



## ***Optical Tilt Equalizer OT1000***



250 Phillips Blvd.  
Suite 255  
Ewing, NJ 08618  
Tel: 609.671.9800  
Fax: 609.671.9801  
Email: [info@optellios.com](mailto:info@optellios.com)

[www.optellios.com](http://www.optellios.com)

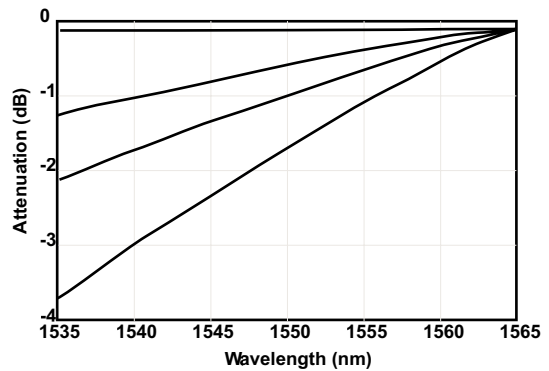
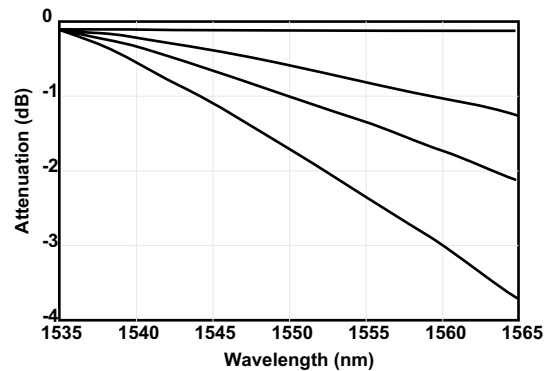


### **The Product**

Optellios' Optical Tilt Equalizer Series OT1000 are tunable, low loss spectral equalizers for WDM applications. Using Optellios' patent pending technology, these rugged devices allow the restoration of equality to non-uniform optical power across the WDM channels.

The small footprint of these devices allows an easy mounting onto a circuit board. Low control voltage and ultra low power consumption permit design flexibility in demanding applications. OT1000C is optimized for C-band operation, but other models are available for the S and L bands. All have the same high level of performance.

The OT1000 Series is available with a range of optical connectors as standard options. Optellios can also provide the device in non-standard configurations, please contact us directly to discuss your individual requirements.



### **Features**

- Ultra-low power consumption
- Small footprint
- Operation over S, C, or L band
- Large dynamic range
- No hysteresis
- Low insertion loss
- Rugged design
- Flexible interface design

250 Phillips Blvd.  
Suite 255  
Ewing, NJ 08618  
Tel: 609.671.9800  
Fax: 609.671.9801  
Email: [info@optellios.com](mailto:info@optellios.com)

[www.optellios.com](http://www.optellios.com)



## Preliminary Specifications

### Performance Data

Parameter	Value	Comment
Waveband	C,S, or L	
Insertion Loss	<1.3 dB	Excluding connector or fusion splice loss
Slope Linearity	<0.5 dB	Max. Deviation from Linearity
Dynamic Range	0-8 dB	Within 0.5 dB linearity
Return Loss	>50 dB	Measured from input side
PDL	<0.1 dB	
PMD	<0.1 dB	
Power Consumption	<1 mW	
Max. Optical Power	25 dBm	Tested under 26 dBm optical power for 30 min
Dimensions	44x19x10 mm	Excluding strain relief boots
Operating Temp.	0 to +65 C	
Storage Temp.	-40 to +85 C	

### Control Signals

Tilt equalizer operation requires, in general, simultaneous application of three (3) independent a.c. control signals. Limited operation is possible with only two (2) control signals, but in such cases it is necessary for one signal to be applied simultaneously to two inputs. No d.c. bias voltage should be applied to the signal inputs of the device at any time.

The following is a summary control signal requirements:

Parameter	Value
Signal Channel Count	3
Signal Waveform	Square or Sinusoidal
Frequency	0.5-2 kHz (1 Khz recommended)
Amplitude	1-5V
Maximum Amplitude	10V

### Ordering Info

Order using the part number information below:

PM = PM to PM

SM = SM to SM

SP = SM to PM

Center Wavelength (nm)

1550 = 1550 nm

1310 = 1310 nm

OT1000XX-XX-XXXX

FC = FC/PC

FA = FC/APC

SC = SC/PC

SA = SC/APC

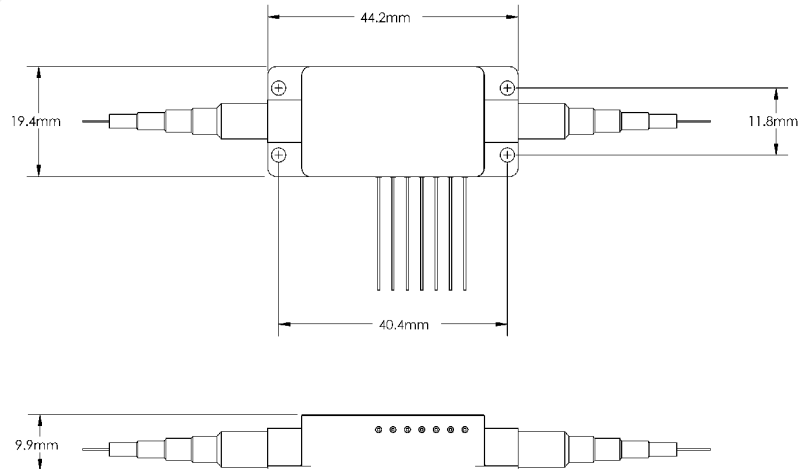
NN = No Connector

250 Phillips Blvd.  
Suite 255  
Ewing, NJ 08618  
Tel: 609.671.9800  
Fax: 609.671.9801  
Email: [info@optellios.com](mailto:info@optellios.com)

[www.optellios.com](http://www.optellios.com)



## Mechanical Design



## Evaluation Kit

Optellios offers an evaluation kit, which represents the quickest way to get started analyzing and testing the OT1000, optical tilt equalizer. The kit contains everything needed to drive the device from a laptop or PC with a PCMCIA interface, including DAQ Card, Software and Cables.

Part Number EK1000OT when ordering



Evaluation Kit number: EK1000OT

250 Phillips Blvd.  
Suite 255  
Ewing, NJ 08618  
Tel: 609.671.9800  
Fax: 609.671.9801  
Email: [info@optellios.com](mailto:info@optellios.com)

[www.optellios.com](http://www.optellios.com)