

# MEMS 1X2 OPTICAL SWITCHING SYSTEM

## GP800 Model, Singlemode Fiber

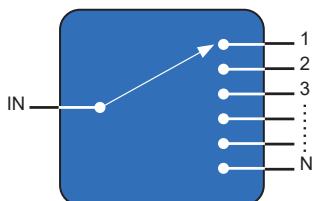


DiCon's **GP800 1x2 Optical Switching System** enables the automated connection of one common fiber to any of N output fibers.

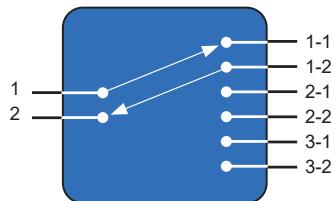
The **GP800 System** comes with multiple control interfaces for users to choose from and there are many options to customize the product, including adding other optical components to meet unique requirements.

- 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

### SIMPLEX SWITCH



### DUPLEX SWITCH



## ORDERING INFORMATION

GP800 -  - M -  -  - 9 -  -  -  - N -

### Chassis Type

<b>1U</b>	1U
<b>2U</b>	2U
<b>3U</b>	3U
<b>4U</b>	4U

*\*Please consult DiCon*

### Device Type

<b>M</b>	MEMS Switch
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### 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 µm SMF
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*\*Other fiber options are available upon request*

### Test Wavelength

<b>O</b>	1310 nm
<b>C</b>	1550 nm
<b>L</b>	1590 nm

*\*Use "/" to add multiple wavelengths. E.g., O/C or O/C/L*

### 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

*\*Other connector types are available upon request*

### Connector Key Orientation

<b>N</b>	None
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### 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. Measured separately for each Test Wavelength at room temperature
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, 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

