

# MA500HD Mode Field Diameter & $A_{eff}$ measurement system

NEW



- High Dynamic range >80dB
- High speed up to 4 points/second
- High resolution <math>0.1^\circ</math> capture angle and <math>0.01^\circ</math> scan increment
- Fully IEC, TIA and ITU compliant
- 1550nm standard wavelength
- Other wavelengths available e.g. 1310nm, 1625nm, 1080nm etc...
- Piezo optimised launch optics (optional)
- External input for user supplied laser source. (optional)
- Multimode Numerical Aperture measurement(optional)
- Available in SD and HD versions

Continued innovation and investment at **PE.fiberoptics** has yielded yet another major improvement in the series of measurement systems that began with the 400 series and happily continues with the 500.

New from-the-ground-up DSP and detection technology reduces measurement noise and greatly improves measurement speed.

All internal modular subassemblies employ TWI/I<sup>2</sup>C and RS485 technology, enabling comprehensive control over every aspect of system operation including temperatures and resulting in greatly enhanced stability.

Considerable investment has been made in the programming to control the system. **PE.fiberoptics'** latest controller package 'PECON' has been built on the Microsoft® .Net Framework which has resulted in an all-new 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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## PE.fiberoptics

Preliminary Specifications

Measurement according to applicable TIA/IEC/ITU recommendations.

Numerical Aperture			
Measurement Wavelengths (nm)	1550 HD version	others available Uses Lasers	
	1310 & 1550 SD version	others available Uses LEDs	
Far Field Scan resolution(degs)	0.01 to 50	user definable	
Far Field Scan range(degs)	+/- 50	user definable	
Measurement performance	Repeatability	Accuracy	
MFD (Petterman II)	<0.03um	<2%	NPL calibration artifact uncertainty is included value quoted in this specification which covers total instrument measurement uncertainty.
Aeff	<1um	<4%	
Dynamic Range	>80dB HD version		
	>60dB SD Version		

*All specifications are typical based on systems using High power LEDs and subject to improvement or modification without notice or obligation. Please refer to any formal offers for specification guarantees.*

**PE.fiberoptics** Limited  
 ILEX House  
 Mulberry Business Park  
 Wokingham RG41 2GX  
 United Kingdom  
 Tel: +44 118 9773003  
 Fax: +44 118 9773493  
 Email: sales@pefiberoptics.com  
 www.pefiberoptics.com

This product complies with 21 CFR 1040.10 Class 1 LED product



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