

# NEXTENGINE DESKTOP 3D SCANNER

TECHSPECS

## ARCHITECTURE

Measurement System	NextEngine proprietary MultiStripe Laser Triangulation (MLT) technology. Patents Pending.
Source	Twin arrays of four, Class 1M, 10 mW solid state lasers with custom optics. 650 nm wavelength.
Sensor	Twin 3.0 Megapixel CMOS RGB image sensors.
PhotoSurface	Optically synchronous RGB color texture capture for precision-locked geometry correlation.
Studio Lighting	Built-in spatially diverse whitelight texture illuminators with tri-phosphor, wide color gamut.
AutoPositioner™	High-precision rotary servo positioner, auto-incremented under scanner control. 20 lb capacity.
PartGripper™	Universal part holder to adjust height, angle and orientation of capture. 10 lb capacity.

## SOFTWARE

ScanStudio™	Software to Scan, Align, Polish and Blend 3D Models High-performance OpenGL 3D viewer.
SolidWorks Integration	Scan right inside SolidWorks (Office Premium 2007). Click to toggle between scanning / design.
Native File Format	SolidWorks + NextEngine co-developed native format. No import or export needed.
Format Options	Scan data can be output as STL, OBJ, VRML, UD3, and PLY files. (more in future releases)
File Size	20MB for typical model, based on 10 facet scans.
ScanStudio™ CORE	Points-to-Mesh solution. Drives scanner and builds 3D mesh models. Free updates! Standard
ScanStudio™ PRO	Points-to-NURBS solution. Adds surfacing and spline output to speed CAD modeling. \$995
RapidWorks™	State-of-the-art Points-to-CAD Engineering tool. Build solid models with feature trees. \$2,495

## PERFORMANCE

Object Size	No preset limit. Objects larger than Field can be composite-captured with supplied software.
Field Size	5.1" x 3.8" (Macro) and 13.5" x 10.1" (Wide). ("soda can" and "shoebox" sizes, respectively).
Resolution	Geometry point density on target surface is 200 DPI in Macro Mode and 75 DPI in Wide Mode.
Texture Density	400 DPI on target surface in Macro Mode and 150 DPI in Wide Mode.
Dimensional Accuracy	±0.005" in Macro Mode and ±0.015" in Wide Mode.
Acquisition Speed	50,000 processed points/sec throughput. Typically 2 minutes per scan of each facet.
Typical Datasets	Typical small models are a quarter million points, after oversampling and optimization.
Environmental	Desktop use under ordinary office lighting. No darkroom or special backgrounds required.

## GENERAL

System Requirements	Min: 2 GHz PC, 2GB RAM, 128MB Graphics, WIN XP. Recommended: 3 GHz, 2GB, 512MB.
Interface	USB 2.0 high speed interface. USB cable included.
Power	100 – 240 VAC built-in worldwide auto-switching power supply. AC cable included.
Eye Safe	Beam is about 1/1000th brightness of a laser pointer (but avoid looking into beam).
Tripod Mount	Stainless steel 1/4 - 20 thread standard screw mount for tripod setups.
Size	Compact 8.8" x 3.6" (letter size) desktop footprint. 10.9" high. Approximately 7 lbs.

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MODEL 2020i

1.0A  
50/60HZ

100 – 240VAC

USB 2.0

MANUFACTURED BY NEXTENGINE INC. SANTA MONICA, CA  
WORLDWIDE PATENTS PENDING ASSEMBLED IN MALAYSIA

FC Tested to comply with FCC standards FOR HOME OR OFFICE USE

UL LISTED I.T.E. E305225 NWGG

TAMPER EVIDENT SEAL - WARRANTY VOID IF OPENED



LASER LIGHT — DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS (MAGNIFIERS)  
CLASS 1M LASER PRODUCT 635-RT01m 4226mW CW  
CLASSIFIED PER IEC 80025-1, Ed 1.2, 2001-08

COMPLIES WITH FDA PERFORMANCE STANDARDS FOR LASER PRODUCTS EXCEPT FOR DEVIATIONS PURSUANT TO LASER NOTICE NO. 68, DATED JULY 26, 2001



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**Dream. Shape. Scan.**

**\$2,495**

