

# MEMS 1X8 OPTICAL SWITCHING SYSTEM

## GP800 Model, Single Mode Fiber

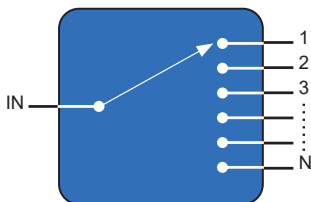


DiCon's **GP800 1x8 Optical Switching System** enable the automated connection of one common fiber to any of N output fibers.

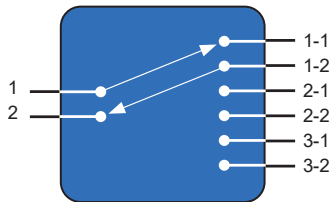
The **GP800 System** comes with multiple control interfaces for users to choose from and there are many options to customize the product, including adding other optical components, to meet unique requirements.

- Interfaces - Web GUI, SSH, RS232, REST API, Telnet
- Low insertion loss - 0.4dB typical (excluding connector loss)
- Switching 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**

- 1U** 1U
- 2U** 2U
- 3U** 3U
- 4U** 4U

*\*Please consult DiCon*

**Product Type**

- M** MEMS Switch

**Number of Switches**

- #** Number of Switches

**Switch Type**

- 1x8** 1x8 Simplex
- 1x8/DS** 1x8 Duplex

**Alignment Type**

- T** Transparent
- P** Opaque

**Fiber Type**

- 9** 9/125 μm SMF
- \*Other fiber options available upon request*

**Optimized Wavelength Range**

- O** 1260-1360 nm
- E** 1360-1460 nm
- S** 1460-1530 nm
- C** 1530-1570 nm
- L** 1570-1625 nm
- U** 1625-1675 nm

*\*Multiple wavelength ranges can be supported.*

*Use "/" to add multiple ranges.*

*For example: For 1260 - 1360 nm & 1530 - 1570nm use O/C, for 1260 to 1675 nm use O/E/S/C/L/U*

**Start Up State**

- 0** Channel 0 (Off state)
- 1** Channel 1
- X** Channel X

**Connector Type**

- FC** FC/UPC
- FC/APC** FC/APC
- SC** SC/UPC
- SC/APC** SC/APC
- LC** LC/UPC
- LC/APC** LC/APC
- N** None

*\*Other connector types available upon request*

**Connector Key Orientation**

- N** None

**Connector Location**

- F** Front
- R** Rear

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### OPTICAL SPECIFICATIONS

Wavelength Range	1260 to 1675 nm
Insertion Loss <sup>1,2</sup>	< 0.7 dB
PDL <sup>3</sup>	< 0.1 dB
WDL <sup>4,5</sup>	< 0.2 dB
Crosstalk	< -50 dB
Back Reflection	< -50 dB
Switching Time, All Channels	< 25 ms
Switch Lifetime	> 1 Billion Cycles
Optical Power	500 mW Max.

1. Excluding connector loss. Equivalent to Method A.3 Three Jumper (TIA/EIA-526-7). Tested at calibrated wavelengths.
2. IL add 0.3 dB for multi-band operation
3. PDL add 0.1 for multi-band operation
4. WDL add 0.1 dB for multi-band operation
5. Over the operating wavelength range of each band

### 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)