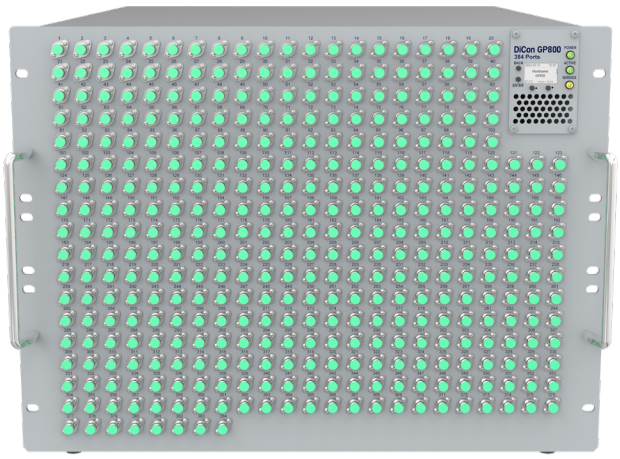
DiCon Fiberoptics, Inc.

# MEMS 384-PORT ANYPORT OPTICAL SWITCHING SYSTEM

## GP800 Model, Single Mode Fiber, Anyport-to-Anyport



The **DiCon GP800 384-Port Anyport** is a high-density, all-optical non-blocking cross-connect switch designed for maximum architectural flexibility. Featuring a true **Anyport-To-Anyport (ATA)** design, any of the 384 ports can be dynamically connected to any of the remaining 383 ports. This “universal” port mapping allows test engineers to conveniently reconfigure the system—moving from a **1x383** switch to a **192x192** matrix—to meet the shifting demands of complex test environments without manual recabling.

Built on DiCon’s proprietary **3D MEMS mirror platform**, the GP800 delivers elite optical performance within a robust rack-mount form factor. Unlike competing systems that rely on complex feedback loops, the GP800 operates with open-loop precision.

- **Zero-Dither Signal Integrity:** Because the unit functions without position sensors or active feedback, optical signals pass through with no observable dithering artifacts, ensuring prist-ine data transmission.
- **"Dark Fiber" Stability:** The system maintains long-term connectivity and switching accuracy even in the absence of an optical signal, providing a "set-and-forget" reliability that is essential during network downtime or staged testing.
- **Precision & Repeatability:** Engineered for high-cycle environments, the GP800 switches repeatedly with exceptional accuracy and superior long-term stability.
- **Intelligent hardware:** The GP800 features field-serviceable hardware designed for rapid on-site maintenance, ensuring maximum operational uptime by eliminating the need for costly production shutdowns.

## ORDERING INFORMATION

**GP800 - □/□ - AS - □ - 9 - □ - □ - □ - N - □**

**Chassis Type**

| | |
|---|---|
| **4U** | 4U |
| **5U** | 5U |
| **6U** | 6U |
| **8U** | 8U |

**Please consult DiCon*

**Chassis Depth**

| | |
|---|---|
| **17** | 17” |
| **22** | 22” |

**Please consult DiCon*

**Product Type**

| | |
|---|---|
| **AS** | Anyport Singlemode |

**Configuration**

| | |
|---|---|
| **T384** | 384 Ports |
| **TM** | M Ports (M<384) |

**Fiber Type**

| | |
|---|---|
| **9** | 9/125 µm SMF |

**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*

**Power**

| | |
|---|---|
| **A1** | AC 100-240V Single |
| **D1** | DC -48V Single |
| **A2** | AC 100-240V Redundant |
| **D2** | DC -48V Redundant |

**Connector Type**

| | |
|---|---|
| **FC** | FC/UPC |
| **FC/APC** | FC/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 |

TAA COMPLIANT

DiCon® FIBEROPTICS

# MEMS 384-PORT ANYPORT OPTICAL SWITCHING SYSTEM

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## OPTICAL SPECIFICATIONS[1]

| | |
|---|---|
| Test Wavelength | 1260 to 1675 nm |
| Insertion Loss[2] | 2.1 dB max. |
| Loss Repeatability[3] | +/- 0.03 dB |
| Connection Stability[4,5] | +/- 0.03 dB |
| PDL[5] | 0.1 dB max. |
| WDL[5,6] | 0.3 dB max. |
| Crosstalk[5] | -60 dB max. |
| Back Reflection | -50 dB max. |
| Optical Transition Time[5,7] | 25 ms max. |
| Switch Lifetime | 1 Billion Cycles min. |
| 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)<br>DB9 (RS232)<br>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”) | | |
| | 559 mm (22”) | | |
| Chassis Height | FC | Front Panel | 8U |
| | | Back Panel | 8U |
| | LC | Front Panel | 4U |
| | | Back Panel | 5U |
| | RLC | Front Panel | 4U |
| | | Back Panel | 6U |