

# XLP Laser Scanning Probe Models 250, 500, 1000

- **XLP laser probes are fully integrated with Laser Design's Surveyor 3D scanning systems and are easily integrated with 7-axis portable CMM arms, as well as any traditional CMM.**



XLP probe models are available in a variety of laser line lengths with varying accuracy levels.

## Probe Features

- Industry best accuracy, resolution, and speed for laser line scanning technology
- Automated, programmable 3 to 6 axis scanning control
- Factory calibration to NIST traceable
- Plug and play for existing users
- Gigabit Ethernet connection vs. USB
- Windows 7 and 8 compatibility
- Multiple CMM controllers compatibility + portable arm
- Rugged design

## Probe Benefits

- Fast program set up
- Ability to scan shiny parts without the use of special coatings
- 50% improved accuracy and 30% higher resolution compared to previous generation (SLP Laser Probe)
- High speed data collection, 70% faster scan rate compared to previous generation (SLP Laser Probe)
- Clean room applications
- Shorter inspection times
- Factory floor compatible



## Application Tools Library for Integrators

- The Application Tools Library contains all the tools essential for data capturing, buffering, and outputting profile data. Consisting of ActiveX controls and available in object form for all popular PC-based development environments, the library provides a straightforward integration path for application software developers and system integrators.

**With the ability to scan everything from small highly detailed parts, to large automotive and aerospace parts, XLP probes are the answer for precise laser scanning.**

# Specifications

	XLP 250	XLP 500	XLP 1000
<b>Standoff distance</b>			
Near	53 mm	65 mm	125 mm
Mid	66 mm	95 mm	240 mm
Far	79 mm	125 mm	390 mm
<b>Depth of Field</b>	26 mm	60 mm	265 mm
<b>Line Length</b>			
Near	23 mm	40 mm	59 mm
Mid	25 mm	50 mm	100 mm
Far	29 mm	60 mm	144 mm
<b>Accuracy<sup>1</sup></b>	6µm	12µm	24µm
<b>Repeatability<sup>2</sup></b>	6µm	12µm	24µm
<b>Resolution (Point Spacing)</b>	19µm	39µm	78µm
<b>CMM Interface</b>	PH10M or LDI Laser Wrist		
<b>Typical Application</b>	Small to medium parts	Small to large parts	Medium to large parts
<b>Sample count</b>	1280 points/line		
<b>Sample Rate</b>	100 Hz 128,000 points/sec		
<b>Weight (probe only)</b>	500g (target)		
<b>Size (h x w x d)</b>	155x145x56mm		
<b>Minimum Angle of Incidence</b>	25 degrees		
<b>Laser Power Output</b>	8mW (class 2M)		
<b>Laser Wavelength</b>	658 nm		
<b>Permissible Ambient Light (fluorescent light)<sup>3</sup></b>	10,000lx		
<b>Protection Class</b>	IP 65		
<b>EMC</b>	Acc. EN 61326-1:2006-01 DIN EN 55011: 2007-11 (group 1, class B) EN 61000-6-2: 2006-03		
<b>Operating Temperature</b>	0°C to 45°C		
<b>Storage Temperature</b>	-20°C to 70°C		
<b>Supply</b>	11-30VDC, 24V, 500mA IEEE 802.3af class2, Power over Ethernet		
<b>Trigger</b>	RS422		

1 Accuracy is the allowable 3σ error of the measured position of a vertex target at 12 positions within the Laser Field of View, repeated 10 times.

2 Repeatability is the allowable 3σ error of the measured position of a vertex target repeated 10 times for 12 positions within the Laser Field of View.

3 Measuring Object: Metallic, diffusely reflecting material

Laser radiation  
Do not stare into the beam or view  
directly with optical instruments  
Class 2M LaserProduct  
IEC 60825-1: 2008-05  
P<sub>a</sub> ≤ 8mW, P<sub>e</sub> ≤ 8mW; H ≤ 52W/m<sup>2</sup>;  
λ = 658nm; F = 0...4kHz, t = 1µs...∞

THIS PRODUCT COMPLIES  
WITH FDA REGULATIONS  
21CFR 1040.10 AND 1040.11

**LASERDESIGN**  
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Contact Laser Design today for more information  
952.884.9648 | info@laserdesign.com | www.laserdesign.com

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