ARTEC MICRO

Metrology-grade 3D scans
Suitable for quality control and precision mechanics

/ For small machine parts, jewelry and dentistry
/ Professional high accuracy industrial desktop 3D scanner

Up to 10 microns accuracy

Fully-automated desktop 3D scanner

Easy 3D capture with just one click
Right out of the box, Micro integrates with the industry-acclaimed Artec Studio for real-time digital capture. See your scans coming to life on the screen. After scanning, Artec Studio makes it easy for you to process your data. Simply follow the same series of steps as you would with our handheld scanners, and then export the final 3D model to software such as SOLIDWORKS, PolyWorks Inspector, Control X and Design X.

Artec Micro brings the latest in scanning technology to your desktop. Its advanced twin cameras and blue LED lights are perfectly synchronized with Micro’s dual-axis rotation system (swing & rotation) to create the ultimate digital copy of your object with a minimum of frames captured.

Compact and ready to scan in seconds. Simply mount the object on the circular scanning platform, and you’re ready to scan. Choose from a variety of smart scanning paths. Then watch in real time as your scan unfolds on the screen in jaw-dropping detail.

Only a minimum of training is needed with Micro. After a quick introduction, you will already be scanning on your own.

Maximum object size: 90 mm×60 mm×60 mm
QUALITY INSPECTION

Across a variety of industries, there is a growing need for ensuring that product quality levels are as high as possible. Delivering extremely high-precision scans at up to 10 microns’ accuracy, not only can Micro “see” well below the human visibility threshold of 40 microns, but its 3D measurements are among the best in today’s cutting-edge scanners, making it a perfect choice for inspection and much more.

APPLICATIONS

The possibilities are limitless

REVERSE ENGINEERING

Whether you have a small part to reproduce for which no blueprint exists, or you need to quickly redesign or simply modify an existing part and either mill or 3D print it, Artec Micro can do the job. Accelerate your design, prototype, and production cycle by weeks and save thousands in the process.
CULTURAL HERITAGE PRESERVATION
Artec Micro gives you the power to make highly-detailed 3D models of a multitude of small cultural objects in just minutes. From there, these models can be archived, or easily shared with researchers and others either locally or around the world, or sent to a 3D printer for printing in a variety of materials.

DENTISTRY
Artec Micro is ready for today’s dental practice, creating precise CAD/CAM-ready 3D scans for lab use and 3D printing. Ideal for scanning single teeth, entire arches, or complex impressions. Export from Artec Studio to ExoCAD and other dental software. Perfect for making exact digital reproductions and archival of crowns and bridges, inlays and onlays, dentures, custom abutments, implants, and more.

