

**Aumictech**

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**Data Sheet**

August 14, 2026

EXFO

## Exfo FVA-3100-BW91 Variable Attenuator

The Exfo FVA-3100-BW91 is a variable optical attenuator designed for precise control of optical signal power. It features a wide wavelength range and high attenuation resolution, making it suitable for various testing and measurement applications in optical communication systems.



|                           |                                                                                                                       |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------|
| MODEL                     | CALIBRATION                                                                                                           |
| <b>Exfo FVA-3100-BW91</b> | <b>Available on request</b>                                                                                           |
| CONDITION                 | STATUS                                                                                                                |
| <b>Used</b>               | <b>In stock</b>                                                                                                       |
| RFQ / SKU                 | LISTING                                                                                                               |
| <b>FVA-3100-BW91</b>      | <a href="https://aumictechlabs.com/products/fva-3100-bw91-2/">https://aumictechlabs.com/products/fva-3100-bw91-2/</a> |

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

### This unit

The Exfo FVA-3100-BW91 is a variable optical attenuator that delivers precise, repeatable control of optical signal power across wide wavelength ranges. It achieves attenuation up to 100 dB with 0.005 dB resolution and ultra-low insertion loss (typically 1.5 dB maximum), making it essential for EDFA characterization, component loss simulation, power meter linearity verification, and spectral tuning in optical communication systems. Technical Specifications Attenuation:  $\geq 65$  dB to  $\geq 100$  dB depending on model and wavelength Attenuation Resolution: 0.005 dB Insertion Loss: Typically 1.5 dB, maximum 1.8 dB Linearity:  $\pm 0.1$  dB Spectral Uniformity:  $\pm 0.1$  dB across WDM spectrum (BW option) Return Loss:  $> 55$  dB (UPC connectors, singlemode);  $> 50$  dB (APC connectors, singlemode) Maximum Input Power: 25 dBm Wavelength Range: 700 to 1350 nm or 1200 to 1650 nm Wavelength Resolution: 0.1 nm Key Features Supports 9/125  $\mu$ m singlemode and 50/125  $\mu$ m, 62.5/125  $\mu$ m, 100/140  $\mu$ m multimode fibers Programmable sequences up to 100 attenuation steps

with dwell times to 1000 hours per step Three attenuation modes: Absolute, Relative, and X+B (reference-based) Front-panel manual control with user-defined steps and on-display value editing Optional monitor output (select models) for receiver-end power-level verification Remote control via GPIB (IEEE-488.1, IEEE-488.2) or RS-232 LabVIEW drivers and OCX controls available Typical Applications EDFA characterization and optimization Component and system loss simulation Instrument calibration and verification Power meter linearity measurement Automated bit-error-rate (BER) testing Compatibility & Integration Configurable for both singlemode and multimode fiber systems. Operates as a standalone instrument or mounts in 19-inch rack. Dimensions: 117 mm (H) × 222 mm (W) × 333 mm (D); weight 2.6 kg. Operating temperature 0 °C to 40 °C.

