



### Product Description

The BR1 Backreflection Meter is a user-friendly instrument developed with extremely stable optics for precise measurement of backreflection, insertion loss and power. The BR1 features up to four built-in laser sources at wavelengths of 850, 1300, 1310, 1490, 1550, 1625 or 1650 nm (depending on fiber type).

With a Backreflection measurement accuracy of  $\pm 0.4$  dB and an Insertion Loss accuracy of  $\pm 0.05$  dB, the BR1 is the perfect tool for reliable & accurate measurements.

The BR1 can be used with our free and easy to use GMS software to help automate test configurations, data logging, and report generation for both short and long term testing needs. The multimode version of the BR1 complies with the encircled flux launch conditions outlined in IEC 61280-4-1 and TIA/EIA 526-14-B."

### KEY FEATURES

- Stable BR measurements at low values
- Up to 4 internal lasers
- BR range to -85 dB

### APPLICATIONS

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

### COMPLIANCE

- MM meets IEC 61280-4-1 Encircled Flux Standard
- UL/CSA 61010
- IEC 61010
- FCC Part 15 (Class A)
- EN 61326 (Class A)

### IN THE BOX

- BR1 Meter
- AC power cord
- Calibration certificate
- Calibrated jumper
- Hybrid test jumper
- SD00 detector cap
- SD01 FC detector adapter
- MW3 Mandrel Wrap



Out 1	IL (dB)	BR (dB)
1310	0.15	-65.1
1490	0.14	-65.0
1550	0.15	-65.1
1625	0.14	-65.0

### Optimized for performance

The internal optics of the BR1 are optimized for the type of fiber being tested. In order to reach industry leading specifications for backreflection accuracy and stability, the optical meters are manufactured with dedicated optics for single-mode or multimode testing needs.

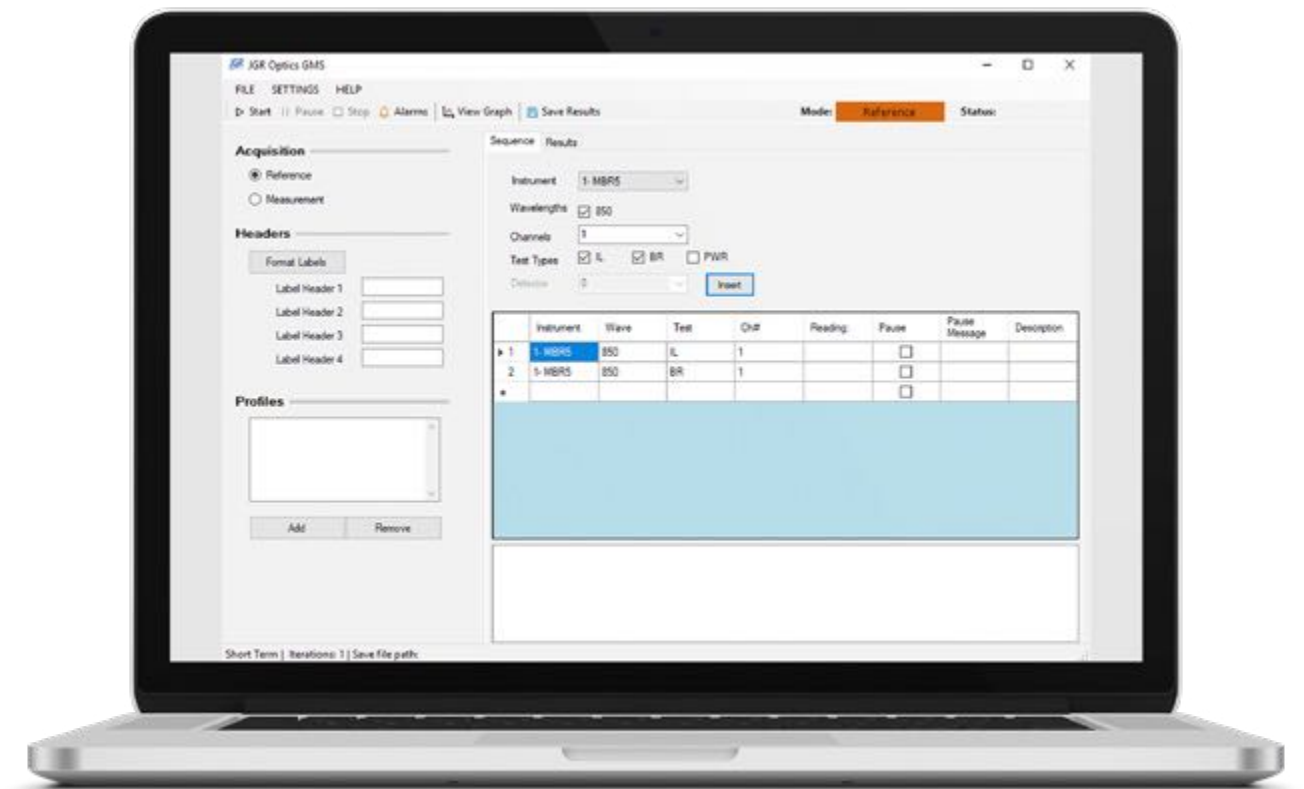
### Touchscreen

The large BR1 touchscreen display allows users to clearly see device under test results. 4 wavelength IL & BR measurements can be performed with simply one tap of the screen.

### Production Friendly Software

The meter may be controlled through remote interface (USB or Ethernet) or locally via the user-friendly touch screen display.

