

MEMS 1X4 OPTICAL SWITCHING SYSTEM

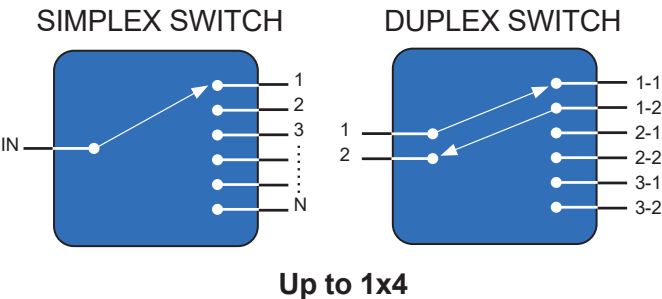
GP800 Model, Singlemode Fiber



DiCon's **GP800 1x4 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
<i>*Please consult DiCon</i>	
Product Type	
M	MEMS Switch
Number of Switches	
#	Number of Switches
Switch Type	
1x4	1x4 Simplex
1x4/DS	1x4 Duplex
Alignment Type	
T	Transparent
P	Opaque
Fiber Type	
9	9/125 μm SMF
<i>*Other fiber options are available upon request</i>	
Test Wavelength	
O	1310 nm
E	1410 nm
S	1490 nm
C	1550 nm
L	1590 nm
U	1650 nm
<i>*Use "/" to add multiple wavelengths. E.g., O/C or O/C/L</i>	
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
<i>*Other connector types are available upon request</i>	
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}	< 0.6 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)