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Test & Measurement

- sales
- rentals
- calibration
- repair
- disposal

Complimentary Reference Material

This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.

TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.

TMG will assist if you are unsure whether this model will suit your requirements.

Call TMG if you need to organise repair and/or calibrate your unit.

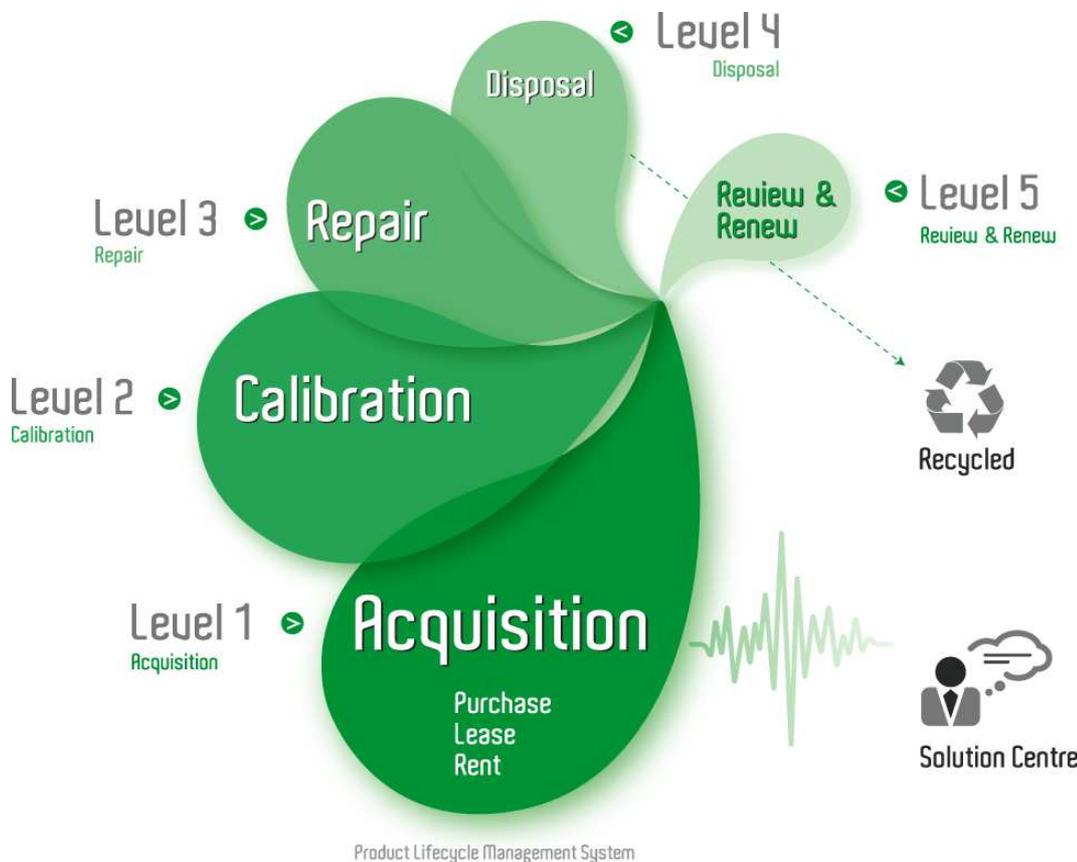
If you click on the “Click-to-Call” logo below, you can call us for FREE!

TMG Corporate Website

TMG Products Website



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Product Lifecycle Management System

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FTB-5500B

NETWORK TESTING



- Less than 5-second testing time for any PMD range
- No auto-correlation peak, for enhanced accuracy
- NIST traceable
- Patented design*: test through EDFAs

Platform Compatibility

FTB-400 Universal Test System

* Patent pending, International PCT Publ. No. WO2004/070341.
Measurement method approved by TIA-FOTP-124A

Measuring PMD the Fast Way

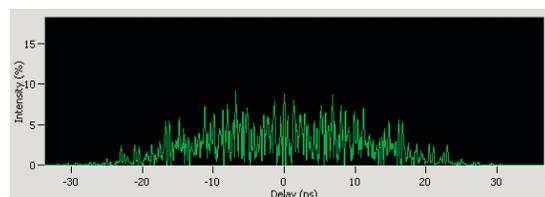
PMD represents a significant danger to both legacy and newly deployed networks. And as systems of 10 Gb/s and faster develop, PMD concern and awareness continue to grow. EXFO's FTB-5500B PMD Analyzer helps you get ahead in the field. Whether you need to verify the capacity of legacy fiber or maintain a network, the modular FTB-5500B is fast, reliable, and ready to go.

