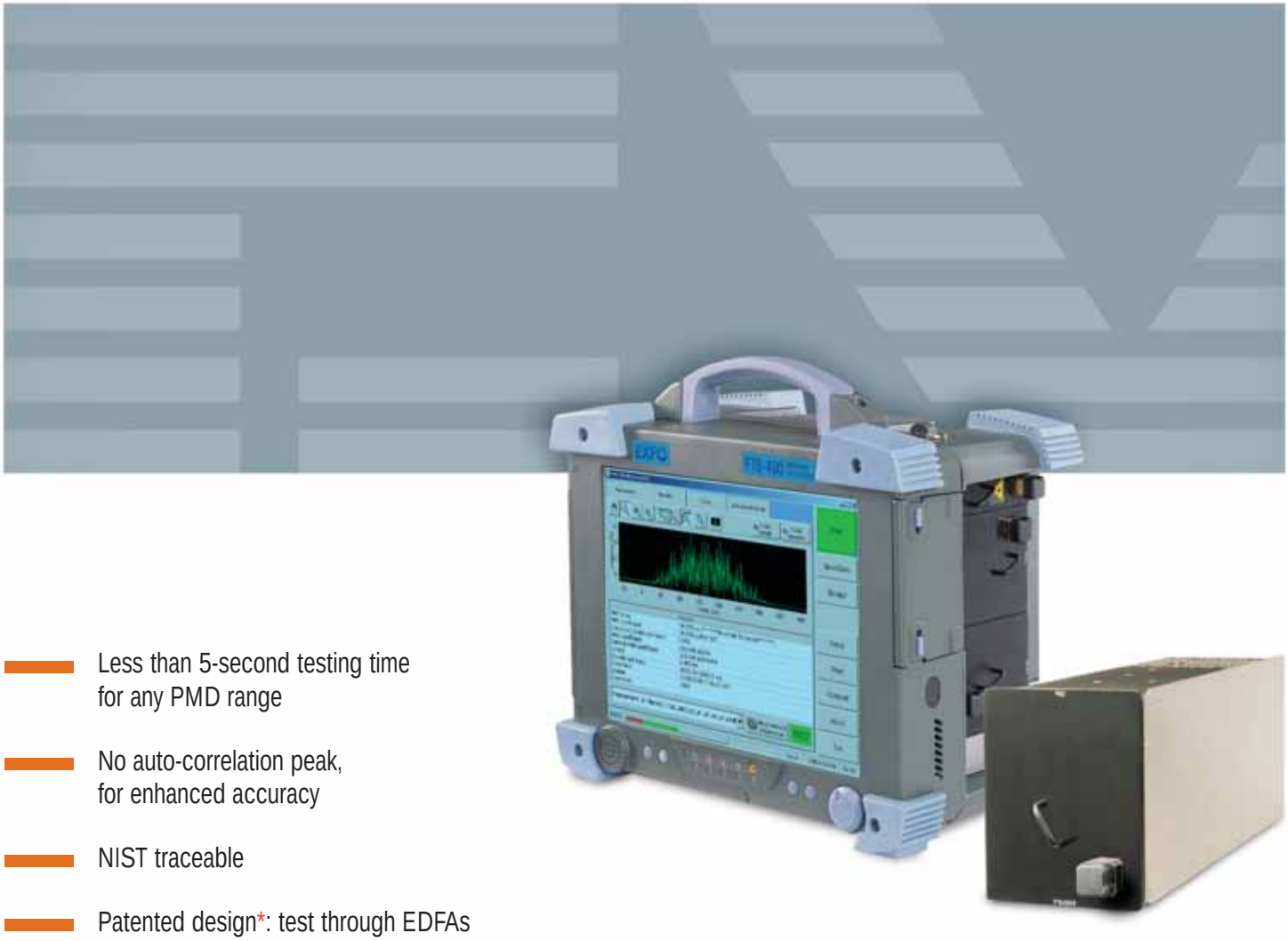
5500B

PMD ANALYZER

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*

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

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Telecommunications Test and Measurement

