

MEMS 1X8 OPTICAL SWITCHING SYSTEM

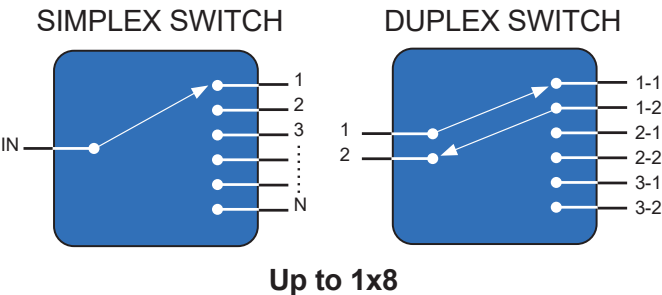
GP800 Model, Singlemode Fiber



DiCon's **GP800 1x8 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
- Low insertion loss - 0.4dB typical (excluding connector loss)
- 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

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 μ m SMF

**Other fiber options are available upon request*

Test Wavelength

O 1310 nm
E 1410 nm
S 1490 nm
C 1550 nm
L 1590 nm
U 1650 nm

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

Power-On 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 are available upon request*

Connector Key Orientation

N None

Connector Location

F Front
R Rear

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OPTICAL SPECIFICATIONS¹

Operating Wavelength	1260 to 1675 nm
Insertion Loss ^{2,3}	< 0.7 dB
PDL ^{4,5}	< 0.1 dB
WDL ^{4,5,6}	< 0.2 dB
Crosstalk ^{4,7}	< -50 dB
Back Reflection	< -50 dB
Optical Transition Time, All Channels ^{4,8}	< 25 ms
Switch Lifetime	> 1 Billion Cycles
Optical Power	500 mW Max.

1. Measured separately for each Test Wavelength at room temperature.
2. Excluding connector loss. Measured with 3-jumper method or equivalent (See TIA/EIA 526-7)
3. Add 0.3 dB in IL for multi-band operation
4. Met by design, not measured.
5. Add 0.1 dB for multi-band operation
6. Over the operating wavelength range of each band
7. For the On-Off switch, the isolation is equivalent to crosstalk.
8. Optical transition time for all ports switching concurrently, not including command processing overhead

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)