

# MEMS VARIABLE OPTICAL ATTENUATOR

## GP800 Model, Polarization Maintaining Fiber

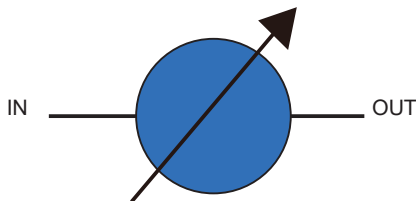


DiCon's **MEMS Variable Optical Attenuator (VOA)** allows for a precise amount of attenuation to be added to an optical path in polarization maintaining fiber applications.

- Industry proven MEMS technology
- Reliable, long life design
- High density to minimize rack space

### Applications

- Optical Communications
- Fiber Sensing
- DWDM Gain Equalization
- Bio-medical Instrumentation



## ORDERING INFORMATION

**GP800 - [ ] - A - [ ] - [ ] - [ ] - [ ] - [ ] - S - [ ] - [ ] - [ ]**

### Chassis Type

- 1U** 1U
- 2U** 2U
- 4U** 4U

*\*Please consult DiCon*

### Device Type

- A** MEMS VOA

### Configuration

- X** # of Channels

### Alignment Type

- T** Transparent
- P** Opaque

### Fiber Type

- PM13<sup>1</sup>** Corning PM 1300 Fiber
- PM15<sup>2</sup>** Corning PM 1550 Fiber

*\*Other fiber options are available upon request*

*1. PER specification covers O band*

*2. PER specification covers C/L band*

### Test Wavelength

- O** 1310 nm
- C** 1550 nm
- L** 1590 nm

*\*Use "/" to add multiple wavelengths (E.g., O/C or O/C/L)*

### Attenuation Range

- 30** 30 dB Attenuation
- X** Specify X dB min.

*\*Other attenuation levels are available upon request*

### WDL Type

- S** Superior Broad Band Flatness

### Connector Type

- FC** FC/UPC
- FC/APC** FC/APC
- LC** LC/UPC
- LC/APC** LC/APC
- SC** SC/UPC
- SC/APC** SC/APC

*\*Other connector types are available upon request*

### Connector Key Orientation

- S** Slow Axis
- F** Fast Axis

### Connector Location

- F** Front
- R** Rear

# MEMS VARIABLE OPTICAL ATTENUATOR

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### OPTICAL SPECIFICATIONS<sup>1</sup>

Operating Wavelength	1260 to 1680 nm	
Excess Loss <sup>2</sup>	0.6 dB max.	
WDL <sup>3</sup>	0 to 1 dB	0.3 dB max. <sup>4</sup>
	1 to 5 dB	0.5 dB max. <sup>4</sup>
	5 to 10 dB	0.6 dB max. <sup>4</sup>
	10 to 20 dB	1.0 dB max. <sup>4</sup>
PER <sup>5</sup>	16 dB min.	
Back Reflection	-50 dB max.	
Response Time <sup>6</sup>	2 ms max.	
Repeatability <sup>7</sup>	0.1 dB max.	
Durability <sup>8</sup>	1 Billion Cycles min.	
Optical Power <sup>8</sup>	500 mW max.	
Fiber Type	Panda PM	

1. All specifications are measured separately at room temperature for each Test Wavelength
2. Measured with 3-jumper method or equivalent (See TIA/EIA 526-7)
3. WDL is defined within Test Wavelength  $\pm 20$  nm
4. O-band adds 0.1 dB
5. PER is defined with connectors; PER without connectors is 18 dB minimum
6. Optical transition time; the actual processing delay to execute the attenuation command is longer
7. Repeatability is defined within 100 cycles
8. Met by design, not measured

### 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

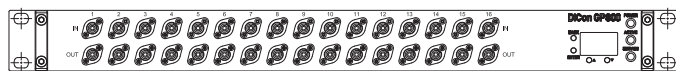
### ENVIRONMENTAL SPECIFICATIONS

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	1U : 44 mm (1.7")
	2U : 88 mm (3.5")
	4U : 177 mm (7.0")

#### Front View



#### Rear View

