MEMS 32X32 OPTICAL SWITCHING SYSTEM

GP800 Model, Multimode Fiber



DiCon's GP800 32x32 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 ٠
- 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 ٠
- · 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 ٠

ORDERING INFORMATION

GP800 - 🗌 - MX - 🗌 - 50 - 🗌 - 🔲 - N - 🗌
Chassis Type 1U 1U 2U 2U 3U 3U 4U 4U *Please consult DiCon
Product Type
MX MEMS Matrix Switch
Configuration
T32x32 32x32 TMxN MxN (M, N≤32)
Fiber Type
50 50 μm *Other fiber options available upon request
Optimized Wavelength Range
850850 nmO1260-1360 nmC1530-1570 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 Rear





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OPTICAL SPECIFICATIONS

Wavelength Range	850 / 1310 / 1550 nm
Insertion Loss ¹	< 1.0 dB
Loss Repeatability ²	+/- 0.03 dB
Connection Stability ³	+/- 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 λ (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	2U/2U (Front/Back, FC) 2U/2U (Front/Back, SC) 1U/2U (Front/Back, LC) 1U/2U (Front/Back, RLC)