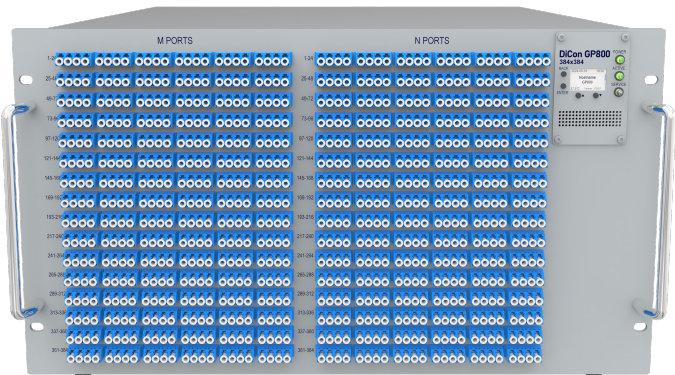


# MEMS 384X384 OPTICAL SWITCHING SYSTEM

## GP800 Model, Single Mode Fiber



DiCon's **GP800 384x384 Optical Switching System** is an all-optical non-blocking cross-connect switch. This rack-mount device is designed with DiCon's proprietary 3D MEMS mirror technology and delivers industry-leading optical performance. The unit works without any position sensor or feedback loop, and the optical signals can pass through the equipment without any observable dithering artifacts. The **GP800 System** can switch repeatedly with great accuracy and maintain long-term connectivity with superior stability even when there is no optical signal in the fiber.

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.

- High-density non-blocking Matrix Switches
- Interfaces - Web GUI, SSH, RS232, REST API, Telnet
- Advanced WebGUI for port partitions
- Low insertion loss - 0.8dB typical (excluding connector loss)
- Fast switching - concurrent switching < 25 ms
- Lifetime > 1 billion switch cycles
- No position sensor nor feedback-loop used
- Works even when there is no light in the fiber
- Excellent stability with no observable dithering artifacts
- 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 -  - SX -  - 9 -  -  - N -

Chassis Type

6U

7U

8U

9U

12U

6U

7U

8U

9U

12U

Please consult DiCon

Product Type

SX

MEMS Matrix Switch

Configuration

T384x384

TMxN

384x384

MxN (M, N≤384)

Fiber Type

9

9/125 μm SMF

Other fiber options available upon request

Test Wavelength

O

E

S

C

L

U

1310 nm

1410 nm

1490 nm

1550 nm

1590 nm

1650 nm

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

Connector Type

FC

FC/APC

LC

LC/APC

RLC

RLC/APC

FC/UPC

FC/APC

LC/UPC

LC/APC

LC/UPC on Removable Panel

LC/APC on Removable Panel

Other connector types available upon request

Connector Key Orientation

N

None

Connector Location

F

R

Front

Rear

# MEMS 384X384 OPTICAL SWITCHING SYSTEM

## GP800 Model, Single Mode Fiber

### OPTICAL SPECIFICATIONS<sup>1</sup>

Wavelength Range	1260 to 1675 nm
Insertion Loss <sup>2</sup>	< 2.1 dB
Loss Repeatability <sup>3</sup>	+/- 0.03 dB
Connection Stability <sup>4,5</sup>	+/- 0.03 dB
PDL <sup>5</sup>	< 0.1 dB
WDL <sup>5,6</sup>	< 0.3 dB
Crosstalk <sup>5</sup>	< -60 dB
Back Reflection	< -50 dB
Optical Transition Time <sup>5,7</sup>	< 25 ms
Switch Lifetime	> 1 Billion Cycles
Input Power Range	Dark to +27 dBm

1. Measured separately for each Test Wavelength

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

3. Over 100 cycles

4. 1 Hz sampling rate for 15 min

5. Met by design, not measured

6. WDL is defined within Test Wavelength  $\pm 20$  nm

7. 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

### 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	559 mm (22")
Chassis Height	12U/12U (Front/Back, FC) 6U/7U (Front/Back, LC) 8U/9U (Front/Back, RLC)