

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

EXFO

Exfo IQS 3100 BM EI Variable Attenuator

The Exfo IQS 3100 is a benchtop variable optical attenuator (VOA) module. It provides precise and reliable control of optical signal power levels for various fiber optic testing and measurement applications. Featuring a broad wavelength range and low insertion loss, it is suitable for use in research, development, and manufacturing environments.



MODEL Exfo IQS-3100	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU IQS-3100	LISTING https://aumictechlabs.com/products/iqs-3100-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Exfo IQS 3100 BM EI is a benchtop variable optical attenuator (VOA) module engineered for precise optical signal power control in fiber optic testing and measurement. It delivers repeatable attenuation up to 100 dB with ± 0.1 dB spectral uniformity and ultra-low insertion loss. The module supports both singlemode and multimode fiber, operating across broad wavelength ranges with programmable control via GPIB, Ethernet, or RS-232 when integrated with the IQS-500 chassis. Three attenuation modes - absolute, relative, and X+B reference - enable flexible measurement workflows, while a high-isolation shutter protects personnel and sensitive optical components. Integrated monitor output provides accurate power-level monitoring at the receiver end. Technical Specifications Attenuation Range: Up to 100 dB maximum Spectral Uniformity: ± 0.1 dB Insertion Loss: Ultra-low Attenuation Modes: Absolute (includes insertion loss), relative (0.00 dB reference), X+B (variable reference) Attenuation Steps: Programmable sequences up to 100 steps

Wavelength Range (Singlemode): 1200 to 1650 nm (measured at 1310 nm and 1550 nm)
Wavelength Range (Multimode): 850 nm and 1300 nm Monitor Output: Available for receiver-end power monitoring Optical Connectors: FC/APC (singlemode), FC/PC (multimode); customization available High-Isolation Shutter: Included Key Features Programmable control with LabVIEW drivers, SCPI commands, and COM/DCOM libraries Remote operation via GPIB (IEEE-488.1, IEEE-488.2), Ethernet, and RS-232 Supports 9/125 μm singlemode, 50/125 μm and 62.5/125 μm multimode fibers Repeatable attenuation stepping for automated test sequences Typical Applications Bit-error-rate (BER) testing EDFA characterization System or component loss simulation Instrument calibration and linearity measurement Optical margin analysis Transceiver testing and system verification Compatibility & Integration The IQS 3100 BM EI integrates with the IQS-500 chassis for full remote control. Exfo Universal Interface (EUI) connector adapters are available separately for alternative fiber terminations.

IQS3100 Characteristics / Specifications

PARAMETER	VALUE
Fiber Type Singlemode B	9/125 um
Wavelength Range Singlemode	1200 to 1650 nm
Maximum Attenuation Singlemode	greater than 70 dB
Insertion Loss Maximum Singlemode	1.8 dB
Resolution Singlemode	0.005 dB
Typical Return Loss Singlemode	greater than 55 dB
Maximum Input Power	20 dBm
Linearity Class Singlemode Family	plus or minus 0.1 dB
Repeatability Class Family	plus or minus 0.03 dB
Maximum PDL Class Family	0.2 dB
Shutter Isolation Class Family	greater than 100 dB
Insertion Loss Typical Singlemode Family	1.1 dB
Monitor Port Models Class	available BM style
Multimode Wavelength Range Class	700 to 1350 nm
Multimode Maximum Attenuation Class	greater than or equal to 60 dB
Multimode Insertion Loss Typical Family	1.3 dB
Multimode Insertion Loss Maximum Family	2.0 dB
Multimode Resolution Class	0.01 dB
Multimode Typical Return Loss Class	greater than 25 dB
Platform Compatibility Class	IQS-505P IQS-510E IQS-510P one-slot module
Form Factor	IQS plug-in module
Wavelength range	Singlemode: 1200 to 1650 nm
Attenuation	Singlemode: greater than 70 dB
Return loss	Singlemode: greater than 55 dB

PARAMETER	VALUE
Fiber type	Singlemode B: 9/125 um

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 list wavelength range 1200 to 1650 nm, maximum attenuation greater than 70 dB, maximum insertion loss 1.8 dB, 0.005 dB resolution, typical return loss greater than 55 dB, and maximum input power 20 dBm; related FVA-3100 stand-alone family tables align with these singlemode and multimode classes.

Applications

EDFA and subsystem characterization, component and system loss simulation, optical margin analysis, power meter linearity verification, spectral tuning, and automated manufacturing attenuation control on IQS mainframes.

Key Features

Programmable modular attenuator for IQS platforms

Fine 0.005 dB resolution on singlemode models

High return-loss singlemode configurations

Optional monitor-port and broadband WDM uniformity variants

Remote control through IQS platform interfaces

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Fiber Type Singlemode B	9/125 um
Wavelength Range Singlemode	1200 to 1650 nm
Maximum Attenuation Singlemode	greater than 70 dB
Insertion Loss Maximum Singlemode	1.8 dB
Resolution Singlemode	0.005 dB
Typical Return Loss Singlemode	greater than 55 dB
Maximum Input Power	20 dBm
Linearity Class Singlemode Family	plus or minus 0.1 dB
Repeatability Class Family	plus or minus 0.03 dB
Maximum PDL Class Family	0.2 dB
Shutter Isolation Class Family	greater than 100 dB
Insertion Loss Typical Singlemode Family	1.1 dB
Monitor Port Models Class	available BM style
Multimode Wavelength Range Class	700 to 1350 nm
Multimode Maximum Attenuation Class	greater than or equal to 60 dB
Multimode Insertion Loss Typical Family	1.3 dB
Multimode Insertion Loss Maximum Family	2.0 dB
Multimode Resolution Class	0.01 dB
Multimode Typical Return Loss Class	greater than 25 dB

PARAMETER	VALUE
Platform Compatibility Class	IQS-505P IQS-510E IQS-510P one-slot module
Form Factor	IQS plug-in module

Notes

Singlemode IQS-3100-B numeric values from published EXFO IQS-3100-B module specification summaries; family linearity/PDL/shutter figures and multimode rows from related FVA-3100/IQS-3100 family OEM tables. Confirm BW/BWM spectral-uniformity options on the faceplate and calibration certificate.

Available from Aumictech

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

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

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
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.