## FVA3100BW91 Characteristics / Specifications

| PARAMETER                         | VALUE                                                                                             |
|-----------------------------------|---------------------------------------------------------------------------------------------------|
| Model Family                      | FVA-3100                                                                                          |
| Queue Interface Coding            | 91 SC class interface coding                                                                      |
| Singlemode Fiber Type Family      | 9/125 um onBcodes                                                                                 |
| Singlemode Wavelength Range       | 1200 to 1650 nm                                                                                   |
| Singlemode Max Attenuation        | greater than or equal to 70 dB                                                                    |
| Typical Return Loss Singlemode    | greater than 25 dB                                                                                |
| Maximum Input Power Singlemode    | 20 dBm                                                                                            |
| Shutter Isolation Singlemode      | greater than 100 dB                                                                               |
| Multimode Wavelength Range Family | 700 to 1350 nm                                                                                    |
| Multimode Max Attenuation Family  | greater than or equal to 65 dB                                                                    |
| Multimode Fibers Family           | 50/125 62.5/125 100/140 um                                                                        |
| Form Factor                       | benchtop with optional 19 inch rack                                                               |
| Connector Interface               | EXFO EI/EA universal interface adapters                                                           |
| Monitor Port Family               | available on BM style codes                                                                       |
| Intended Use                      | loss simulation and calibration                                                                   |
| Calibration Class                 | meticulous calibration for repeatable settings                                                    |
| Spectral Tuning Use               | yes per OEM applications list                                                                     |
| Ultra Low Insertion Loss Class    | yes per OEM optimization claim                                                                    |
| Specification Ambient Class       | laboratory ambient unless OEM table states otherwise                                              |
| Related Family Models             | FVA-3100-B BMCDEDocumentation Source Class: EXFO FVA-3100 Variable Attenuator specification sheet |
| Faceplate Confirm Class           | confirm exact fiber and connector codes on unit                                                   |
| Wavelength range                  | 1200 to 1650 nm                                                                                   |
| Attenuation                       | greater than or equal to 70 dB                                                                    |
| Return loss                       | Singlemode: greater than 25 dB                                                                    |

| PARAMETER  | VALUE                     |
|------------|---------------------------|
| Fiber type | Family: 9/125 um onBcodes |

# Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

| Specifications                                                                                                                                                                  |                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Specifications                                                                                                                                                                  |                                                                                                   |
| PARAMETER                                                                                                                                                                       | VALUE                                                                                             |
| Model Family                                                                                                                                                                    | FVA-3100                                                                                          |
| Queue Interface Coding                                                                                                                                                          | 91 SC class interface coding                                                                      |
| Singlemode Fiber Type Family                                                                                                                                                    | 9/125 um onBcodes                                                                                 |
| Singlemode Wavelength Range                                                                                                                                                     | 1200 to 1650 nm                                                                                   |
| Singlemode Max Attenuation                                                                                                                                                      | greater than or equal to 70 dB                                                                    |
| Typical Return Loss Singlemode                                                                                                                                                  | greater than 25 dB                                                                                |
| Maximum Input Power Singlemode                                                                                                                                                  | 20 dBm                                                                                            |
| Shutter Isolation Singlemode                                                                                                                                                    | greater than 100 dB                                                                               |
| Multimode Wavelength Range Family                                                                                                                                               | 700 to 1350 nm                                                                                    |
| Multimode Max Attenuation Family                                                                                                                                                | greater than or equal to 65 dB                                                                    |
| Multimode Fibers Family                                                                                                                                                         | 50/125 62.5/125 100/140 um                                                                        |
| Form Factor                                                                                                                                                                     | benchtop with optional 19 inch rack                                                               |
| Connector Interface                                                                                                                                                             | EXFO EI/EA universal interface adapters                                                           |
| Monitor Port Family                                                                                                                                                             | available on BM style codes                                                                       |
| Intended Use                                                                                                                                                                    | loss simulation and calibration                                                                   |
| Calibration Class                                                                                                                                                               | meticulous calibration for repeatable settings                                                    |
| Spectral Tuning Use                                                                                                                                                             | yes per OEM applications list                                                                     |
| Ultra Low Insertion Loss Class                                                                                                                                                  | yes per OEM optimization claim                                                                    |
| Specification Ambient Class                                                                                                                                                     | laboratory ambient unless OEM table states otherwise                                              |
| Related Family Models                                                                                                                                                           | FVA-3100-B BMCDEDocumentation Source Class: EXFO FVA-3100 Variable Attenuator specification sheet |
| Faceplate Confirm Class                                                                                                                                                         | confirm exact fiber and connector codes on unit                                                   |
| Notes                                                                                                                                                                           |                                                                                                   |
| From EXFO FVA-3100 Variable Attenuator specification sheet family rows. Connector/fiber suffix on slug is ordering interface coding; optical limits are family verified values. |                                                                                                   |

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

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Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.