

MEMS 1X64 OPTICAL SWITCHING SYSTEM

GP800 Model, Single Mode Fiber



DiCon's **GP800 1x64 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
- 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

ORDERING INFORMATION

GP800 - [] - M - [] - [] - [] - 9 - [] - [] - [] - N - []

Chassis Type

- 1U** 1U
- 2U** 2U

**Please consult DiCon*

Product Type

- M** MEMS Switch

Number of Switches

- #** Number of Switches

Switch Type

- 1x64** 1x64 Simplex
- 1x64/DS** 1x64 Duplex

Alignment Type

- T** Transparent
- P** Opaque

Fiber Type

- 9** 9/125 μm SMF

**Other fiber options 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 available upon request*

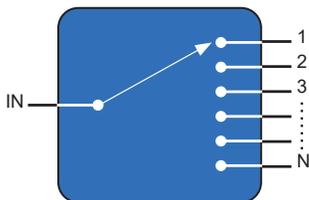
Connector Key Orientation

- N** None

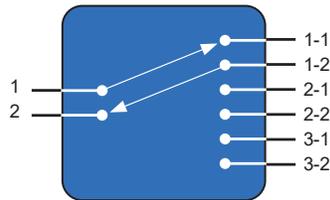
Connector Location

- F** Front
- R** Rear

SIMPLEX SWITCH



DUPLEX SWITCH



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OPTICAL SPECIFICATIONS¹

Wavelength Range	1260 to 1675 nm
Insertion Loss ^{2,3}	< 1.2 dB
PDL ^{4,5}	< 0.1 dB
WDL ^{5,6}	< 0.4 dB
Crosstalk ⁵	< -50 dB
Back Reflection	< -50 dB
Optical Transition Time ^{5,7}	< 25 ms
Repeatability ^{5,8}	< 0.04 dB
Switch Lifetime ⁵	> 1 Billion Cycles
Optical Power ⁵	500 mW Max.

1. Measured separately for each Test Wavelength at room temperature

2. Measured with 3-jumper method or equivalent. See TIA/EIA 526-7.

3. Adds 0.3 dB for multi-band operation

4. Add 0.1 dB for multi-band operation

5. Met by design, not measured

6. WDL is defined within Test Wavelength ± 20 nm

7. Not include the command processing overhead.

8. Over 100 cycles

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 : 44.0mm(1.73") 2U : 88.0mm(3.47")

*Please consult DiCon. Depends on connectors and options.