State	
<b>0</b>	Channel 0 (Off state)
<b>1</b>	Channel 1
<b>X</b>	Channel X
Connector Type	
<b>FC</b>	FC/UPC
<b>FC/APC</b>	FC/APC
<b>LC</b>	LC/UPC
<b>LC/APC</b>	LC/APC
<b>SC</b>	SC/UPC
<b>SC/APC</b>	SC/APC
<i>*Other connector types are available upon request</i>	
Connector Key Orientation	
<b>N</b>	None
Connector Location	
<b>F</b>	Front
<b>R</b>	Rear

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

Operating Wavelength	1260 to 1680 nm
Insertion Loss <sup>2</sup>	0.6 dB max. <sup>3</sup>
PDL <sup>4</sup>	0.1 dB max.
WDL <sup>4,5</sup>	0.2 dB max.
Repeatability <sup>6</sup>	0.02 dB max.
Transition Time <sup>7,8</sup>	25 ms max.
Crosstalk <sup>8</sup>	-50 dB max.
Back Reflection	-50 dB max.
Durability <sup>8</sup>	1 Billion Cycles min.
Optical Power <sup>8</sup>	500 mW max.
Fiber Type	Singlemode

1. All specifications are measured separately at room temperature for each Test Wavelength

2. Measured with 3-jumper method or equivalent (See TIA/EIA 526-7)

3. Multi-band adds 0.3 dB

4. Multi-band adds 0.1 dB

5. WDL is defined within Test Wavelength  $\pm 20$  nm

6. Repeatability is defined over 100 cycles

7. Optical transition time for all ports switching concurrently, not including command processing overhead

8. Met by design, not measured

### ELECTRICAL SPECIFICATIONS

Power Supply	100-240 VAC, 50/60 Hz
Connectors	RJ45 (Ethernet) DB9 (RS232) USB-C (Service)
Control Interface	Web GUI, SSH, RS232, REST API, Telnet

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0 to 50°C, < 85% RH
Storage Temperature	-40 to 70°C, < 40% RH

### MECHANICAL SPECIFICATIONS

Chassis Width	483 mm (19")
Chassis Depth	435 mm (17")
Chassis Height	1U/2U (Front/Back, FC) 1U/2U (Front/Back, SC) 1U/1U (Front/Back, LC)

#### Front View



#### Rear View

