Professional
3D scanning solutions

Artec 3D

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Artec 3D

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

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

Artec Eva and 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.
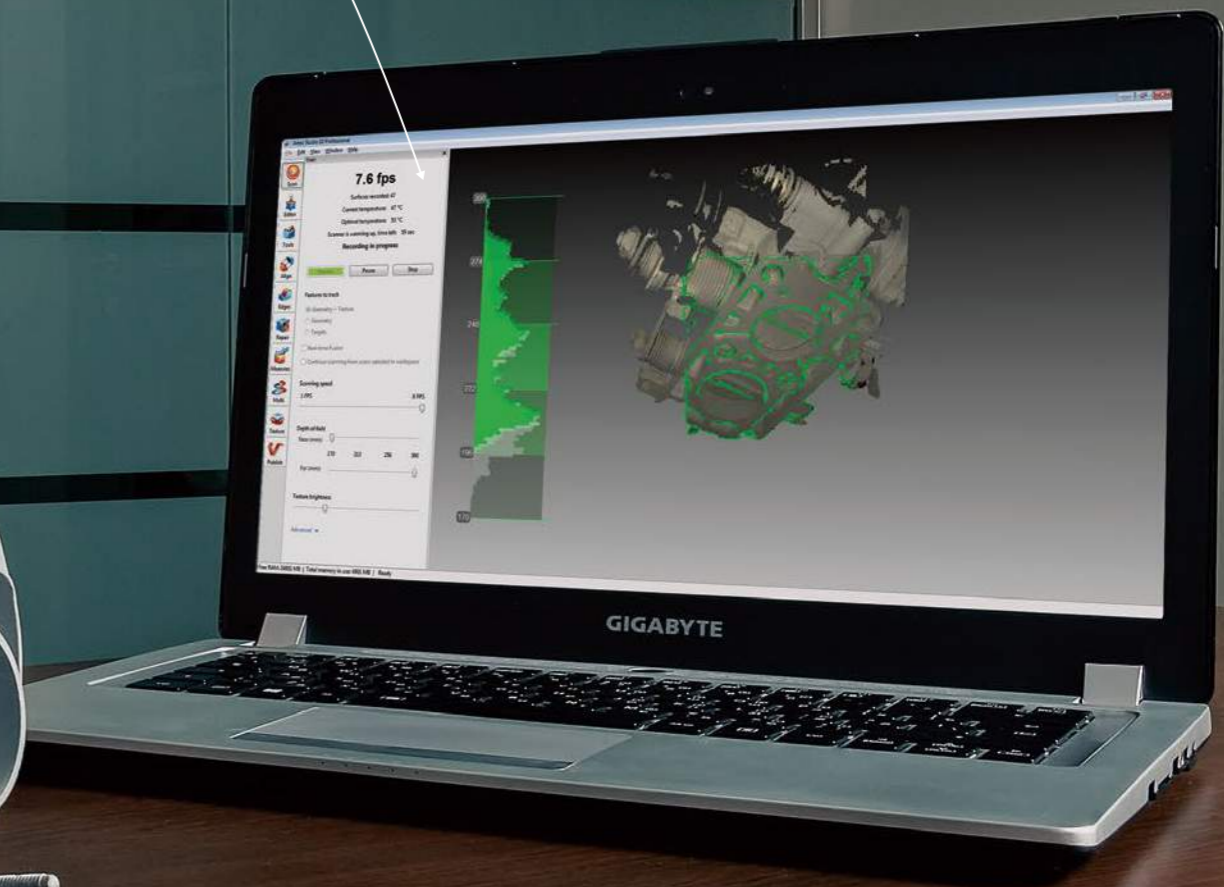
Totally mobile scanning solution

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 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 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.

