



**3D Desktop Laser  
Scanner + Interface  
Software Starting at  
19,900 USD\*\***

*The OpenLaser Systems Inc. - Laserdenta Open Scanner is compact enough to reside on your desktop. The software runs on any standard Microsoft Windows PC.*

# 3D-Scanning with the Highest Precision

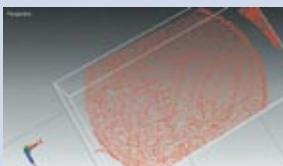
## | 3D Scanning for Rapid Prototyping and Reverse Engineering |

3D-scanning with laser technology delivers fast and affordable results for industrial applications. Whenever your application requires the highest precision of true three-dimensional scanning, laser scanning technology offers many advantages compared to existing technologies using cameras. Laser beams and our 5 axis movement reach into hidden or hard-to-capture surfaces inaccessible to camera-only systems or scanners with less than 5 axis.

Our unique 5-axis movement “sees” everything, hidden areas and lines are hidden no longer! Only our 3D-scanners deliver a true dimensional model of any scanned object. Once scanned, our proprietary software converts multiple scans (point clouds) automatically into one full wire-frame model which can be used in software such as CAD, animation, quality documentation and CAM (e.g auto-adjusting manufacturing machines and processes).

### ..> Recognize the finest details

**3D-Scan of a 10 Cent coin:**  
*The example reveals the detail of how the scanner recognizes even the finest height differences. The surface of the 10 Cent coin has elevations of less than 10 microns (=0,01  $\mu\text{m}$ ).*



### ..> Scan “hidden” areas/lines

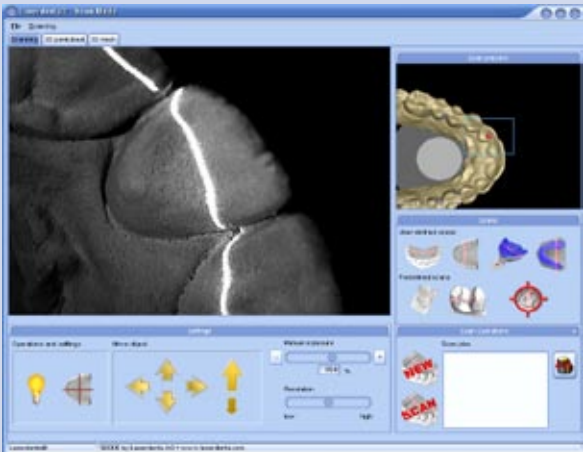
**Scanning 3D-models is technically very challenging:**  
*Check out the tail of the dinosaur, the scanner has to recognize the hard-to-scan areas “between” the armor and also scan the throat to deliver a true 3D-model.*



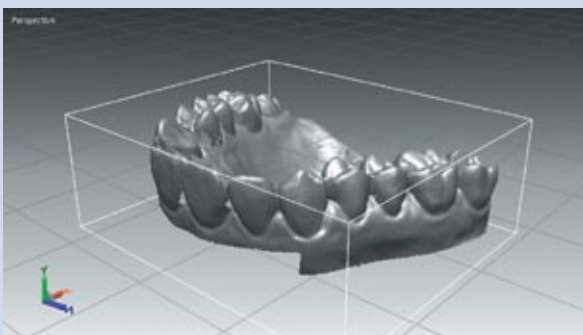
# 3D-Scanning with the Highest Precision



**Place objects into the scanner.** Our model holder can support objects up to 11.8 x 11.8 x 3.9 inches (Shown here: Dental impression holder).



**Easy-to-use Software controls the scanner.** Operate the scanner with "One-Click" or adjust all options directly in the control menus.



**Scan and visualize complex objects such as dentures.** Through our unique 5 axis movement, the laser beams reach into areas that are typically invisible or hidden to camera technologies or scanners with less than 5 axis movements.

••➤ **Five Axis**

••➤ **Precision: 0,02 mm**

••➤ **Scans objects from 1x1 millimeter up to 11.8x11.8x3.9 inches\***

## • **User-friendly Software Interface**

"One-button" scanning software offers superior user-friendliness and can be operated by a non-expert user with a minimum of training. To perform a 3D scan, the user only needs to place the objects in the scanner and press the scan button in the scanning software. The system handles all operations automatically

## • **Precise output ready to export to other software**

The scanner output is a precise replica of the full original object stored in a vectorized format, which makes it easy to transfer to other software or manufacturing machines.

## • **Scanner specifications**

Scanner dimensions: 22 x 20.5 x 20.5 inches (WxHxD)

Max. Scan Area/Object Dimension:

11.8 x 11.8 x 3.9 inches (WxHxD)

Unit Weight: 61 lbs

Scan Resolution: 10-80 µm/microns

(depends on lens, we offer various lenses)

Technology: Laser triangulation

Movement: 5 axis movement, 2 rotation, 3 translation

Operating voltage: 110/220V

Interface: USB 2.0, IEEE-1394

Output formats: STL, IGES 3.0, DXF

## • **Recommended Processing Hardware**

PC with 3 GHz Pentium 4, 2 GB RAM, Windows XP

Home/Professional with OpenGL

(PC not included with the scanner)

Points scanned: typically 1.000.000

Resulting 3D model:

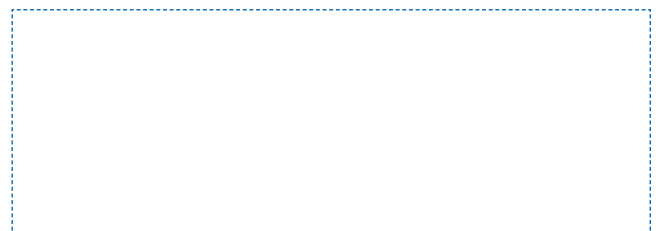
100.000 - 500.000 triangles (adjustable)

Resolution: ≤ 0,01 mm

Accuracy: 20 - 80 µm/microns

**3D-Laser Scanning starts at 19,900 USD\*\***

**...Call us now!**



\*with a scanner model not shown on this brochure (see [www.laserdenta.com](http://www.laserdenta.com))

\*\*sales tax, maintenance and shipping charges not included



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