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 Typ			
2U	2U		
3U	3U		
4U	4U		
5U	5U		
*Please cons	ult DiCon		
Product Typ	ie		
MX	MEMS Matrix Switch		
Configuratio	n		
T64x64	64x64		
TMxN	MxN (M, N≤64)		
Fiber Type			
50	50 µm		
*Other fiber o	ptions available upon request		
Optimized V	Vavelength Range		
	350 nm		
	260-1360 nm		
	530-1570 nm		
	elength ranges can be supported.		
	d multiple ranges.		
For example	: For 1260 - 1360 nm & 1530 - 1570nm use O/C		
Connector 7			
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		
14			

Connector Location

Front

R Rear

F



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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	3U/4U (Front/Back, FC) 3U/4U (Front/Back, SC) 2U/2U (Front/Back, LC) 2U/2U (Front/Back, RLC)