

&Artec3D



# 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





**Fully-automated** desktop 3D scanner



Easy 3D capture with just **one click** 



## AUTOMATED 3D CAPTURE

#### POWERFUL, ROBUST SOFTWARE

Right out of the box, Micro integrates with the industry-acclaimed Artec Studio for realtime 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.

#### THE CUTTING EDGE OF DESKTOP 3D SCANNING

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. www.artec3d.com

### SMART 3D SCANNING

Artec Studio's new Smart Scanning feature injects Micro with the power to capture your objects faster, automatically and with unsurpassed results.

Smart Scanning's algorithms compute the ideal scanning path in order to digitize every surface of your object from every needed angle. With the optimal number of frames captured, file sizes are reduced and your scans are ready to go in minutes.

> Maximum object size: **90 × 60 × 60 mm**

> > RapidScan3D



# APPLICATIONS The possibilities are limitless

0



### **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.



#### 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.





6

 $\bigcirc$ 



#### CULTURAL HERITAGE PRESERVATION

Artec Micro gives you the power to make highlydetailed 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.

#### 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. www.artec3d.com

### DENTISTRY

ARARARA A

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.



# SPECIFICATIONS

|  | MICRO  | SPACE SPIDER   | EVA   | LEO  |
|--|--|--|---|--|
| <b>3D point accuracy</b> , up to   | 0.01 mm  | 0.05 mm  | 0.1 mm  | 0.1 mm   |
| <b>3D resolution</b> , up to   | 0.029 mm   | 0.1 mm   | 0.2 mm  | 0.2 mm   |
| Scanner type   | Desktop  | Handheld   | Handheld  | Handheld   |
| Ability to capture texture   | Yes  | Yes  | Yes   | Yes  |
| Texture resolution   | 6.4 mp   | 1.3 mp   | 1.3 mp  | 2.3 mp   |
| Colors   | 24 bpp   | 24 bpp   | 24 bpp  | 24 bpp   |
| Data acquisition speed, up to  | 1 mln points/s   | 1 mln points/s   | 18 mln points/s   | 35 mln points/s  |
| 3D exposure time   | Customizable   | 0.0002 s   | 0.0002 s  | 0.0002 s   |
| 2D exposure time   | Customizable   | 0.0002 s   | 0.00035 s   | 0.0002 s   |
| 3D light source  | Blue LED   | Blue LED   | Flash bulb  | VCSEL  |
| Interface  | USB 3.0  | 1 × USB 2.0, USB 3.0<br>compatible                       | 1 × USB 2.0, USB 3.0<br>compatible  | Wi-Fi, Ethernet,<br>SD card  |
| Supported OS   | Windows 10 x64   | Windows 7, 8 or 10<br>x64                                | Windows 7, 8 or 10<br>x64   | <b>Scanning:</b><br>No computer<br>required<br><b>Data processing:</b><br>Windows 7, 8, 10 x64 |
| <b>Recommended computer<br/>requirements</b><br>(Please refer to www.artec3d.com for<br>detailed hardware requirements.) | Intel Core i7 or<br>i9, 64+ GB RAM,<br>NVIDIA GPU with<br>at least 3 GB VRAM,<br>CUDA 3.5+ | Intel Core i7 or i9,<br>32 GB RAM, GPU<br>with 2 GB VRAM | Intel Core i7 or i9,<br>64+ GB RAM, NVIDIA<br>GPU with 8+ GB<br>VRAM, CUDA 6.0+ | Intel Core i7 or i9,<br>64+ GB RAM, NVIDIA<br>GPU with 8+ GB<br>VRAM, CUDA 6.0+                |
| Power source   | AC power   | AC power or external battery pack                        | AC power or external battery pack   | Built-in exchangeable<br>battery, optional<br>AC power   |
| Dimensions, H × D × W  | 290 × 290 × 340 mm   | 190 × 140 × 130 mm                                       | 262 × 158 × 63 mm   | 231 × 162 × 230 mm   |
| Weight   | 12 kg / 26.7 lb  | 0.8 kg / 1.8 lb  | 0.9 kg / 2 lb   | 2.6 kg / 5.7 lb  |
| 3D mesh formats  | OBJ, PLY, WRL, STL, AOP, ASC, Disney PTX (PTEX), E57, XYZRGB                               |  |   |  |
| CAD formats  | STEP, IGES, X_T  |  |   |  |
| Formats for measurements   | CSV, DXF, XML  |  |   |  |

#### Rapid Scan 3D (562) 912-3544 info@rapidscan3d.com



**CERTIFIED** Solution Partner

www.artec3d.com

