

# LPT



# PRODUCT SHEET

## The LPT12, Targetless Laser Projector with Feature Measurement

\* Targetless Laser Projector

\* Laser Scanner

\* Built-In Feature Detection Software for In-Process Inspection

\* Ply Layup Verification

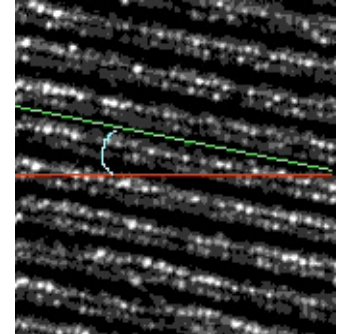
\* Cord Angle Verification

\* Part Placement Verification



This equipment conforms to provisions US 21 CFR 1040.10 and 1040.11 and IEC

1. Features are selected from model.
2. Features are scanned by projector.
3. Features are used for alignment.
4. After placement Parts or Plys can be measured.



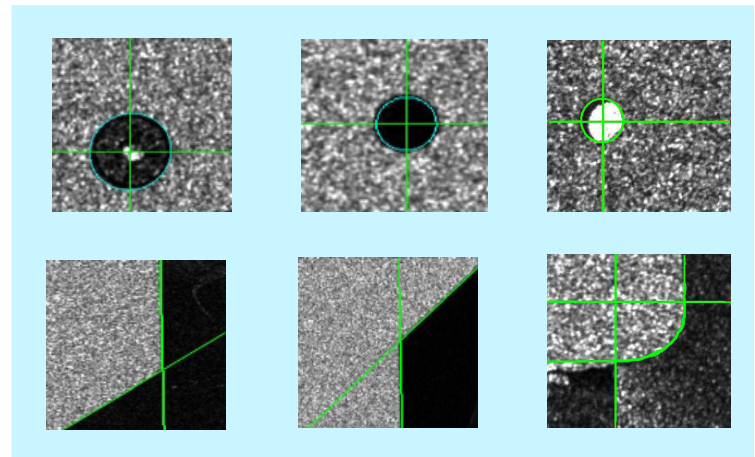
Feature Scans with Measurement

### Targetless Laser Projector

The **LPT12** is a 'Targetless Laser Projector' that is contained within a sealed, temperature controlled, rugged industrial enclosure. An advanced thermal management system keeps the internal components at stable operating temperatures with an active thermal cooling array. The **LPT12** provides precise 'Targetless' alignment and measurement along with accurate laser templating that is driven by virtually any 3D CAD model. The **LPT12** is easy to use and extremely effective in providing high speed glowing optical templates directly on any work surface for a wide variety of manufacturing applications in multiple industries.

### Measure Parts, Angles & Detect FOD

This distinctive laser projection system combines an enhanced laser optical scanning system with unique image processing software that can measure the features or angles of parts. The **LPT12** can scan any features that have optical contrast on almost any tool, part, framework, subassembly or finished vehicle frame to achieve alignment or measurement within a 3D coordinate system. The system has the unique ability to measure and verify part placement along with the unique ability to detect FOD on the surface of a part based on the optical contrast of the FOD. The **LPT12** can scan and measure features such as: holes, fasteners, rivets, corners, framework intersections, corners, edges & ply angles. Any feature that has optical contrast can be used for alignment or measurement. The **LPT12** runs on our newest version of **RayTracer Software Suite** and can be combined with any of the current metrology software packages that are in use today.



### LPT12 Specifications

Power Input:	110/240 Vac 50/60 Hz
Laser Power:	< 5 mW
Laser Class:	CDRH IIIa, IEC 3R
Laser Wavelength:	532 nm (visible green)
Projection Distance:	2 ft. to 50 ft. (0.61 m to 15.25 m)
Dynamic Projection Accuracy:	0.010 in. (0.25 mm)
Feature Measurement Accuracy:	0.010 in. (0.25 mm)
Line Width:	0.020 in. (0.50 mm)
Projector Weight:	38 lbs. (17.23 kg)
Projector L x W x H:	20 in. X 12 in. X 9.25 in. (559 mm X 508 mm X 483 mm)
Certifications:	UL, cUL, CE, CDRH IIIa, IEC 3R



**Laser Projection Technologies, Inc.**

8 Delta Drive, Londonderry, NH U.S.A. 03053

Phone: 603-421-0209 Fax: 603-421-0072

website: [www.lptcorp.com](http://www.lptcorp.com)