LESS THAN 5-SECOND TESTING TIME

The rugged FTB-5500B features a market-leading PMD measurement time of less than five seconds—for any PMD value. Improve your testing efficiency. Reduce testing costs. Test more fiber, and test it faster.

A UNIQUE APPROACH TO TESTING THROUGH EDFAS AND REMOVING AUTO-CORRELATION PEAKS

The FTB-5500B's unique technology allows for both the auto-correlation and cross-correlation to be known. Therefore, any spectral shape of source can be used. The auto-correlation peak is thus removed, and higher accuracy and resolution are obtained. PMD of 0 ps can be measured. In addition, a signal transmitted through EDFAs can be analyzed for total link PMD. Calibration is traceable to NIST.



KEY FEATURES

- No auto-correlation peak, for increased accuracy and resolution
- Testing through EDFAs (above 120 EDFAs)
- Under five-second testing time for any range
- Minimum measurable PMD: 0 ps

FIELD-PROOF, ADVANCED TECHNOLOGY

The FTB-400 UTS Advantage

Housed in the tough, light-magnesium-shell and rubber-bumpered FTB-400 Universal Test System, the FTB-5500B PMD Analyzer will survive knocks, bumps and drops. Combine up to seven single-slot, field-interchangeable modules in the powerful FTB-400 for simultaneous support of multiple testing applications (CD analyzer, OTDR and OLTS, among others).

The FLS-5800 CD/PMD Analyzer Source Advantage

A single light source, the FLS-5800 CD/PMD Analyzer Source, can help you characterize both chromatic dispersion (CD) and polarization mode dispersion (PMD)—reducing testing time and minimizing the potential for human error.

SECOND-ORDER PMD

Particularly important in multichannel transmission, second-order PMD is derived from the measured PMD value. EXFO's software provides second-order PMD delay and coefficient values for telecom fibers. These values allow you to characterize fibers and cables more precisely than simple PMD and better control the transmission quality of high-speed systems.

TOOLBOX SOFTWARE SOLUTIONS

PMD Touch and Go

EXFO's ToolBox software suite runs the FTB-400's test module applications. The user-friendly touchscreen provides easy access to menus and functions, for highly productive, yet simple testing in the field.

Simple Step-by-Step Measurements

Step-by-step instructions make testing easy and virtually error-free. Both new users and experts can obtain fast, accurate and efficient PMD measurements with minimal training. The analysis software calculates and displays a fiber's total PMD and coefficient, as well as the second-order PMD value and coefficient.

Multiple Measurement Possibilities

Check for long-term stability. Make several PMD measurements over long time periods with the Multiple Measurement mode, and monitor PMD changes over an extended time.

Statistical Result Tables

View your results quickly and easily. After completing multiple tests, the FTB-5500B PMD Analyzer automatically compiles the results in a table and provides statistical analysis:

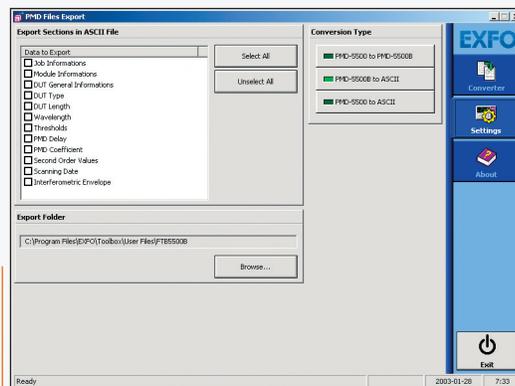
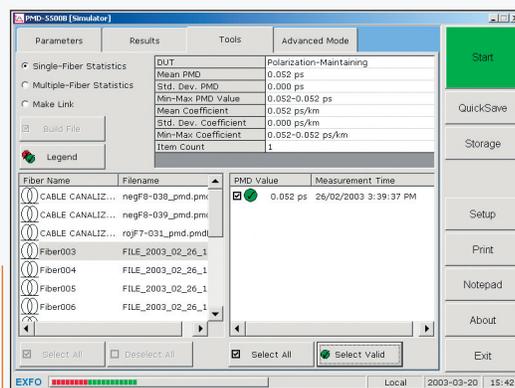
- Mean PMD delay and coefficient
- Standard deviation PMD delay and coefficient
- Minimum and maximum PMD delay and coefficient

