

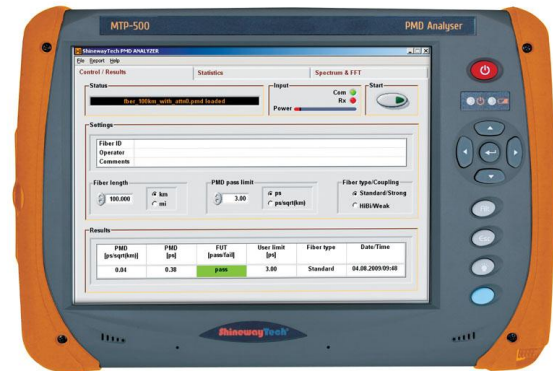
# MTP-500 PMD Analyzer

## PMD Characterization System for High-Speed Optical Network Installation & Certification

MTP-500 Polarization Mode Dispersion (PMD) Analyzer consisting of an independent optical source (the Source) and the analyzer module (the Receiver) tests single-mode fibers quickly and easily. It measures PMD using the ITU-T G.650 recommended method with high-speed scanning technique, which ensures the best immunity against fiber movement. Windows XP platform and easy to use analysis software shorten learning process and enhance productivity.

### Features

- ◆ ITU-T G.650 recommended method for PMD characterization:
  - Accurate total PMD, PMD coefficient
  - Intelligent certification: Threshold setting enables auto Pass/Fail assessment
- ◆ Fully support 10G/40G/100G DWDM optical network upgrade test
- ◆ High-speed scanning technique enables the best immunity against fiber movement during test
- ◆ Compliant with G.650.2, EIA/TIA FOTP-124 & IEC-61941
- ◆ High dynamic range for long span measurement
  - 40dB or 200Km
  - 48dBw high power light source available for 240Km
- ◆ Industry's fastest measurement speed: 2s
- ◆ Test through optical amplifiers
- ◆ Suitable for aerial and buried fiber infrastructure
- ◆ Windows XP with PMD Analyzer software for fast setup and easy handling
- ◆ Easy to use touch screen
- ◆ Professional and comprehensive test report
- ◆ Internal battery supports 5 hours continuous operation
- ◆ Rugged casing, field application ready
- ◆ External ports: RG45x1, RS232x1, USBx2, VGAx1
- ◆ CE, FCC certificates



MTP-500-A PMD Analyzer



MTP-500-L PMD Source

# Comprehensive and Professional Test Report

## PMD Test System - Measurement Report

Measurement ID

Test set-up

Wavelength range	1525-1570nm
Step size	0.05nm

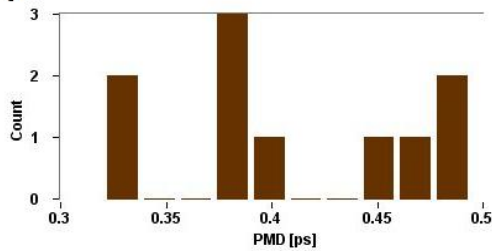
Measured data

PMD [ps/sqrt(km)]	PMD [ps]	FUT [pass/fail]	User limit [ps]	Fiber type	Date/Time
0.04	0.38	pass	3.00	Standard	04.08.2009/09:48

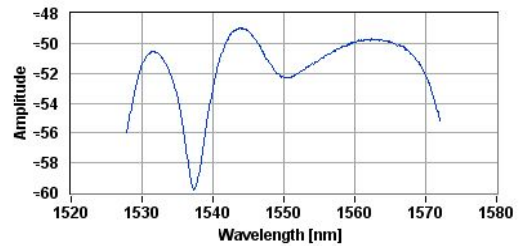
PMD statistics

Number of PMD measurements	10
Delay between measurements [HH:MM:SS]	00:00:00
Average PMD [ps]	0.41
Standard deviation [ps]	0.06
Max. PMD value [ps]	0.49
Min. PMD value [ps]	0.32
PMD [ps] #1	0.49
PMD [ps] #2	0.49
PMD [ps] #3	0.47
PMD [ps] #4	0.44
	0.32
	0.39
	0.32
	0.38
	0.39
	0.38

Histogram



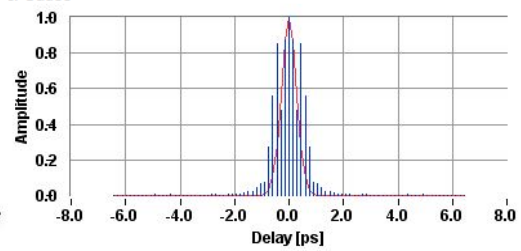
spectrum



Drift



& Gauss



## Specifications

Model	MTP-500
Operating System	Windows XP
Display	10.4" TFT Touch Screen (800x600)
Connectivity	USB×2; RJ-45 (10/100 Mbit/s)×1; RS232×1; VGA×1
Data Storage	4G CF Card
<b>MTP-500-L PMD Source</b>	
Wavelength (nm)	1525-1565
Output Power	< 20mW
<b>MTP-500-A PMD Analyzer</b>	
Dynamic Range (dB)	>40 (Optional 48dB)
Measurement Method	ITU-T G650
PMD Range <sup>(1)</sup>	0.2 - 35ps
PMD Accuracy <sup>(2)</sup>	±(0.1ps+5% of PMD)
DGD Range <sup>(3)</sup>	0.5 - 90ps (for Polarization Maintaining Fiber)
DGD Accuracy <sup>(3)</sup>	± (0.1ps + 3% of DGD)
Wavelength Scanning Time	< 100 ms
Measurement Time	2-10s (depending on PMD value)
<b>General Specifications</b>	
Power Supply	Li-Ion Rechargeable Battery / AC Adaptor
Battery Life	(Continuous operation) PMD Analyzer ≥5hrs; Source ≥7hrs
Operating Temperature	0°C - 40°C
Storage Temperature	-20°C - 60°C
Relative Humidity	0-90% (non-condensing)
Weight	PMD Analyzer: 3.1kg; Source: 1kg
Dimensions (HxWxT)	PMD Analyzer: 320x240x90mm; Source: 170x170x55mm

### Notes:

- (1) For standard SMF, with strong mode coupling, length≥100m;
- (2) For standard SMF, with strong mode coupling, length≥100m, with single standard PMD emulator;
- (3) For HiBi fiber, with weak mode coupling.

\* Specifications subject to change without notice

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