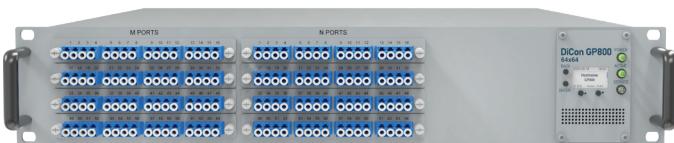


# MEMS 64X64 OPTICAL SWITCHING SYSTEM

## GP800 Model, Multimode Fiber



DiCon's **GP800 64x64 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 -  - MX -  - 50 -  -  - N -

#### Chassis Type

**2U** 2U  
**3U** 3U  
**4U** 4U  
**5U** 5U

*\*Please consult DiCon*

#### Product Type

**MX** MEMS Matrix Switch

#### Configuration

**T64x64** 64x64  
**TMxN** MxN (M, N≤64)

#### Fiber Type

**50** 50 μm

*\*Other fiber options available upon request*

#### Optimized Wavelength Range

**850** 850 nm  
**O** 1260-1360 nm  
**C** 1530-1570 nm

*\*Multiple wavelength ranges can be supported.*

*Use "/" to add multiple ranges.*

*For example: For 1260 - 1360 nm & 1530 - 1570nm use O/C*

#### 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

#### Connector Location

**F** Front  
**R** Rear

# MEMS 64X64 OPTICAL SWITCHING SYSTEM

GP800 Model, Multimode Fiber

## OPTICAL SPECIFICATIONS

Wavelength Range	850 / 1310 / 1550 nm
Insertion Loss <sup>1</sup>	< 1.0 dB
Loss Repeatability <sup>2</sup>	+/- 0.03 dB
Connection Stability <sup>3</sup>	+/- 0.03 dB
Crosstalk	< -60 dB
Back Reflection	< -30 dB
Switching Time, All Channels	< 25 ms
Switch Lifetime	> 1 Billion Cycles
Input Power Range	Dark to +27 dBm

1. Measured at optimized  $\lambda$  (e.g. 1550 nm), 25°C, excluding connectors (Each pair of connectors will add extra 0.2 dB loss.)

2. Over 100 cycles

3. 1 Hz sampling rate for 15 min

## 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	435 mm (17")
Chassis Height	3U/4U (Front/Back, FC) 3U/4U (Front/Back, SC) 2U/2U (Front/Back, LC) 2U/2U (Front/Back, RLC)