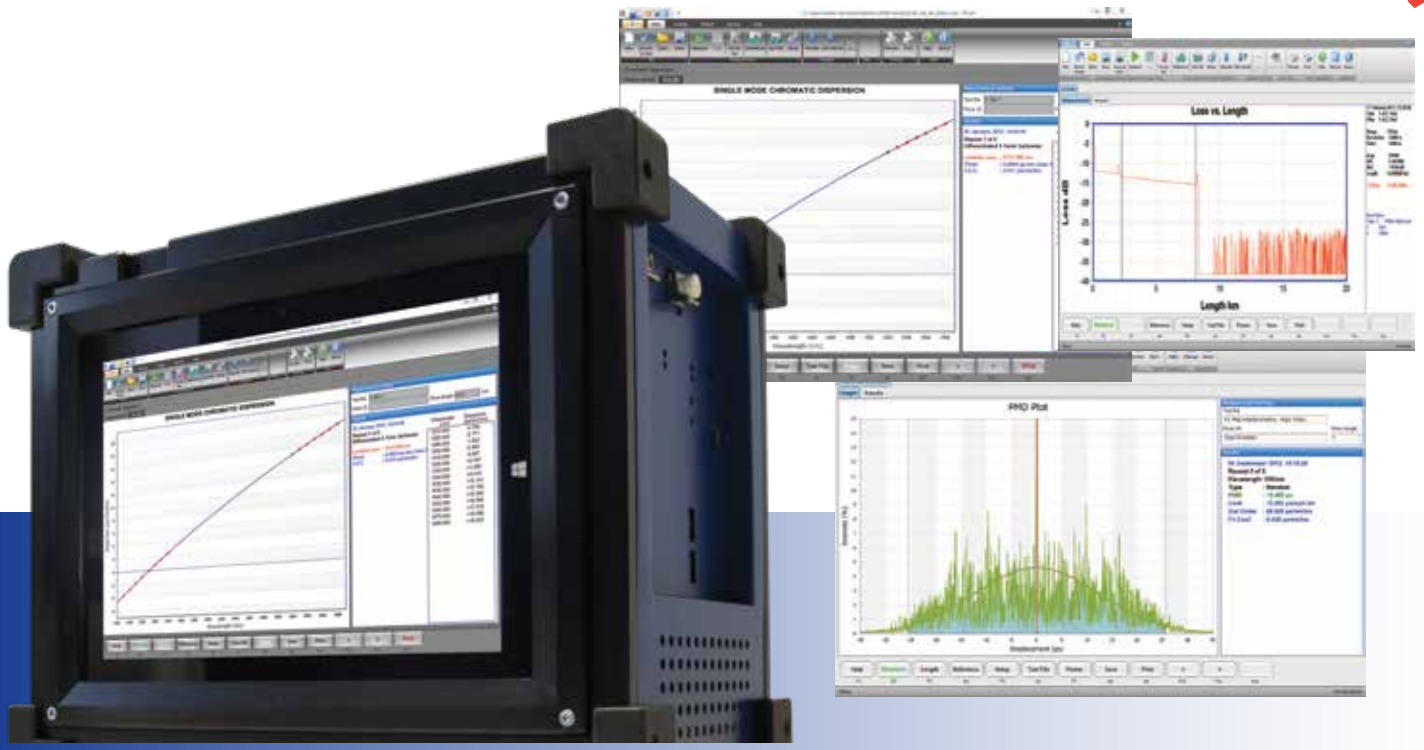
FP5000 Field Portable Dispersion & PMD measurement system

NEW



- HIGH SPEED Chromatic Dispersion by Phase Shift & Differential Phase Shift
- HIGH SPEED PMD by Interferometer
- Fully IEC, TIA and ITU compliant
- Full shift battery life
- up to 60dB dynamic range.
- Measures through amplifiers
- Dispersion in as little as 10 seconds
- PMD in as little as 4 seconds
- Windows 10™ with Touch Screen
- PECON is built on the Microsoft® .NET Framework
- Built-in Report Designer
- Soon to be available OTDR modules

PE.fiberoptics range of field portable measurement instruments led the field when it introduced the FD4 Field Portable Dispersion measurement system in 1988. This year, we are proud to introduce our 4th generation Field Portable system which we are calling the FP5000.

New from-the-ground-up, the FP5000 uses utilises the latest DSP and detection technology, reducing measurement noise and greatly improving measurement speed.

Considerable investment has been made in software and the latest version of ***PE.fiberoptics***' controller package 'PECON' which is been built on the Microsoft® .Net Framework and now runs on Winfows 10™. The result is a software package that maintains our philosophy of simplicity, stability and user friendliness, whilst adding powerful features such as an all-new Report Designer.

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Specifications

Measurement according to applicable TIA/IEC/ITU recommendations.

Chromatic Dispersion and PMD

Spectral Characteristics[1]

Chromatic Dispersion (CD)	1250 to 1675 O - U Bands			*Max range available* *LEDs define limits*
	1310 LED	1550 LED	15/16 LED	*Other LEDs available*
	1250nm-1340nm	1520nm-1580nm	1490nm-1650nm	*Best performance range*
	O Band	C Band	C/L band	*Relevant Band*
	0.001			*minimum increment*

Polarisation Mode Dispersion (PMD)	1250 to 1675 O - U Bands			*Max range available* *LEDs define limits*
	1310 LED	1550 LED	15/16 LED	*Other LEDs available*
	1250nm-1350nm	1500nm-1600nm	1450nm-1675nm	*Best performance range*
	O Band	C Band	C/L band	*Relevant Band*

Dynamic Range[2]

CD	45dB	*LED dependent*
PMD	60dB	*LED dependent*

Measurement Range

CD	+/- 6,000ps/nm	
PMD	up to 130ps	

Measurement speeds[3]

CD	10 seconds	*Typical multipoint scan*
PMD	4 seconds	*Typical scan*

Measurement performance[4]	Repeatability	Uncertainty[5]	
Chromatic Dispersion (ps/nm.km)	<0.005	<0.05 or 1.5% +/-0.02	*Based on 20 measurements of 25km spool G652 fiber.*
Lambda Zero (nm)	<0.1	<0.5	
Slope at Lambda zero (ps/nm.km^2)	<0.35%	<1.5%	
PMD	0.05ps	<0.02 +/- 2% PMD	*Based on 20 measurements of PMD546 0.3ps calibration artefact.*

All specifications are typical and subject to improvement or modification without notice or obligation

Please refer to any formal offers for confirmation of specification

1 *The wavelength ranges mentioned are nominal and will vary according to the Light source configuration. Measurement outside these ranges is available however the performance specifications may vary.*

2 *Dynamic range varies according to the Light source LED configuration.*

3 *Measurement speeds mentioned are for a nominal measurement configuration and will vary according to the particular setup.*

4 *Specifications vary dependant on the Light source LED configuration, fiber length and type.*

5 *Accuracies limited by/related to NPL/NIST uncertainties given for calibration artefact used.*

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This product complies with 21 CFR 1040.10 Class 1 LED product

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