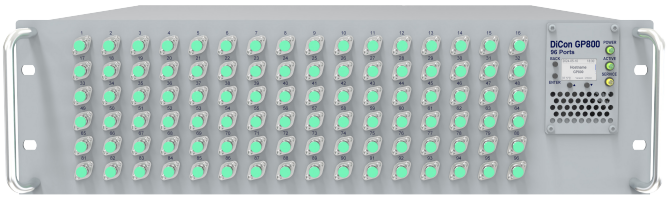
DiCon Fiberoptics, Inc.

MEMS 96-PORT ANYPORT OPTICAL SWITCHING SYSTEM

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



The **DiCon GP800 96-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 96 ports can be dynamically connected to any of the remaining 95 ports. This “universal” port mapping allows test engineers to conveniently reconfigure the system—moving from a **1x95** switch to a **48x48** 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 pristine 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

2U	2U
3U	3U

**Please consult DiCon*

Chassis Depth

17	17”

**Please consult DiCon*

Product Type

AS	Anyport Singlemode

Configuration

T96	96 Ports
TM	M Ports (M<96)

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
RFC/APC	FC/APC on Removable Panel
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

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OPTICAL SPECIFICATIONS[1]

Test Wavelength	1260 to 1675 nm
Insertion Loss[2]	1.2 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) DB9 (RS232) USB-C (Service)
Control Interface	REST API, Web GUI, RS232, NETCONF, SNMPv2c, SNMPv3, TL1 , gNMI, gRPC, Telnet, SSH

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	FC	Front Panel	3U
		Back Panel	3U
	SC	Front Panel	2U
		Back Panel	3U
	LC	Front Panel	2U
		Back Panel	2U
	RLC	Front Panel	2U
		Back Panel	2U