

# OA5 | Programmable Optical Attenuators



## Product Description

JGR's programmable OA5 Optical Attenuators enable precise optical power control and feature high accuracy and superior repeatability.

They are ideal for lab and production applications including power level adjustment in automated test systems, BER testing of transmitters and receivers, and channel equalization in WDM systems.

The OA5 model is a benchtop instrument offering dynamic range of at least 50 dB (depending on the model configuration). The OA5 remote interface can be controlled via GPIB, RS232, USB\* or locally via the user-friendly front panel keypad and display, simplifying the selection and confirmation of attenuation levels.

A variety of configuration options offer additional flexibility. The OA5 series attenuators may be calibrated to particular wavelengths and offer either front panel bulkheads or pigtailed of various lengths.

\*USB interface via USB-DB9 adapter

## KEY FEATURES

- Precise optical power
- $\pm 0.1$  dB Accuracy
- $\pm 0.01$  dB Repeatability
- 100 dB Dynamic range
- Optional new Flexcore
- (5/125  $\mu\text{m}$ ) Fiber testing

## APPLICATIONS

- Manufacturing production testing
- BER testing
- Channel equalization

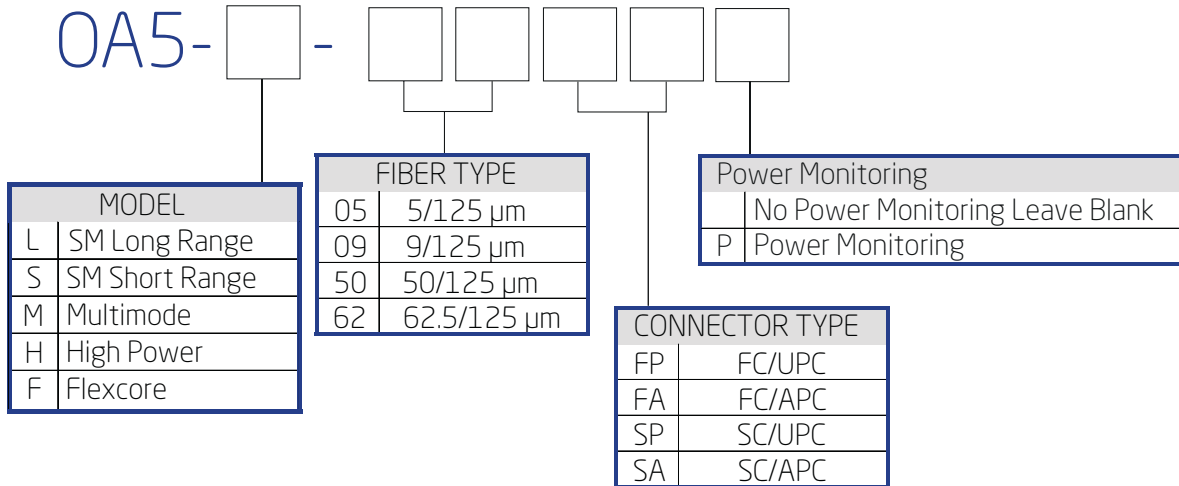
## COMPLIANCE

- UL/CSA 61010
- IEC 61010
- FCC Part 15 (Class A)
- EN 61326 (Class A)

## IN THE BOX

- OA5 Attenuator
- AC power cord

## Ordering Scheme



### JGR Optics Inc.

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## Specifications

OPTICAL / ELECTRICAL SPECIFICATIONS					
Parameter	Specification				
	Single-mode		Multimode	High Power	Flexcore
	Long	Short			
Wavelength Range (nm)	1200-1700	1200-1700	750-1700	1200-1700	980-1700
Attenuation Range (dB)	100	60	60	60	90
Insertion Loss (dB) <sup>1</sup>					
HI1060 (5 / 125µm) <sup>2</sup>					1.8
SM (9 / 125µm) <sup>3</sup>	1.5	1.2		2.0 <sup>4</sup>	
MM (50 or 62.5 / 125µm) <sup>5</sup>			1.8		
Return Loss (dB)					
HI1060 (5 / 125µm)					55
SM (9 / 125µm)		60		55	
MM (50 or 62.5 / 125µm) <sup>6</sup>			35		
PDL (dB)			< 0.1		
Repeatability (dB)			± 0.01		
Resolution (dB)			± 0.01		
Absolute Accuracy (dB) <sup>7</sup>			± 0.1		
Max. Optical Input Power (dBm)		23 (200mW)		30 (1W)	23 (200mW)
Beam Block (dB)			> 100		
Input Voltage		110 - 220 V AC, 50 - 60 Hz			
Interface		Front Panel / GPIB / RS232 / USB <sup>8</sup>			

**Notes:**

<sup>1</sup> Excluding connectors and couplers.

<sup>2</sup> At 980nm and 1060nm.

<sup>3</sup> At 1550nm. 0.3 dB higher at 1310nm.

<sup>4</sup> At 1550nm 1.0dB higher at 1310nm.

<sup>5</sup> At 850nm. 0.3dB lower at 1310nm.

<sup>6</sup> At 800-1350nm.

<sup>7</sup> At calibration wavelength.

<sup>8</sup> USB interface via USB-DB9 adapter.

## MECHANICAL / ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification
Unit Dimensions W x H x D (cm)	26 x 11 x 26
Shipping Box Dimensions W x H x D (cm)	37 x 25 x 38
Unit Weight (kg)	3
Total Shipment Weight (kg)	4
Operating Temperature (°C)	0 to 40
Storage Temperature (°C)	-40 to 70
Humidity (Non-condensing) (°C)	Maximum 95% RH from 0 to 40