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# Professional 3D scanning solutions



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Industrial design and manufacturing / Healthcare  
Science and education / Art and design



# Artec Eva and Space Spider: The perfect package for mass production, industrial design and more

Artec Eva and Space Spider are the ideal 3D scanners for professional use. Unrivalled in their scanning quality, they are proven to scan fast and in very high resolution, while being easy to use.

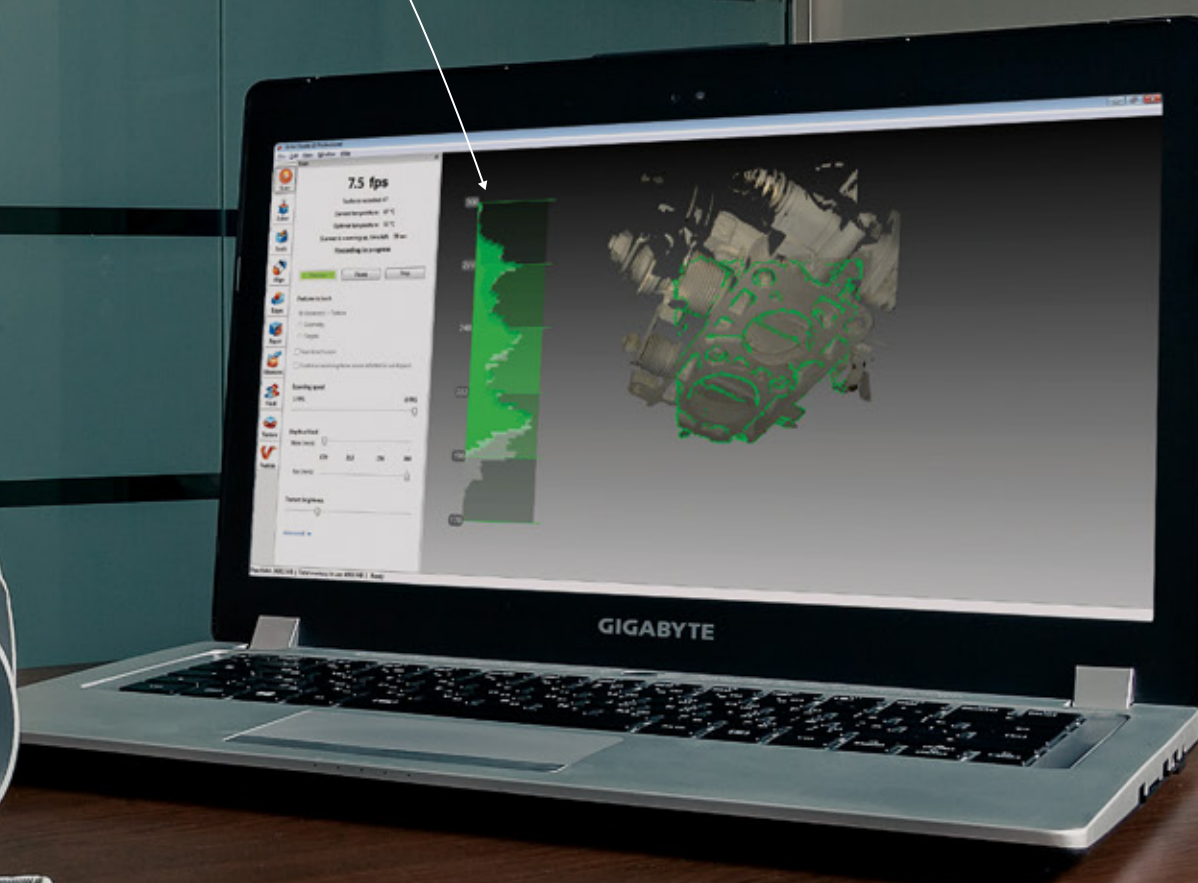


## Totally mobile scanning solution

With the available battery pack and tablet compatibility, Artec's handheld scanners are the only totally mobile scanning solution on the market.

## Very high resolution

Create a quick, textured and accurate scan of medium to large surface areas with Eva, and use Artec Space Spider to scan small areas, capturing intricate detail with minute precision.





## A tried and tested product used in a wide range of industries

Artec Eva and Space Spider are used in countless industries, including quality control, the automotive industry, medicine, heritage preservation, computer graphics, design, forensics, education, reverse engineering and architecture.

### Artec Studio professional 3D data processing software

Scan with Artec Studio advanced 3D data processing software for editing data fast and effectively using Artec's unparalleled algorithms. Then export the results into a wide range of formats: OBJ, PLY, WRL, STL, AOP, ASCII, Disney PTX, E57, XYZRGB, CSV, DXF, XML

Use models in a wide range of software:

 AUTODESK.

