

Features

- Proven, reliable, and compact design
- Low back-reflections/high return loss—ensures source stability and measurement repeatability
- Less than 2dB insertion loss
- Large dial indicator
- Fixed high performance FC-APC 8° angle-polished interface
- Cam-driven, all-mechanical construction—no batteries required
- Easy to use—turn the thumbwheel to adjust the attenuation



Applications

Receiver Sensitivity Testing

The 338A variable single-mode attenuator allows for quick optical power adjustments when performing fiber optic tests and measurements. By serving as a “fiber optic potentiometer,” the 338A makes receiver sensitivity testing simple and convenient. The 338A can also be used to simulate long lengths of single-mode fiber when developing transmission links.

Bit Error Rate (BER) Testing

The 338A is an essential tool for performing bit error rate (BER) tests and system margin analysis. The low back-reflections induced by the instrument ensure that the transmitter output is not adversely affected during testing.

The 338A is fitted with fixed high performance FC-APC 8° angle-polished interfaces. The FC-APC interfaces assure optimum return loss performance, maximum accuracy, and excellent repeatability when conducting critical measurements on fiber optic systems.

Key Specifications

Insertion loss	< 2dB (1.25dB typical)
Resolution	< 0.1dB
Return loss	> 55dB
Attenuation range	0 to 35dB
Max. input power	+23dBm
Fiber compatibility	Single-mode SMF-28
Connector interface	Fixed FC-APC, 8° angle-polished endface

Ordering Information

The 338A is fitted with fixed FC-APC 8° angle-polished interfaces. This instrument should not be used with standard FC-PC connectors or cables.

Part No.	Description
338A	338A variable attenuator

Accessories

900B	Ruggedized carrying case. Holds three handheld instruments and accessories.
901B	Ruggedized carrying case. Holds five handheld instruments and accessories.
911B	Soft nylon field case. Holds two handheld instruments. Separate accessory compartment.
945	All-In-One connector cleaning system. Self-contained—eliminates canned air, alcohol and other awkward consumables.
946	Adapter cleaning wands. For all 2.5mm receptacles.

Specifications¹

Subject to change without notice

Insertion loss	< 2dB (1.25dB typical)
Resolution	< 0.1dB
Return loss	> 55dB
Attenuation range	0 to 35dB
Polarization dependent loss	< 0.1dB
Maximum input power	13dBm
Fiber compatibility	Single-mode SMF-28
Optical interface	Fixed FC-APC, 8° angle-polished endface
Environmental:	
Operating temp.	-15°C to +60°C
Storage temp.	-35°C to +70°C
Humidity	0 to 95% RH, non-condensing
Dimensions	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
Weight	230 g (8.1 oz.)

¹ Within specified ambient environment of +20°C to +25°C.

