

Single Mode, Variable Fiber Optical Attenuators: Inline

This manually adjustable, inline variable optical attenuator (VOA) is used to precisely balance the signal strengths in fiber circuits or to balance an optical signal when evaluating the dynamic range of the measurement system. The attenuation is adjusted using a screw on the side of the attenuator housing. These in-line VOAs include SMF-28e+ single mode fiber with a Ø3 mm jacket, and they are offered unterminated or terminated with 2.0 mm narrow key FC/PC or FC/APC connectors. These attenuators are available with other connector styles; please contact your local Thorlabs office for a quotation.



Specifications

- **Operating Wavelength:** 1200 to 1600 nm
- **Fiber:** SMF-28e+ or Equivalent, 1 m per Side
- **Attenuation Range:** 1.5 - 50 dB
- **Attenuation Resolution:** ≤0.1 dB
- **Back Reflection (Return Loss):** >55 dB
- **Polarization Sensitivity:** ≤0.2 dB
- **Optical Power:** ≤300 mW
- **Thermal Stability:** ≤0.03 dB/°C
- **Operating Temperature:** 0 to 60 °C
- **Dimensions:** 38 mm x 30 mm x 19 mm

Inline Variable Optic Attenuator: SM Fiber, No Connectors

ITEM #	\$	£	€	RMB	DESCRIPTION
VOA50	\$ 225.90	£ 162.65	€ 196.53	¥ 1,800.42	Inline Variable Optical Attenuator, 50 dB, No Connectors

Inline Variable Optic Attenuator: SM Fiber, FC/PC Connectors

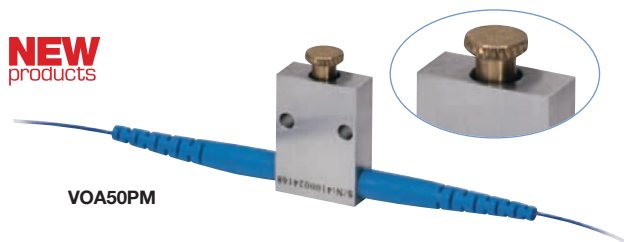
ITEM #	\$	£	€	RMB	DESCRIPTION
VOA50-FC	\$ 245.90	£ 177.05	€ 213.93	¥ 1,959.82	Inline Variable Optical Attenuator, 50 dB, FC/PC Connectors

Inline Variable Optic Attenuator: SM Fiber, FC/APC Connectors

ITEM #	\$	£	€	RMB	DESCRIPTION
VOA50-APC	\$ 265.90	£ 191.45	€ 231.33	¥ 2,119.22	Inline Variable Optical Attenuator, 50 dB, FC/APC Connectors

Polarization-Maintaining, Variable Fiber Optical Attenuators: Inline

Polarization-maintaining inline variable optical attenuators (VOAs) allow the user to manually vary the attenuation of a signal for precise power balancing in fiber circuits or evaluation of the dynamic range of measurement systems. A thumbscrew on the housing adjusts the amount of attenuation. All in-line PM VOAs have fiber pigtailed with a Ø900 µm jacket. The VOA50PM has unconnectorized pigtailed while the pigtailed on the VOA50PM-FC and VOA50PM-APC have 2.0 mm narrow key FC/PC or FC/APC connectors, respectively. For other connector styles, please contact tech support for a quote.



Specifications

- **Operating Wavelength:** 1310/1550 nm ± 40 nm
- **Fiber:** SM15-PS-U25A, 1 m per side
- **Attenuation Range:**
 - Unconnectorized: 0.6 - 50 dB
 - Connectorized: 0.9 - 50 dB
- **Attenuation Resolution:** 0.15 dB
- **Back Reflection (Return Loss):** ≥50 dB
- **Polarization Sensitivity:** <0.15 dB
- **Extinction Ratio:**
 - Unconnectorized: ≥20 dB
 - Connectorized: ≥18 dB
- **Optical Power:** ≤500 mW
- **Operating Temperature:** -5 to 70 °C
- **Dimensions:** 26 mm x 18 mm x 8 mm

Inline Variable Optic Attenuator: PM Fiber, No Connectors

ITEM #	\$	£	€	RMB	DESCRIPTION
VOA50PM	\$ 900.00	£ 648.00	€ 783.00	¥ 7,173.00	PM Variable Optical Attenuator, 50 dB, No Connectors

Inline Variable Optic Attenuator: PM Fiber, FC/PC Connectors

ITEM #	\$	£	€	RMB	DESCRIPTION
VOA50PM-FC	\$ 940.00	£ 676.80	€ 817.80	¥ 7,491.80	PM Variable Optical Attenuator, 50 dB, FC/PC Connectors

Inline Variable Optic Attenuator: PM Fiber, FC/APC Connectors

ITEM #	\$	£	€	RMB	DESCRIPTION
VOA50PM-APC	\$ 960.00	£ 691.20	€ 835.20	¥ 7,651.20	PM Variable Optical Attenuator, 50 dB, FC/APC Connectors