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Find the *Exfo FVA-60B* at our website: *Click HERE*

FVA-60B

NETWORK TESTING–OPTICAL



- Up to 70 dB attenuation
- Typical 2.5 dB insertion loss
- Automatic attenuation sequence with Program mode
- Standard Universal Interface

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Lab and Field Versatility

This portable variable attenuator performs just as well in a laboratory environment as it does in the field. Superior specifications make it the variable attenuator of choice for a number of applications. For lab or fieldwork flexibility, choose the FVA-60B.



Key Features

- Accurate system loss simulation
- Return loss of > 40 dB
- RS-232 computer interface for custom applications

Total Flexibility

Three attenuation display modes:

- Absolute (including insertion loss)
- Relative (in reference to 0.00 dB level)
- x + b (arbitrary value)

Program mode: Cycles through a repeatable sequence of up to 60 attenuation steps, pausing for one second or up to 60 hours at a time. The Program mode is particularly suited to accelerated bit-error-rate (BER) testing.

Fourteen available wavelengths: Matches your source wavelength to the nearest 10 nm for unbeatable accuracy.

Variable scanning speed: Scans the complete attenuation range at four different speeds according to the selected step size (0.05, 0.20 or 1.00 dB/step and variable step size).

Remote Control Capability

Operate the FVA-60B remotely from your PC using the standard RS-232 interface and control codes. Program software solutions are adapted to your testing needs.

Three-Way Powering Goes a Long Way

The FVA-60B features three complementary power sources for extended operation: a rechargeable NiCd battery, a 9 V alkaline backup battery and an AC adapter/charger for continuous operation.

Exceptional Specifications

High-quality optical components make the FVA-60B Variable Attenuator the standard for performance and flexibility. EXFO's computer-assisted calibration techniques deliver remarkable specifications:

- ± 0.15 dB linearity
- 0.05 dB resolution
- ± 0.10 dB repeatability

Multiple Applications

The FVA-60B enables consistent operation in various manual or automated testing situations.

- BER testing
- System testing and acceptance
- Power meter calibration and verification
- Optical margin analysis
- System loss simulation
- Field, manufacturing and R&D applications

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FVA-60B
Variable Attenuator

SPECIFICATIONS [a]

Model		FVA-60B-B-XX	FVA-60B-C-XX	FVA-60B-D-XX	FVA-60B-E-XX
Fiber type (µm)		9/125	50/125	62.5/125	100/140
Calibration wavelengths (nm)		1310/1550	1300	1300	1300
Attenuation maximum (dB)		70	65	65	65
Insertion loss [b, c] (dB)	typical	2.5	2.5	2.5	2.5
	maximum	3.5	4.0	4.0	4.0
Resolution (dB)		0.05	0.05	0.05	0.05
Linearity [d] (dB)		± 0.15	± 0.15	± 0.15	± 0.15
Repeatability (dB)	typical	± 0.03	± 0.03	± 0.03	± 0.03
	maximum	± 0.10	± 0.10	± 0.10	± 0.10
Return loss [b] (dB)	typical	45	27	27	27
	minimum	40	20	20	20
Max. input power (dBm) [e]		15	15	15	15

GENERAL SPECIFICATIONS

Size		220 mm x 110 mm x 50 mm	(8 3/4 in x 4 1/2 in x 2 in)
Weight	unit	0.75 kg	(1 1/2 lb)
	shipping	2.5 kg	(5 1/2 lb)
Temperature	operating	–10 °C to 50 °C	(14 °F to 122 °F)
	storage	–30 °C to 70 °C	(–22 °F to 158 °F)
Relative humidity		0 % to 95 % non-condensing	
Power		AC charger (continuous operation), NiMH (5 to 25 hours depending on usage), 9 V alkaline batteries (3 to 10 extra hours depending on usage)	
Speed		0 to 70 dB in 10 seconds at maximum scan rate	

14 wavelengths available, of which two can be picked for quick toggling.

Multimode (nm)	820, 830, 840, 850, 860, 870, 880, 1270, 1280, 1290, 1300, 1310, 1320, 1330
Singlemode (nm)	1280, 1290, 1300, 1310, 1320, 1330, 1340, 1520, 1530, 1540, 1550, 1560, 1570, 1580

STANDARD ACCESSORIES

User guide, carrying case, protective holster, shoulder strap, RS-232 serial interface (comes with cable and application software), AC adapter/charger, 9 V alkaline battery, Certificate of Compliance

BELLCORE PRODUCT CODES

Model	CPR#	ECI#	CLEI#
FVA-60B	574669	661071	LGTDJ20AAA

NOTES

a. At 23 °C ± 2 °C unless otherwise specified.

b. At 1310 nm and 1550 nm for singlemode fiber; at 850 nm and 1300 nm for multimode fiber. The insertion loss is dependent on the input numerical aperture.

c. With FC/UPC connectors for singlemode fiber and FC/PC for multimode fiber.

d. At a calibrated wavelength, using a non-polarized light source with 0.002 dB stability (source accuracy of ± 0.5 nm) and up to 50 dB of attenuation.

e. Typical value. Prolonged exposure may damage the unit.

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ORDERING INFORMATION

FVA-60B-X-XX

Fiber code
B = 9/125 µm singlemode
C = 50/125 µm multimode
D = 62.5/125 µm multimode
E = 100/140 µm multimode

Connector code
EI-EUI-28 = UPC/DIN 47256
EI-EUI-76 = UPC/HMS-10/AG
EI-EUI-89 = UPC/FC narrow key
EI-EUI-90 = UPC/ST
EI-EUI-91 = UPC/SC
EI-EUI-95 = UPC/E-2000
EA-EUI-28 = APC/DIN 47256
EA-EUI-89 = APC/FC narrow key
EA-EUI-91 = APC/SC
EA-EUI-95 = APC/E-2000

Example: FVA-60B-B-EI-EUI-89
FVA-60B-B-EA-EUI-89



Rugged Handheld Solutions

OPTICAL
- OTDRs
- OLTSs
- Power meters
- Light sources
- Talk sets

COPPER ACCESS
- ADSL/ADSL2+, SHDSL, VDSL test sets
- VoIP and IPTV test sets
- Ethernet test sets
- POTS test sets



Platform-Based Solutions

OPTICAL FIBER
- OTDRs
- OLTSs
- ORL meters
- Variable attenuators

DWDM TEST SYSTEMS
- OSAs
- PMD analyzers
- Chromatic dispersion analyzer

TRANSPORT AND DATACOM
- Next-generation SONET/SDH and OTN testers
- SONET/DSn (DS0 to OC-192) testers
- SDH/PDH (64 kbit/s to STM-64) testers
- T1/T3, E1 testers
- 10/100 Mbit/s and Gigabit Ethernet testers
- Fibre Channel testers
- 10 Gigabit Ethernet testers

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EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.EXFO.com/recycle. **Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.**

For the most recent version of this spec sheet, please go to the EXFO website at http://www.EXFO.com/specs
In case of discrepancy, the Web version takes precedence over any printed literature.

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