DiCon Fiberoptics, Inc.

MEMS 1X8 OPTICAL SWITCHING SYSTEM

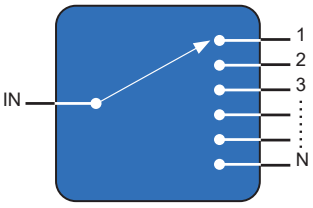
GP800 Model, Polarization Maintaining Fiber

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

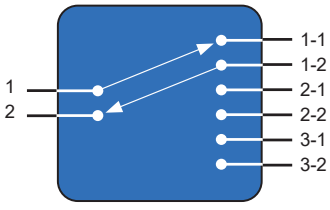
The **GP800 System** comes with multiple control interfaces for users to choose from and there are many options to customize the product, including adding other optical components to meet unique requirements.

- Interfaces - Web GUI, SSH, RS232, REST API, Telnet
- 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 -□-□-□-□-□-□-□-□-□

Chassis Type

1U	1U
2U	2U
3U	3U
4U	4U

**Please consult DiCon*

Device Type

M	MEMS Switch

Configuration

X/1x8	# of Switches / 1x8 Simplex
X/1x8/DS	# of Switches / 1x8 Duplex

Alignment Type

T	Transparent
P	Opaque

Fiber Type

PM13[1]	Corning PM 1310 Fiber
PM15[2]	Corning PM 1550 Fiber

**Other fiber options are available upon request*
1.PER Specification covers O band
2.PER Specification covers C/L band

Test Wavelength

O	1310 nm
C	1550 nm
L	1590 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
LC	LC/UPC
LC/APC	LC/APC
SC	SC/UPC
SC/APC	SC/APC

**Other connector types are available upon request*

Connector Key Orientation

S	Slow Axis
F	Fast Axis

Connector Location

F	Front
R	Rear

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OPTICAL SPECIFICATIONS[1]

Operating Wavelength	1260 to 1680 nm
Insertion Loss[2]	0.9 dB max.[3]
WDL[4,5]	0.3 dB max.
PER[6]	16 dB min.
Repeatability[7]	0.05 dB max.
Transition Time[8,9]	25 ms max.
Crosstalk[9]	-50 dB max.
Back Reflection	-50 dB max.
Durability[9]	1 Billion Cycles min.
Optical Power[9]	500 mW max.
Fiber Type	Panda PM

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 ±20 nm
6. PER is defined with connectors; PER without connectors is 18 dB minimum
7. Repeatability is defined over 100 cycles
8. Optical transition time for all ports switching concurrently, not including command processing overhead
9. Met by design, not measured

ELECTRICAL SPECIFICATIONS

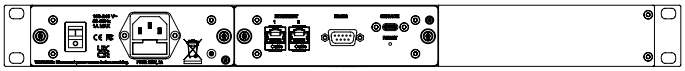
Power Supply	100-240 VAC, 50/60 Hz
Connectors	RJ45 (Ethernet) DB9 (RS232) USB-C (Service)
Control Interface	Web GUI, SSH, RS232, REST API, Telnet, gNMI

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