

# MEMS 1X2 OPTICAL SWITCHING SYSTEM

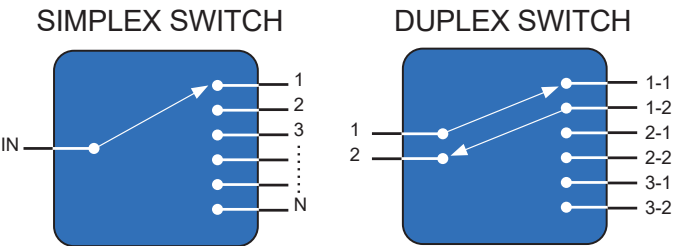
## GP800 Model, Multimode Fiber



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 - ☐ - ☐ - ☐ - ☐ - ☐ - ☐ - 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>50</b>	50/125 $\mu$ m MMF
<b>62</b>	62/125 $\mu$ m MMF
<i>*Other fiber options available upon request</i>	
Test Wavelength	
<b>850</b>	850 nm
<b>980</b>	980 nm
<b>O</b>	1310 nm
<b>C</b>	1550 nm
<i>*Use "/" to add multiple wavelengths (E.g., 850/980)</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

# MEMS 1X2 OPTICAL SWITCHING SYSTEM

## GP800 Model, Multimode Fiber

### OPTICAL SPECIFICATIONS<sup>1,2</sup>

Operating Wavelength	850 / 980 / 1310 / 1550 nm	
Insertion Loss <sup>3</sup>	1.0 dB max. <sup>4</sup>	
Repeatability <sup>5</sup>	0.04 dB max.	
Transition Time <sup>6,7</sup>	25 ms max.	
Crosstalk <sup>7</sup>	50 $\mu$ m	-25 dB max.
	62.5 $\mu$ m	-20 ms max.
Back Reflection	-20 dB max.	
Durability <sup>7</sup>	1 Billion Cycles min.	
Optical Power <sup>7</sup>	500 mW max.	
Fiber Type	Multimode	

1. Measured separately for each Test Wavelength at room temperature

2. Multimode fiber specification are based on LED light source

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

4. Multi-band adds 0.4 dB

5. Repeatability is defined over 100 cycles

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

7. 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, gNMI

### 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