 SOLIDWORKS

 Geomagic®

 blender



Easy integration:

## Integrate Artec Eva or Space Spider into your own scanning system using Artec Scanning SDK

With Artec Scanning SDK you can now achieve the very best in scanning results also using your own software, integrating Artec Eva and Space Spider into almost any system.

Either adapt your current software to support Eva and Space Spider, or develop your own software to spec.

Whether you want to scan for medical purposes, industrial quality control, or reverse engineering, Eva and Space Spider can be easily assimilated into your specialized solution.

Artec Scanning SDK can also be used with Artec L2, a 3D scanner with a wider field of view, specifically developed for built-in scanning solutions.



# Artec Eva and Space Spider: New possibilities for forward thinking industries

From rapid prototyping to quality control, CGI to heritage preservation, the automotive industry to forensics, medicine and prosthetics to aerospace, Artec Eva and Space Spider are used to customize, innovate and streamline a wide range of different industries.

## In focus: Reverse engineering

Test and redesign a part without manufacturing defects using 3D scan data.



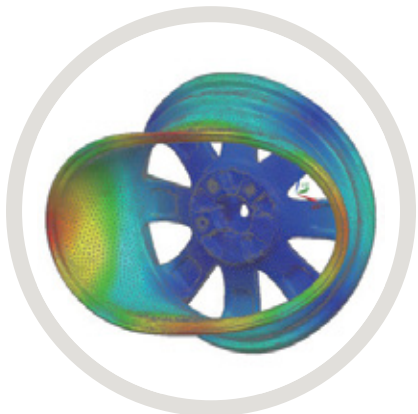
Scan your object fast and  
with high accuracy



Create your 3D model using  
Artec Studio algorithms



Export to simulation  
software



Analyze how the object reacts  
under specific conditions



## In focus: CGI

Digitally capture a person or object to create a 3D CG model for use in visual effects.

Artec Eva and Space Spider are widely used in the entertainment industry, including by TNG Visual Effects, who have provided their 3D scanning services to blockbuster films such as Twilight: Breaking Dawn 1 & 2 and Man of Steel.



## In focus: Orthopedics

Scan the patient with Artec Eva and use 3D modelling to manufacture an individually tailored, perfectly fitting brace. Each section features its own particular structure, with rigid, flexible or stretchy parts to allow the patient to move and breathe freely, whilst also correctly supporting the body.

Customized  
orthopedic brace



Images courtesy  
of Antonius Köster

## In focus: Heritage preservation

Scan and create replicas of cultural objects, preserve them for posterity, digitize collections and make them accessible to everyone all over the world.

*Photo: Scanning a 1.8 million year old giant crocodile at a paleontological site in Kenya.*



See 3D models of prehistoric fossils scanned by Artec Eva and Space Spider on [africanfossils.org](http://africanfossils.org) free online lab.



3D model of prehistoric giant crocodile with measurements.

## 3D scanning has never been so portable

Artec handheld 3D scanners are compatible with both lightweight laptops and tablets, making for the best all round user experience. Plus with the Artec battery pack, which gives up to 6 hours scanning time, you really can take Artec scanners anywhere, capturing objects right in the field.

### Artec battery pack



### Compatible tablets & lightweight laptops\*

Tablets: Microsoft Surface Pro 4, Surface Pro 3, Wacom Mobile Studio Pro 13" & 16" i7 512 GB, Wacom Cintiq Companion 2, Razer Edge Pro  
Lightweight laptops: Gigabyte P34G v2, Lenovo ThinkPad T440p, Razer Blade

\*These models have been tested and verified by Artec, however other lightweight options may also be available.

# Artec Eva and Space Spider: What you need to know



## Extremely versatile

Scan a broad range of objects with Artec Eva and Space Spider. Use Eva for medium to large objects and Space Spider for small objects



## Fast and accurate

Eva scans fast, capturing and simultaneously processing up to two million points per second with up to 0.1mm accuracy



## Speed and precision

Artec Space Spider processes up to one million points per second and produces images of extremely high resolution (*up to 0.1 mm*) and superior accuracy (*up to 0.05 mm*)



## Target free

No object preparation needed. Start scanning from the word go



## Easy integration

Integrate Artec Eva or Space Spider into your own scanning system using Artec Scanning SDK



## Portability

Lightweight and battery compatible, you can take Artec scanners anywhere. The Artec battery pack provides power for up to 6 hours of scanning



## Safe to use

Artec scanners employ structured light technology and are totally safe for scanning people