EXFO

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Measuring PMD the Fast Way

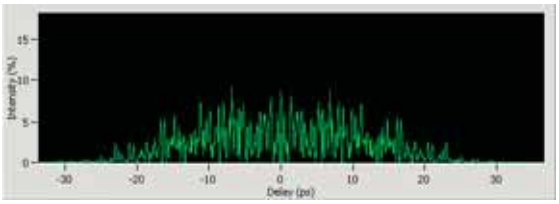
PMD represents a significant danger to both legacy and newly deployed networks. And as systems of 10 Gb/s and faster develop, PMD concern and awareness continue to grow. EXFO's FTB-5500B PMD Analyzer helps you get ahead in the field. Whether you need to verify the capacity of legacy fiber or maintain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

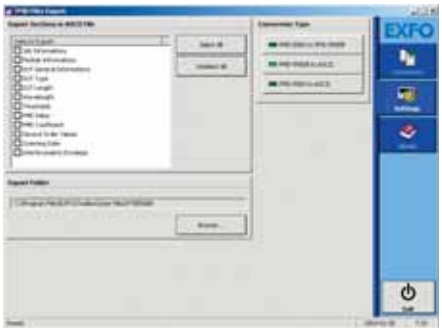
- Mean PMD delay and coefficient
- Standard deviation PMD delay and coefficient
- Minimum and maximum PMD delay and coefficient

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.



SPECIFICATIONS

Wavelength range (nm)	1260 to 1675 (O to U band)
Measurement range (ps)	0 to 115
Sensitivity (dBm)	–45[1]
Measuring time (s)	4.5 (for any PMD value)
Absolute uncertainty (accuracy)[2] (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)

Note:

1. Typical, for C-band. May be increased with averaging. With the FLS-5800, the typical dynamic range is 47 dB.
2. 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

FLS-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: FLS-5803-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: FLS-110-02P-EI-EUI-89

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

Safety

21 CFR 1040.10 — Class I Laser Product
IEC 60825-1: 2001 — Class 1 Laser Product

Standard Accessories

User Guide, Certificate of Calibration, connector cleaners.

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

Rugged Handheld Solutions
- OLTS
- Power meter
- Light source
- Talk set

Optical Fiber
- OTDR
- OLTS
- ORL meter
- Variable attenuator

DWDM Test Systems
- OSA
- PMD analyzer
- Chromatic dispersion analyzer

Transport/Datacom
- SONET/DSn (DS0 to OC-192c)
- SDH/PDH (64 kb/s to STM-64c)
- 10/100 and Gigabit Ethernet
- Fibre Channel
- 10 Gigabit Ethernet

Corporate Headquarters > 400 Godin Avenue, Vanier (Quebec) G1M 2K2 CANADA | Tel.: 1 418 683-0211 | Fax: 1 418 683-2170 | info@EXFO.com

Toll-free: 1 800 663-3936 (USA and Canada) | www.EXFO.com

EXFO America	3701 Plano Parkway, Suite 160	Plano, TX 75075 USA	Tel.: 1 800 663-3936	Fax: 1 972 836-0164
EXFO Europe	Le Dynasteur, 10/12 rue Andras Beck	92366 Meudon la Forêt Cedex FRANCE	Tel.: +33.1.40.83.85.85	Fax: +33.1.40.83.04.42
EXFO Asia-Pacific	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	Tel.: +65 6333 8241	Fax: +65 6333 8242
EXFO China	No.88 Fuhua, First Road Central Tower, Room 801, Futian District	Shenzhen 518048, CHINA	Tel.: +86 (755) 8203 2300	Fax: +86 (755) 8203 2306
	Beiijing New Century Hotel Office Tower No.6 Southern Capital Gym Road, Room 1754-1755	Beijing 100044, P.R. CHINA	Tel.: 86.10.6849.2738	Fax.: 86.10.6849.2662

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