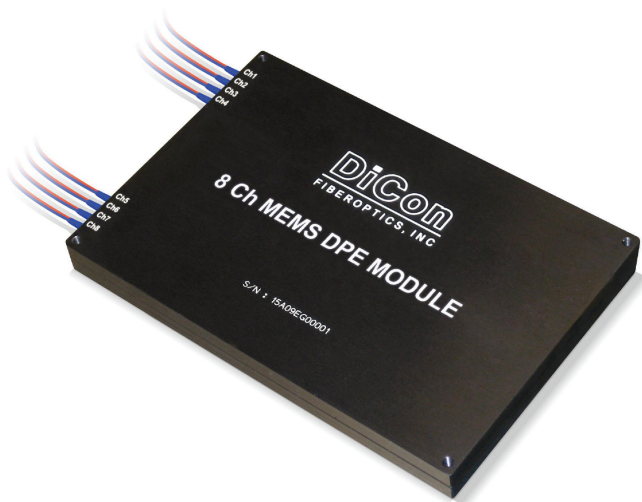


MULTI-CHANNEL MEMS DPE MODULE

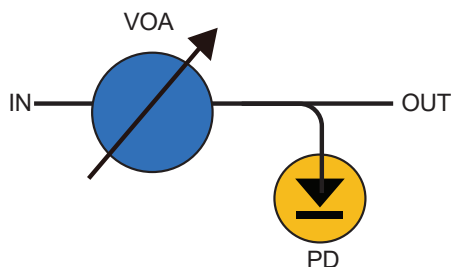
Polarization Maintaining Fiber



DiCon's **PM MEMS Dynamic Power Equalizer (DPE)** compensates for deviations in input optical power and maintains output optical power at a preset level for up to eight fiber channels. The DPE continuously adjusts the attenuation through closed loop feedback from output taps to DiCon's MEMS based attenuators.

- Proven MEMS Durability and Reliability
- Compact Form Factor
- Excellent Output Accuracy
- Wide Attenuation Range
- Low Insertion Loss

Operating Principle



ORDERING INFORMATION

ME - □ - □ - □ - □ - □ - □ - □ - □ - □ - □

Configuration

X/Y # of Channels/
Tap Ratio %

Attenuator Range

30 30 dB min.
40 40 dB min.

Control Type

I2C I²C
RS2 RS-232

Flatness Type

S Superior Broad Band Flatness
F Fine Narrow Band Flatness

Test Wavelength

O 1310 nm
C 1550 nm
L 1590 nm

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

Fiber / Jacket Type

PM13/BF Corning PM 1300 Fiber, 250 μm buffer
PM13/LT Corning PM 1300 Fiber, 900 μm loose tube over 250 μm buffer
PM15/BF Corning PM 1550 Fiber, 250 μm buffer
PM15/LT Corning PM 1550 Fiber, 900 μm loose tube over 250 μm buffer

Connector Key Orientation

PMF Fast axis
PMS Slow axis
PMN No Connector

Connector Type

N None
FC/SPC FC/SPC
FC/APC FC/APC

**Other connector types are available upon request*

Pigtail Length

1 1 Meter
X Specify X Meters

**Tolerance is ±0.1 m*

MULTI-CHANNEL MEMS DPE MODULE

Polarization Maintaining Fiber

OPTICAL SPECIFICATIONS^{1,8}

Operating Wavelength		1260 to 1675 nm	
Insertion Loss ²	1%	1.1 dB max.	
	2%	1.2 dB max.	
	5%	1.6 dB max.	
	10%	1.8 dB max.	
Dynamic Power Range	1%	-25 to 20 dBm	
	2%	-28 to 17 dBm	
	5%	-32 to 13 dBm	
	10%	-35 to 10 dBm	
Output Accuracy ³		±0.03 dB max.	
Extinction Ratio ⁴		18 dB min.	
WDL Flatness	Superior	0 to 1 dB	0.4 dB max. ⁵
		1 to 5 dB	0.6 dB max. ⁵
		5 to 10 dB	0.7 dB max. ⁵
		10 to 20 dB	1.0 dB max. ⁶
	Fine ⁷	0 to 15 dB	0.4 dB max.
		15 to 20 dB	0.5 dB max.
Back Reflection		-50 dB max.	
Tuning Resolution		0.01 dB	
Optical Power		500 mW max.	
Fiber Type		Panda PM	

1. All specifications are without connectors.

2. IL is measured at Test Wavelength, 23°C.

3. For closed-loop operation.

4. Extinction Ratio with connectors is 15 dB min.

5. Operating from 1290 - 1330nm or 1570 - 1610 nm adds 0.2 dB.

6. Operating from 1290 - 1330nm or 1570 - 1610 nm adds 0.3 dB.

7. Maximum change every 2nm.

8. DiCon recommends use of external detectors or a dynamic power equalizer module for applications requiring absolute attenuation accuracy.

ELECTRICAL SPECIFICATIONS

Latching Type	Non-latching
Control Type	I ² C, RS232
Vcc Voltage	5 VDC
Power Consumption	1 W max.
Connector Type	Molex 87833-1620

MECHANICAL SPECIFICATIONS

Dimensions in mm