## Tablet compatibility

Scan with a tablet for greater mobility



## Real-time scanning

Frames are automatically aligned in real time



## High resolution

Scan in brilliant colour and high resolution (*Eva up to 0.5mm, Space Spider up to 0.1mm*)



## 3D video mode

Scan a moving object and record a real-time 3D video



## Bundling

Several scanners can be bundled together and synced to scan larger objects automatically

# Artec Studio 12

## Revolutionary 3D scanning and data processing software

Enjoy the smartest, easiest and most effortless scanning ever with Artec Studio 12



## Easy 3D scanning with Artec Studio 12

Creating 3D scanning masterpieces requires smart and powerful software to capture, process, analyze and edit data.

Now anyone can achieve professional results with the most comprehensive and straightforward 3D scanning software on the market today.

- \ User-friendly and intuitive interface for smooth, expertly guided 3D scanning
- \ Quick and easy start-up process. No special positioning requirements, just point and shoot
- \ Artec Studio 12 software is compatible with tablets as well as 3D sensors, and together with the battery pack for the 3D scanner, you can easily create professional scans anytime and anywhere
- \ Get high quality scans every time with a smart tracking system that ensures correct movement of the scanner and object capture
- \ Stop or pause scanning and continue exactly from where you left off, with the smart auto-continue feature
- \ Achieve equally great results using both manual and Autopilot modes

## Smart, fast and automated post-processing

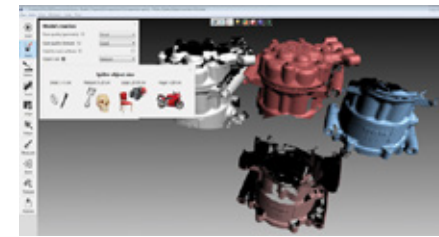
What was once tricky and time consuming for new and inexperienced users is now a thing of the past.

### Making accurate 3D models has never been so straightforward

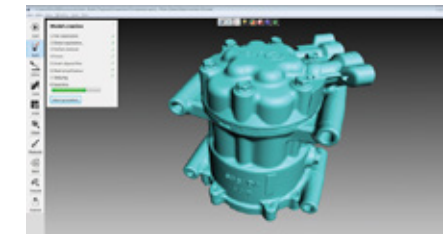


Introducing AUTOPILOT – the smartest and most advanced post-processing mode ever. Create professional 3D objects in just a few clicks

Autopilot. An essential tool for beginners, a time saver for experienced users



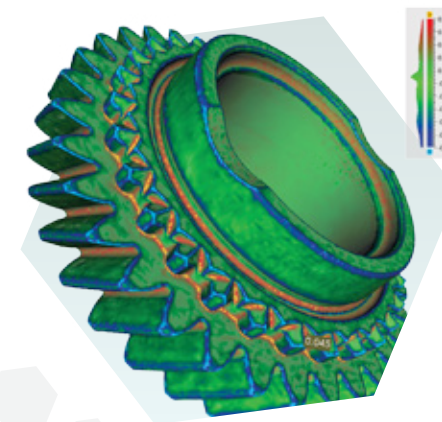
Answer a few easy questions about the object you have scanned, including its size, geometry and texture. All the questions are illustrated with clear examples.



Based on the info provided, Autopilot automatically chooses the right algorithms and settings to create the best possible result.



Fast and accurate application of automatically selected settings for all the processing stages: Creates a high precision 3D model in no time.



## Thorough analysis in Artec Studio

- \ Get all the needed measurements, including the surface size and the volume of your model
- \ Compare your scans and models
- \ Annotate your 3D object

## Export files to CAD in one click

- \ Export scanned model to CAD software with just one click
- \ Export files to 3D Systems' Design X software
- \ Effortlessly export your 3D model directly to SOLIDWORKS in seconds



EXPORT YOUR MODEL TO A WIDE RANGE OF POPULAR SOFTWARE





## Eva

Artec's fastest structured-light 3D handheld scanner

*All Artec handheld scanners come with a USB cable and power cord.*



## Space Spider

Metrological device for superior precision  
Long-term repeatability in data capture  
Automatic temperature stabilization



## Artec Studio 12 Ultimate

For use with Artec 3D scanners and 3rd party sensors\*



## Artec Studio 12 Professional

For use with all Artec 3D scanners

*\*Compatible sensors: Kinect for Windows V1 & V2, Intel RealSense F200 (IVCAM), R200 (DS4) & SR300, PrimeSense Carmine, ASUS Xtion, XYZprinting 3D scanner.*

## Where to buy Artec Scanners

Find Artec Eva and Space Spider in stock at over 110 distribution centers worldwide.