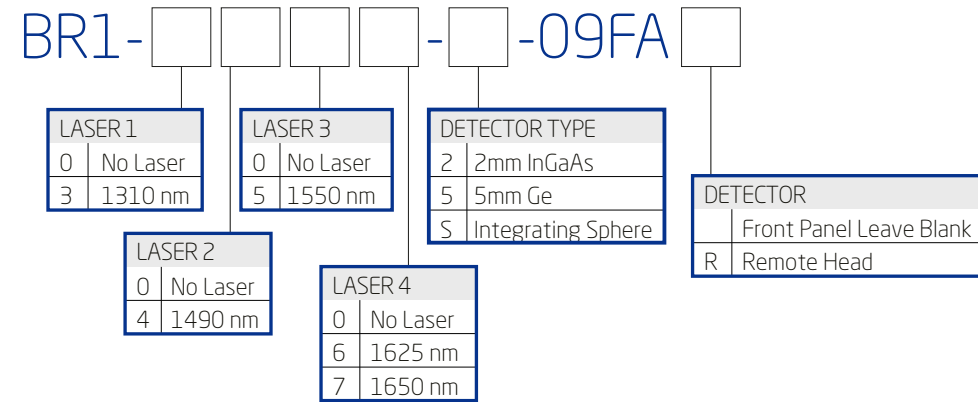
The free GMS Software allows the user to configure test profiles, manage test sequences, and export results to preconfigured templates.



## Ordering Scheme

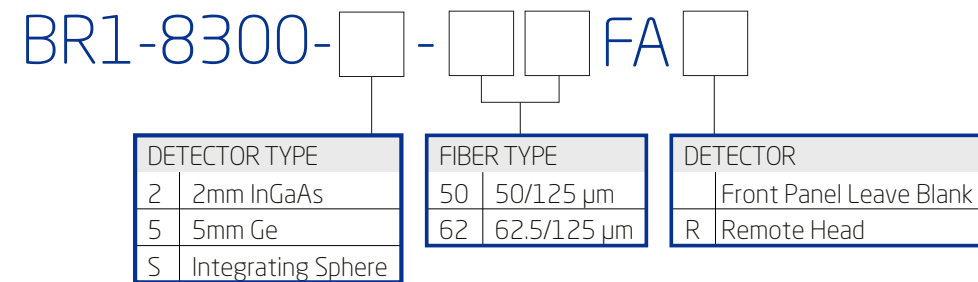
## 1 - Configure BR1 meter

## Single-mode version



- Up to four lasers may be selected in the single-mode version  
Other wavelengths available upon request

## Multimode version



- The standard multimode version contains two lasers at 850 and 1300 nm.  
Other wavelengths are available upon request

## 2 - Add accessories

## Slide detector adapters

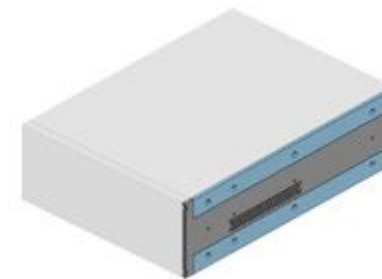


More detector adapters available upon request.  
See more details on pg 84.

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TYPE							
00	Cap	14	MU	20	DA113 Barrel	38	MTPO/MPO-16
01	FC	15	E2000	21	BFA3000 Barrel	64	CS
02	ST	16	Universal 2.5.	26	Universal 1.6	67	SN
03	SC	17	MTP/MPO	34	LC Duplex	68	MDC
04	Universal 1.25.	18	LC	35	Optitap		
12	MT	19	MT-RJ	37	MXC		

## Rackmount Kit



2U-RACK-KIT

## Optical/Electrical Specification

Parameter	Specification	
	Single-mode	Multimode
Fiber Type (µm)	9/125	50/125 / 62.5/125
Encircled Flux Standard	N/A	IEC 61280-4-1
Operating Wavelengths (nm)	1310 / 1490 / 1550 / 1625 / 1650	850 / 1300
Backreflection Range (dB)	0 to -85	0 to -60
Backreflection Accuracy (dB) <sup>1,2</sup>	± 0.4	
Detector Type	2mm InGaAs / 5mm Ge / Integrating Sphere	
Power Range (dBm)	0 to -80 / 0 to -60 / 0 to -40	
Insertion Loss Accuracy (dB)	± 0.03 (< 5 dB loss)	
	± 0.15 (≥ 5 dB loss)	
Absolute Power Accuracy (dB) <sup>3</sup>	± 0.25	
Remote Interface	USB / Ethernet	
Display	5" touch screen	
Input Voltage	100 - 240 V AC, 50 - 60 Hz	
Power Consumption (VA)	60 maximum	

Notes:

<sup>1</sup> Add 0.1 dB to the spec for every 1dB below -60dB (single-mode).<sup>2</sup> Add 0.1dB to the spec for every 1dB below -45dB (multimode).<sup>3</sup> Measured at -10 dBm.

## Mechanical/Environmental Specifications

Parameter	Specification
Unit Dimensions W x H x D (cm)	23.5 x 12 x 32.5
Shipping Box Dimensions W x H x D (cm)	36,5 x 39 x 53
Unit Weight (kg)	8
Total Shipment Weight (kg)	9
Operating Temperature (°C)	0 to 55
Storage Temperature (°C)	-40 to 70
Humidity (Non-condensing)	Maximum 95% RH from 0 to 40°C

