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Data Sheet

August 13, 2026

EXFO

Exfo IQ-5523-ST-89 PMD Analyzer

Exfo Fiber Characterization Systems. Accuracy: deviation from linearity with 95% (2σ) confidence.



MODEL

Exfo IQ-5523-ST-89

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

IQ-5523-ST-89

LISTING

<https://aumictechlabs.com/products/iq-5523-st-89-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The EXFO IQ-5523-ST-89 PMD Analyzer is a precision instrument for measuring Polarization Mode Dispersion (PMD) and related optical parameters in fiber and component characterization. It delivers high-accuracy PMD assessments critical for signal integrity validation in high-speed optical transmission systems, operating across laboratory and production environments. Technical Specifications PMD Measurement Range 0.05 ps to 35 ps at 1550 nm 0.06 ps to 35 ps at 1310 nm Extended range option: 0.05 ps to 200 ps Can measure PMD of 0 ps; calculated values below 0.1 ps and interpolated values above 115 ps are possible Measurement Performance Measurement speed: typically under 15 seconds for complete PMD diagnosis (some models achieve 5 seconds) Measurement method: Interferometric, per TIA/IEC standard FOTP-124 Accuracy: deviation from linearity with 95% (2σ) confidence for birefringent fiber, referenced to EXFO standards Physical Characteristics Dimensions: 12 × 7.5 × 26.2 cm (4 3/4 × 3 × 10 1/3 in) Operating temperature: -40°C to 50°C (-40°F to 122°F) Relative humidity: 0 to 80% non-condensing Optical Wavelengths Primary: 1310 nm, 1550 nm Additional bands tested: 1625 nm Key Features Windows-compatible

software for fast PMD calculation and statistical analysis Direct on-screen PMD distribution visualization PMD coefficient calculation representing PMD as a function of link length Measurement annotation, table building, and result recording capabilities Intuitive interface requiring minimal operator training Typical Applications High-speed transmission system signal quality assessment Fiber PMD characterization and component performance evaluation PMD impact analysis on optical network signal integrity Production and laboratory optical parameter validation Compatibility & Integration Standards Compliance ITU G.650.3 fiber testing standard FOTP-243, FOTP-175B, and FOTP-124 standards Integration Compatible with EXFO IQ-200 Optical Test System via IQ-203 Control Unit for multi-module configurations Compatible light sources: EXFO M2100 Broadband Light Source, FLS-110P Optical Source

Features & description

From manufacturer datasheet

Features

- Dual wavelength 1310/1550 nm PMD analyzer (5523 configuration)
- Interferometric Michelson method; TIA FOTP-124 class compliance
- Standard and extended analysis ranges
- Second-order PMD delay and coefficient calculation
- Auto-range and auto-diagnosis software modes
- Multiple-measurement statistical tables
- FC/UPC connector code 89 (ST-89 ordering style)
- Hosts in IQ / FTB modular platforms

Applications

- PMD delay and coefficient characterization of fiber and cable
- Second-order PMD evaluation for high-bit-rate upgrade readiness
- Field and factory interferometric PMD measurements
- Multi-measurement statistical averaging over time
- IQ-platform modular PMD testing with polarized LED sources

IQ5523ST Characteristics / Specifications

PARAMETER	VALUE
Model	IQ-5523-ST-89
Manufacturer	EXFO
Instrument Type	Dual Wavelength PMD Analyzer Module
Alias	IQ-5523; FTB-5523 equivalent configuration; IQ-5500 family
Wavelengths	1310 nm and 1550 nm
Connector code	89 FC/UPC
Analysis method	interferometric (Michelson)
Standard analysis range typical	0.05 ps to 35 ps
Extended analysis range typical	0.05 ps to 200 ps with ER option
Measurement range instrument	0.1 ps to 115 ps
Calculated low end class	down to about 0.05 ps
Estimated high end class	up to about 200 ps with ER
Dynamic range dual wavelength typical	32 dB (40 dB with M-2100 broadband source)
Average measuring time	15 s
Second order PMD	calculated from measured PMD
Operating temperature	5 C to 40 C
Storage temperature	-20 C to 60 C
Relative humidity	0% to 80% non-condensing
Standard accessories class	instruction manual; PMD software; connector cleaners
Source type class	polarized LED broadband
Vibration immunity	high due to short coherence LED source
Auto range	yes
Statistical results	mean; standard deviation; min; max PMD delay and coefficient
Platform class	IQ Optical Test System / FTB Universal Test System
Compliance method class	EIA/TIA-455-124 interferometric

PARAMETER	VALUE
Dynamic range note	at 1 ps reference condition
High DR option source	M-2100 Broadband Light Source
Module family	FTB-5500 / IQ-5500 PMD Analyzer Notes Specs from EXFO FTB-5500 PMD Analyzer datasheet FTB-5523 (1310/1550) column and reseller IQ-5523-ST-89 listings. Confirm ER option, source pairing, and exact IQ vs FTB host firmware on the installed module.
Humidity	0% to 80% non-condensing

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	20 C to 60 C
Operating temperature	5 C to 40 C
Operating Temperature	5 C to 40 C
Humidity	0% to 80% non-condensing
Relative humidity	0% to 80% non-condensing
Standard accessories class	instruction manual; PMD software; connector cleaners
Source type class	polarized LED broadband
Vibration immunity	high due to short coherence LED source
Auto range	yes
Statistical results	mean; standard deviation; min; max PMD delay and coefficient
Platform class	IQ Optical Test System / FTB Universal Test System
Compliance method class	EIA/TIA-455-124 interferometric
Dynamic range note	at 1 ps reference condition
High DR option source	M-2100 Broadband Light Source
Module family	FTB-5500 / IQ-5500 PMD Analyzer Notes Specs from EXFO FTB-5500 PMD Analyzer datasheet FTB-5523 (1310/1550) column and reseller IQ-5523-ST-89 listings. Confirm ER option, source pairing, and exact IQ vs FTB host firmware on the installed module.

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	IQ-5523-ST-89
Manufacturer	EXFO
Instrument Type	Dual Wavelength PMD Analyzer Module
Alias	IQ-5523; FTB-5523 equivalent configuration; IQ-5500 family
Wavelengths	1310 nm and 1550 nm
Connector code	89 FC/UPC
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Standard accessories class	instruction manual; PMD software; connector cleaners
Source type class	polarized LED broadband
Vibration immunity	high due to short coherence LED source
Auto range	yes
Statistical results	mean; standard deviation; min; max PMD delay and coefficient
Platform class	IQ Optical Test System / FTB Universal Test System
Compliance method class	EIA/TIA-455-124 interferometric
Dynamic range note	at 1 ps reference condition

PARAMETER	VALUE
High DR option source	M-2100 Broadband Light Source
Module family	FTB-5500 / IQ-5500 PMD Analyzer

Notes
Specs from EXFO FTB-5500 PMD Analyzer datasheet FTB-5523 (1310/1550) column and reseller IQ-5523-ST-89 listings. Confirm ER option, source pairing, and exact IQ vs FTB host firmware on the installed module.

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

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NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.