

# BR5

## Backreflection Meter

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### KEY FEATURES

- > Stable BR measurements at low values
- > Up to 4 internal lasers
- > BR range to -80 dB
- > User Friendly



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### PRODUCT DESCRIPTION

The BR5 Backreflection Meter is a user-friendly instrument developed with extremely stable optics for precise measurement of backreflection, insertion loss and power. The BR5 features up to four built-in laser sources at wavelengths of 850, 1310, 1490, 1550, 1625 or 1650 nm (depending on fiber type).

An intuitive display and keypad, with one-button access to BR and IL modes, simplifies the collection and management of measurement data. Available in single-mode and multimode, the BR5 is ideal for measurements of connectors, components, and systems.

The BR5 achieves ultra-stable backreflection measurements at very low values. Accuracy is typically  $\pm 0.4$  dB and measurement sensitivity is to -80 dB. Insertion loss relative accuracy is  $\pm 0.05$  dB.

### APPLICATIONS

- > Component testing
- > Connector and patchcord testing
- > Incoming inspection
- > QA testing

### COMPLIANCE

- > UL/CSA 61010
- > IEC 61010
- > IEC 60825-1 Class 1
- > FCC Part 15 (Class A)
- > EN 61326 (Class A)

## SPECIFICATIONS

### Optical/Electrical Specifications

Parameter	Specification	
	Single-mode	Multimode
Fiber Type	(9/125 $\mu\text{m}$ )	(50/125 or 62.5/125 $\mu\text{m}$ )
Operating Wavelengths	1310/1490/1550/1625/1650 $\pm 10$ nm	850/1310, $\pm 20$ nm
Backreflection Range	0 to - 80 dB	0 to - 60 dB
Backreflection Accuracy <sup>1</sup>	$\pm 0.4$ dB	
Detector Type	InGaAs 2 mm; Ge 5 mm	
Power Range	0 to -80 dBm; 0 to -60 dBm	
Absolute Power Accuracy <sup>2</sup>	$\pm 0.25$ dB	
Relative Power Accuracy	$\pm 0.05$ dB (< 5 dB loss) $\pm 0.15$ dB (> 5 dB loss)	$\pm 0.15$ dB
Remote Interface	RS232 and GPIB	
Input Voltage	100 - 240 V AC, 50 - 60 Hz	
Power Consumption	30 VA maximum	
Display	16 character LCD	

1. Add 0.1dB to the spec for every 1dB below -60dB.  
2. Measured at - 10 dBm.

### Mechanical/Environmental Specifications

Parameter	Specification
Dimensions (W x H x D)	25 x 12 x 27 cm
Weight	4 kg
Operating Temperature	0 to 40 °C
Storage Temperature	- 40 to 70 °C
Humidity	Maximum 95% RH from 0 to 40 °C

## ORDERING INFORMATION

Choose one characteristic from each column and assemble the part number. Up to four lasers may be selected for the single-mode version. The standard multimode version contains two lasers at 850 and 1310 nm. Other wavelengths are available upon request (sample: BR5-3050-2-09FA).

### Single-Mode Version

BR5---09FA

<b>LASER 1</b>	<b>LASER 3</b>	<b>DETECTOR TYPE</b>
No Laser   0	No Laser   0	2 mm InGaAs   2
1310 nm   3	1550 nm   5	5 mm Ge   5
<b>LASER 2</b>	<b>LASER 4</b>	
No Laser   0	No Laser   0	
1490 nm   4	1625 nm   6	
	1650 nm   7	

### Multimode Version

BR5-8300-5-FA

<b>FIBER TYPE</b>
50/125 $\mu\text{m}$   50
62.5/125 $\mu\text{m}$   62