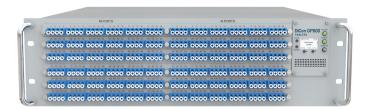
## MEMS 144X144 OPTICAL SWITCHING SYSTEM

# **GP800 Model, Polarization Maintaining Fiber**

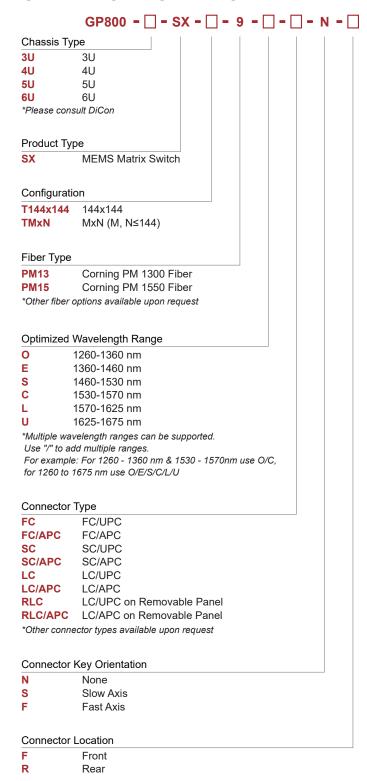


DiCon's **GP800 144x144 Optical Switching System** is an all-optical non-blocking cross-connect switch. This rack-mount device is designed with DiCon's proprietary 3D MEMS mirror technology and delivers industry-leading optical performance. The unit works without any position sensor or feedback loop, 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</li>
- 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





# **MEMS 144X144 OPTICAL SWITCHING SYSTEM**

# **GP800 Model, Polarization Maintaining Fiber**

## **OPTICAL SPECIFICATIONS**

Wavelength Range	1260 to 1675 nm
Insertion Loss <sup>1</sup>	< 1.2 dB
Loss Repeatability <sup>2</sup>	+/- 0.03 dB
Connection Stability <sup>3</sup>	+/- 0.03 dB
Polarization Extinction Ratio (PER) <sup>4</sup>	> 18 dB
WDL (One Operating Band)	< 0.3 dB
Crosstalk	< -60 dB
Back Reflection	< -50 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
- 4. PER with connectors is 18 dB typical, 16 dB minimum

### **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	5U/6U (Front/Back, FC) 6U/6U (Front/Back, SC) 3U/4U (Front/Back, LC) 3U/4U (Front/Back, RLC)

DiCon Fiberoptics, Inc. — www.diconfiberoptics.com