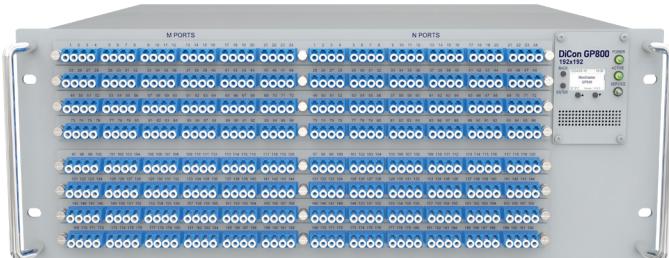


MEMS 192X192 OPTICAL SWITCHING SYSTEM

GP800 Model, Single Mode Fiber



DiCon's **GP800 192x192 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

4U	4U
5U	5U
7U	7U
8U	8U

*Please consult DiCon

Product Type

SX	MEMS Matrix Switch
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Configuration

T192x192	192x192
TMxN	MxN (M, N≤192)

Fiber Type

9	9/125 µm SMF
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*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

Connector Type

FC	FC/UPC
FC/APC	FC/APC
SC	SC/UPC
SC/APC	SC/APC
LC	LC/UPC
LC/APC	LC/APC
RLC	LC/UPC on Removable Panel
RLC/APC	LC/APC on Removable Panel

*Other connector types available upon request

Connector Key Orientation

N	None
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Connector Location

F	Front
R	Rear

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OPTICAL SPECIFICATIONS¹

Wavelength Range	1260 to 1675 nm
Insertion Loss ²	< 1.9 dB
Loss Repeatability ³	+/- 0.03 dB
Connection Stability ^{4,5}	+/- 0.03 dB
PDL ⁵	< 0.1 dB
WDL ^{5,6}	< 0.3 dB
Crosstalk ⁵	< -60 dB
Back Reflection	< -50 dB
Optical Transition Time ^{5,7}	< 25 ms
Switch Lifetime	> 1 Billion Cycles
Input Power Range	Dark to +27 dBm

1. Measured separately for each Test Wavelength at room temperature
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 ± 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, 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	7U/8U (Front/Back, FC) 8U/8U (Front/Back, SC) 4U/4U (Front/Back, LC) 4U/5U (Front/Back, RLC)