JEWELRY
Forget about the traditional method of calipers and tracing methods. In minutes, Artec Micro transforms intricate jewelry items into CAD/CAM data for design, modification, 3D printing, and casting. Saves hours of time in the design and production of complex and highly-detailed jewelry pieces such as rings, pendants, bracelets, cameos, and more.
# SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>MICRO</th>
<th>SPACE SPIDER</th>
<th>EVA</th>
<th>LEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D point accuracy, up to</td>
<td>0.01 mm</td>
<td>0.05 mm</td>
<td>0.1 mm</td>
<td>0.1 mm</td>
</tr>
<tr>
<td>3D resolution, up to</td>
<td>0.029 mm</td>
<td>0.1 mm</td>
<td>0.5 mm</td>
<td>0.5 mm</td>
</tr>
<tr>
<td>Scanner type</td>
<td>Desktop</td>
<td>Handheld</td>
<td>Handheld</td>
<td>Handheld</td>
</tr>
<tr>
<td>Ability to capture texture</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Texture resolution</td>
<td>6.4 mp</td>
<td>1.3 mp</td>
<td>1.3 mp</td>
<td>2.3 mp</td>
</tr>
<tr>
<td>Colors</td>
<td>24 bpp</td>
<td>24 bpp</td>
<td>24 bpp</td>
<td>24 bpp</td>
</tr>
<tr>
<td>Data acquisition speed, up to</td>
<td>1 mln points / sec.</td>
<td>1 mln points / sec.</td>
<td>2 mln points / sec.</td>
<td>3 mln points / sec.</td>
</tr>
<tr>
<td>3D exposure time</td>
<td>Customizable</td>
<td>0.0002 s</td>
<td>0.0002 s</td>
<td>0.0002 s</td>
</tr>
<tr>
<td>2D exposure time</td>
<td>Customizable</td>
<td>0.0002 s</td>
<td>0.00035 s</td>
<td>0.0002 s</td>
</tr>
<tr>
<td>3D light source</td>
<td>Blue LED</td>
<td>Blue LED</td>
<td>Flash bulb (no laser)</td>
<td>VCSEL</td>
</tr>
<tr>
<td>Interface</td>
<td>USB 3.0</td>
<td>1 × USB 2.0, USB 3.0 compatible</td>
<td>1 × USB 2.0, USB 3.0 compatible</td>
<td>Wi-Fi, Ethernet, SD card</td>
</tr>
<tr>
<td>Supported OS</td>
<td>Windows 7, 8 or 10 x 64</td>
<td>Windows 7, 8 or 10 x 64</td>
<td>Windows 7, 8 or 10 x 64</td>
<td>Windows 7, 8, 10 x 64</td>
</tr>
<tr>
<td>Minimum computer requirements</td>
<td>i5 or i7 recommended, 32GB RAM</td>
<td>i5 or i7 recommended, 18GB RAM</td>
<td>i5 or i7 recommended, 12GB RAM</td>
<td>i5 or i7, 32GB RAM</td>
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<tr>
<td></td>
<td>(Please refer to <a href="http://www.artec3d.com">www.artec3d.com</a> for detailed hardware requirements)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power source</td>
<td>AC power</td>
<td>AC power or external battery pack</td>
<td>AC power or external battery pack</td>
<td>Built-in exchangeable battery, optional AC power</td>
</tr>
<tr>
<td>Dimensions, HxDxW</td>
<td>290 x 290 x 340 mm</td>
<td>190 x 140 x 130 mm</td>
<td>262 x 158 x 63 mm</td>
<td>231 x 162 x 230 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>12 kg / 26.7 lb</td>
<td>0.8 kg / 1.8 lb</td>
<td>0.9 kg / 2 lb</td>
<td>2.6 kg / 5.7 lb</td>
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<tr>
<td>3D mesh formats</td>
<td>OBJ, PLY, WRL, STL, AOP, ASC, PTX, E57, XYZRGB</td>
<td></td>
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<tr>
<td>3D point cloud formats</td>
<td>BTX, PTX</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Formats for measurements</td>
<td>CSV, DXF, XML</td>
<td></td>
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</tbody>
</table>

**Scanning:** No computer required

**Post-processing:**
- Windows 7, 8, 10 x 64

**Scanning:** No computer required

**Post-processing:**
- i5 or i7, 32GB RAM

**Artec3D Certified Solution Partner**

www.artec3d.com
SYSTEM SPECIFICATIONS

Angular position data

Scan density control: software selectable
12 points/degree
2 points/degree
80 points/degree

Beam diameter at Aperture
Internal Angular Representation Unit
3 mm
1 arcsec

Scanner Type
Phase shift, Hemi-spherical Scanner with 360° x 270° field of view

Distance Measurement Method
Phase shift

Laser Wavelength
1550 nm

Laser Type
Continuous Wave

Laser Class: (IEC EN60825-1:2007)
Class 1

Internal Coordinate Representation Unit
0.001 mm

Range
Up to 110 m

Ranging error
<0.7 mm @ 15 m

Angular accuracy
25 arcseconds

Range noise, 90% reflectivity
0.12 mm @ 15 m

Range noise, 10% reflectivity
0.3 mm @ 15 m

Export formats
OBJ, PLY, WRL, STL, AOP, ASCII, Disney PTEX, E57, XYZRGB, BTX, PTX, CSV, DXF, XML

Min. Vertical Point Density

Min. Horizontal Point Density

Max Vertical Point Density

Max Horizontal Point Density

Power specifications
14 - 24V DC, 30 W
Two Li-Ion 14V, 49Wh batteries, powers the scanner for up to 4 hours.
30 W

External power supply voltage

Internal battery power supply

Power consumption

Physical dimensions and weight
5.74 kg
287 mm x 200 mm x 118 mm

Weight with battery

Computer requirements
Windows 7, 8 or 10 – x64
i5 or i7 recommended, 32 Gb RAM, NVIDIA GeForce 400 series

Supported OS

Minimum computer requirements

www.artec3d.com

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