

## Optical Attenuator: Inline Variable (VOA)

This manually-adjusted, inline, variable optical attenuator (VOA) is used for precisely balancing the signal strengths in fiber circuits and also for balancing an optical signal when evaluating the dynamic range of the measurement system. These in-line VOAs include SMF-28e fiber with a 3mm jacket, and they are offered either terminated with FC/APC connectors or non-terminated. These attenuators are available with other connector styles; please contact your local Thorlabs office for a quotation.



### Specifications

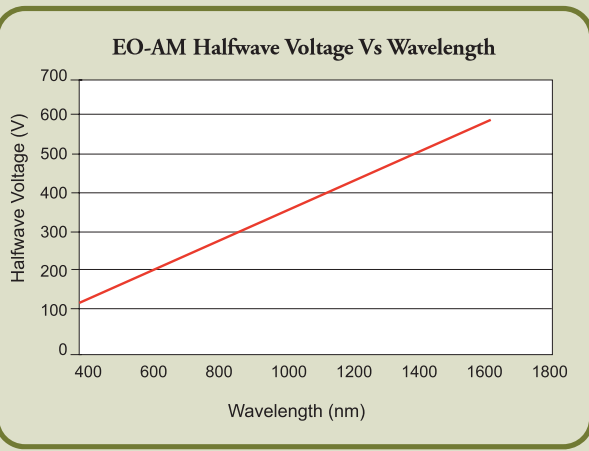
- **Operating Wavelength:** 1200 to 1600nm
- **Fiber:** SMF-28e or Equivalent
- **Residual Attenuation:**  $\leq 1.5$ dB
- **Attenuation Range:**  $\geq 50$ dB
- **Attenuation Resolution:**  $\leq 0.1$ dB
- **Back Reflection (Return Loss):**  $< -55$ dB
- **Polarization Sensitivity:**  $\leq 0.2$ dB
- **Optical Power:**  $\leq 300$ mW
- **Thermal Stability:**  $\leq 0.03$ dB/ $^{\circ}$ C
- **Operating Temperature:** 0 to 60 $^{\circ}$ C
- **Storage Temperature:** -40 to 75 $^{\circ}$ C
- **Dimension:** 38 x 30 x 19mm

### Inline Variable Optic Attenuators

ITEM#	\$	£	€	RMB	DESCRIPTION
VOA50	\$ 221.45	£ 139.50	€ 205.90	¥ 2,114.80	Inline Variable Optical Attenuator, 50dB
VOA50-APC	\$ 264.85	£ 166.90	€ 246.30	¥ 2,529.30	Inline Variable Optical Attenuator, 50dB, FC/APC

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## New Electro-Optic Modulators



### Highlights

- High Performance in a Compact Package
- Broadband DC Coupled and High Q Resonant Models for Low RF Drive
- Standard Broadband AR and Custom Coatings
- 2mm Diameter Clear Aperture
- SMA Female Modulation Input Connector
- MgO-Doped Versions for High Power
- DC to 100MHz
- Custom OEM Versions Available

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Passive Components

Collimation Packages

FiberBench

Optical Switches

Rackbox Systems

Connectors/  
Termination Tools

Single Mode Fiber

Rare Earth Doped

Polarization  
Maintaining Fiber

Photonic  
Crystal Fiber

Multimode Fiber:  
Graded Index

Multimode Fiber:  
Step Index

Plastic Optical Fiber