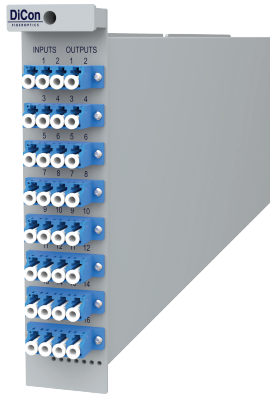


GP850 DYNAMIC POWER EQUALIZER

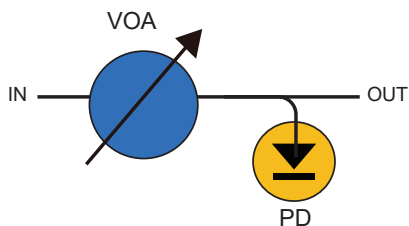
Singlemode MEMS DPE Slot Card



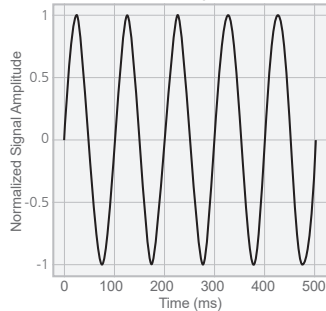
DiCon's **Dynamic Power Equalizer (DPE) Slot Card** maintains optical power at a present level for up to sixteen fiber channels. Each slot card is designed for easy integration into DiCon's GP850 modular system. All slot cards require no configuration and are hot swappable, providing true plug-and-play functionality.

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

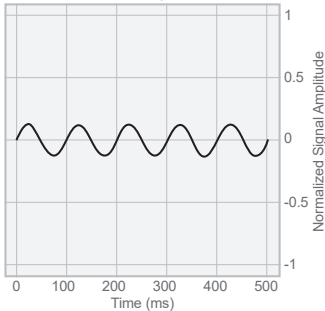
Operating Principle



Equalizer Amplitude Suppression Example
Input Signal



Equalizer Amplitude Suppression Example
Output Signal



ORDERING INFORMATION

GP850 - SL - E - □ - □ - □ - 9 - □ - □ - S - □ - N

Product Type

SL Slot Card

Device Type

E MEMS DPE

Configuration

X/Y # of Channels / Tap Ratio %

Slot Width

1S 1-Slot Module

2S 2-Slot Module

**Custom multi-slot modules are available upon request*

Alignment Type

T Transparent

P Opaque

Fiber Type

9 9/125 μ m SMF

**Other fiber options are available upon request*

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

N None

GP850 DYNAMIC POWER EQUALIZER

Singlemode MEMS DPE Slot Card

OPTICAL SPECIFICATIONS^{1,2}

Operating Wavelength		1260 to 1680 nm	
Insertion Loss ³	1% Tap Ratio	0.8 dB max.	
	2%	0.9 dB max.	
	5%	1.1 dB max.	
	10%	1.3 dB max.	
Dynamic Power Range	1% Tap Ratio	-47 to 25 dBm	
	2%	-50 to 22 dBm	
	5%	-54 to 18 dBm	
	10%	-57 to 15 dBm	
Relative Power Accuracy ⁴		±0.2 dB max.	
Response Time ⁵		2 to 500 ms	
Closed Loop Bandwidth ⁶		45 Hz ⁷	
PDL ⁸	0 dB Att.	0.14 dB max.	
	< 10 dB Att.	0.2 dB max.	
	< 20 dB Att.	0.3 dB max.	
WDL	Superior Broad Band ¹⁰	< 10 dB Att. ⁸	0.5 dB max.
		< 20 dB Att. ⁹	0.7 dB max.
Back Reflection		-50 dB max.	
Tuning Resolution		0.01 dB	
Durability ¹¹		1 Billion Cycles min.	
Optical Power ¹¹		500 mW max.	
Fiber Type		Singlemode	

1. All specifications are measured separately at room temperature for each Test Wavelength
2. DiCon recommends the use of external detectors or a dynamic power equalizer module for applications requiring absolute attenuation accuracy
3. Measured with 3-jumper method or equivalent (See TIA/EIA 526-7)
4. For closed-loop operation when
 - output power > -27 dBm for 1% tap ratio
 - output power > -30 dBm for 2% tap ratio
 - output power > -34 dBm for 5% tap ratio
 - output power > -37 dBm for 10% tap ratio
5. The averaging time for power measurements and the control loop interval for the built-in Variable Optical Attenuator (VOA)
6. The frequency range where the system can suppress input power fluctuations by over 50%
7. When input power > -30 dBm
8. Adds 0.1 dB for dual-band operation
9. Adds 0.3 dB for dual-band operation
10. Maximum variation within the wavelength range of Test Wavelength ±20 nm
11. Met by design, not measured

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0 to 50°C, < 85% RH
Storage Temperature	-40 to 70°C, < 40% RH

MECHANICAL SPECIFICATIONS

Slot Width	37.8 mm
Slot Depth	487.6 mm
Slot Height	146 mm

