

MAP Variable Backreflector (mVBR-A1)



Key Features

- Operation at 850/1310 or 1310/1550 nm
- Single-mode or multimode fiber
- Can be automated when used with MAP-200 LXI-compliant interfaces and IVI drivers

Applications

- Transmitter/receiver development and testing
- Reflection testing for connectors
- Quality assurance acceptance testing
- Laser development and production

Safety Information

- The MAP Variable Backreflector, when installed in a MAP chassis, complies to CE, CSA/UL/IEC61010-1, plus LXI Class C requirements.

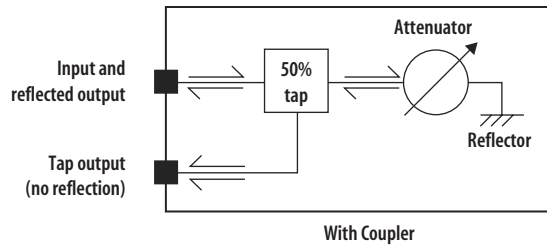
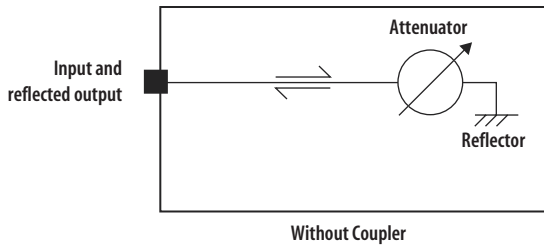
The Multiple Application Platform (MAP) Variable Backreflector (mVBR-A1) is optimized for the industry-leading JDSU MAP-200 platform. Based on the previous-generation MAP, the MAP-200 is the first photonic layer lab and manufacturing platform that is LAN Extensions for Instrumentation (LXI)-compliant by conforming to the required physical attributes, Ethernet connectivity, and interchangeable virtual instrument (IVI) drivers. The MAP-200 platform is optimized by density and maximum configurability to meet specific application requirements in the smallest possible foot print. The MAP Variable Backreflector cassette provides precise levels of return loss (RL) to transmitters, enabling system sensitivity measurement or system degradation as a function of back-reflection measurement.

When used with a transmitter/receiver pair and characterization equipment, the MAP backreflector can be used to establish the magnitude of reflections that significantly degrade transmission system performance, and to characterize the problems they cause.

The MAP backreflector uses the JDSU linear attenuator prism and high reflectivity mirror to precisely control the level of RL. The cassette is available in single-mode (SM) or multimode (MM) fibers and with an optional coupler for monitoring.

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Optical Configurations for the Variable Backreflector Cassette



Specifications

Parameter	Single-mode fiber (SMF) without Coupler	Single-mode fiber (SMF) with 50/50 Coupler	Multimode fiber (MMF) without Coupler	Multimode fiber (MMF) with 50/50 Coupler
Wavelength range	1260 to 1650 nm	1260 to 1650 nm	750 to 1350 nm	750 to 1350 nm
Maximum backreflection level	>-5.0 dB	>-9.5 dB	>-5.0 dB	>-9.5 dB
Minimum backreflection level (APC/PC)	<-60/<-45 dB	<-60/<-45 dB	-30/<-30 dB	-30/<-30 dB
Insertion loss (IL)(IN to OUT) ^{1,2,3}	N/A	<5.0 dB	N/A	<6.0 dB
Relative backreflection setting accuracy ^{1,3,4}	±0.2	±0.2	±0.4	±0.4
Backreflection setting resolution	0.01	0.01	0.01	0.01
Fiber type	9/125 μm	9/125 μm	50/125 or 62.5/125 μm	50/125 or 62.5/125 μm
Polarization dependent loss (PDL) ¹	<1.0 dB	<1.0 dB	N/A	N/A
Maximum optical input power			200 mW	
Calibration period			2 years	
Warm-up time			30 minutes	
Operating temperature			0 to 50°C	
Storage temperature			-30 to 60°C	
Humidity			<90% at 23°C, <20% at 50°C (relative non-condensing)	
Dimensions (W x H x D)			4.06 x 13.26 x 37.03 cm (1.6 x 5.22 x 14.58 in)	
Weight			1.1 kg (2.43 lb) single backreflector/1.3 kg (2.87 lb) dual backreflector	

1. At 1310 ±15 and 1550 ±15 nm for SM units and at 850 ±15 nm and 1310 ±15 nm for MM units
2. Including one mated pair of connectors
3. At 23 ±5°C
4. From maximum backreflection to -40 dB for SM units and from maximum backreflection to -25 dB for MM units

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Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Product Code	Description
Base Options (Required, select one)	
MVBR-A1S0	Single Backreflector, no built-in option
MVBR-A1S1	Single Backreflector with built-in 50/50 splitter
MVBR-A1D0	Dual Backreflector, no built-in option
MVBR-A1D1	Dual Backreflector with built-in 50/50 splitter
Fiber Type Options (Required, select one)	
M100	9/125 fiber type
M101	50/125 fiber type
M102	62.5/125 fiber type
Connector Options (Required, select one)	
MFP	FC/PC connector type
MFA	FC/APC connector type
MSC	SC/PC connector type

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