Benefit from powerful statistical analysis for

- Averaging multiple tests on one fiber
- Averaging sets of pre-averaged fibers to produce cable stats
- Gathering data from end-to-end fibers and calculating of total PMD (link creation)

Data Management Features

Manage all your data with ease. EXFO's software includes various data management features, such as automatic file naming and statistical and table management, as well as custom report generation and batch printing. The software also comes with a file converter, which transforms PMD files into text files.



EXFO has an online application called the Total Link PMD Calculator that performs end-to-end link polarization mode dispersion (PMD) calculations directly on our web site. Visit the FTB-5500B PMD Analyzer product page to access this valuable online tool.

SPECIFICATIONS

Wavelength range (nm)	1260 to 1675 (O to U band)
Measurement range (ps)	0 to 115
Sensitivity (dBm)	-45 ^a
Measuring time (s)	4.5 (for any PMD value)
Absolute uncertainty (accuracy) ^b (ps)	± (0.020 + 2 % of PMD)
Allows measurement through EDFA	Yes (above 120 EDFAs)

GENERAL SPECIFICATIONS

Temperature	operating	0 °C to 40 °C	(32 °F to 104 °F)
	storage	-40 °C to 70 °C	(-40 °F to 158 °F)
Relative humidity		0 % to 93 % non-condensing	
Size (H x W x D) (module only)		9.6 cm x 7.6 cm x 26.0 cm	(3 3/4 in x 3 in x 10 1/4 in)
Weight (module only)		1.5 kg	(3.4 lb)

NOTES

- a. Typical, for C-band. May be increased with averaging. With the FLS-5800, the typical dynamic range is 47 dB.
- b. For C-band, assuming averaging over all states of polarization.

ORDERING INFORMATION

PMD ANALYZER

FTB-5500B-XX

Connector *

- 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: FTB-5500B-EI-EUI-89

CD/PMD ANALYZER SOURCE

FTB-58XX-XX

Model

- FLS-5803 = 1550 nm SuperLED
- FLS-5804 = 1625 nm SuperLED
- FLS-5834 = 1550 nm and 1625 nm SuperLEDs

Connector *

- 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: FTB-5500B-EI-EUI-89

POLARIZED LIGHT SOURCE

FLS-110-XXP-XX

Model

- FLS-110-02P = 1310 nm LED
- FLS-110-03P = 1550 nm LED

Connector *

- 58 = FC/APC narrow key
- 89 = FC/UPC narrow key
- 91 = SC/UPC
- EI-EUI-28 = UPC/DIN 47256
- EI-EUI-76 = UPC/HMS-10/A
- 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: FTB-5500B-EI-EUI-89

* EXFO Universal Interface is protected by US patent 6,612,750.

SAFETY

- 21 CFR 1040.10
- IEC 60825-1: 2001
- CLASS 1 LASER PRODUCT
- CLASS 1 LASER PRODUCT

STANDARD ACCESSORIES

USER GUIDE, CERTIFICATE OF CALIBRATION, CONNECTOR CLEANERS.

Rugged Handheld Solutions

- OPTICAL**
 - OLTs
 - 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
 - OLTs
 - 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 kb/s to STM-64) testers
 - T1/T3, E1 testers
 - 10/100M and Gigabit Ethernet testers
 - Fibre Channel testers
 - 10 Gigabit Ethernet testers



Find out more about EXFO's extensive line of high-performance portable instruments by visiting our website at www.EXFO.com.

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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. All of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.EXFO.com/recycle. 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. 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.