[www.artec3d.com/where\\_to\\_buy](http://www.artec3d.com/where_to_buy)



Global support, training and integration offered by every distribution center and online by Artec's dedicated support team.

## Optional extras:



Battery pack



Shoulder bag



Hard carry case



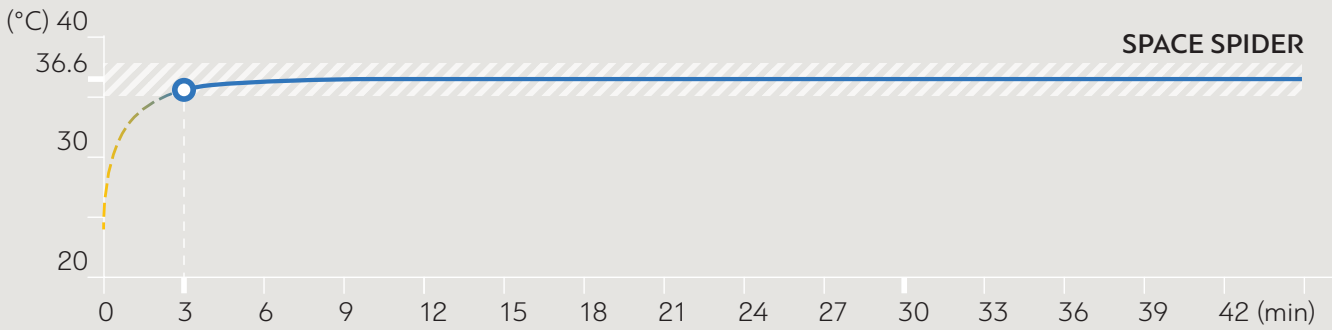
Artec Scanning SDK free to download  
[www.artec3d.com/3d-software/sdk](http://www.artec3d.com/3d-software/sdk)

|                                            | EVA                                              | SPACE SPIDER                      |
|--------------------------------------------|--------------------------------------------------|-----------------------------------|
| Ability to capture texture                 | Yes                                              |                                   |
| 3D resolution, up to                       | 0.5 mm                                           | 0.1 mm                            |
| 3D point accuracy, up to                   | 0.1 mm                                           | 0.05 mm                           |
| 3D accuracy over distance, up to           | 0.03% over 100 cm                                |                                   |
| Texture resolution                         | 1.3 mp                                           |                                   |
| Colors                                     | 24 bpp                                           |                                   |
| Light source                               | flash bulb                                       | blue LED                          |
| Working distance                           | 0.4 – 1 m                                        | 0.2 – 0.3 m                       |
| Linear field of view, H×W @ closest range  | 214×148 mm                                       | 90×70 mm                          |
| Linear field of view, H×W @ furthest range | 536×371 mm                                       | 180×140 mm                        |
| Angular field of view, H×W                 | 30 x 21°                                         |                                   |
| Video frame rate, up to                    | 16 fps                                           | 7.5 fps                           |
| Exposure time                              | 0.0002 s                                         |                                   |
| Data acquisition speed, up to              | 2 million points/s                               | 1 million points/s                |
| Multi core processing                      | Yes                                              |                                   |
| Dimensions, H×D×W                          | 261.5×158.2×63.7 mm                              | 190×140×130 mm                    |
| Weight                                     | 0.85 kg / 1.9 lb                                 |                                   |
| Power consumption                          | 12V, 48W                                         | 12V, 24W                          |
| Interface                                  | 1 x USB 2.0, USB 3.0 compatible                  |                                   |
| Output formats                             | OBJ, PLY, WRL, STL, AOP, ASCII, PTX, E57, XYZRGB |                                   |
| Output format for measurements             | CSV, DXF, XML                                    |                                   |
| Processing capacity                        | 40 million triangles / 1GB RAM                   |                                   |
| Supported OS                               | Windows 7, 8 or 10 – x64                         |                                   |
| Minimum computer requirements*             | i5 or i7 recommended,<br>12Gb RAM                | i5 or i7 recommended,<br>18Gb RAM |
| Calibration                                | no special equipment required                    |                                   |

\*Please refer to [www.artec3d.com](http://www.artec3d.com) for detailed hardware requirements.

## Space Spider

### Warm up period for achieving maximum accuracy



To achieve the very best results, every measurement tool is usually tuned to the conditions of a particular use case. Space Spider, however, keeps its precision in a wide range of temperatures and adjusts to the conditions in only 3 minutes, saving you precious time.

 temperature range for achieving maximum accuracy

## Field of view of Artec Scanners