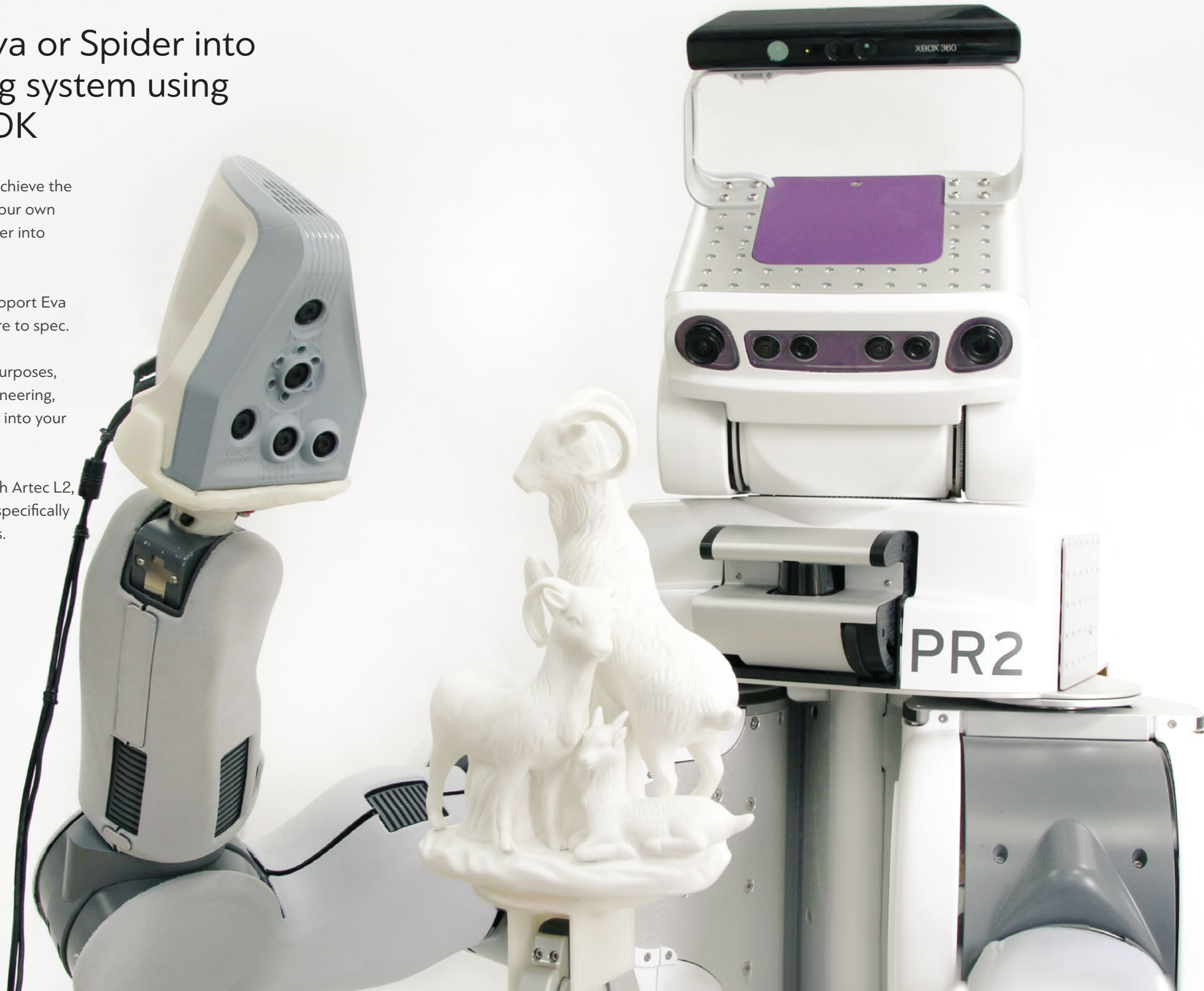**DS SOLID**WORKS

Geomagic®

blender

Easy integration:

Integrate Artec Eva or 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 Spider into almost any system.

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

Whether you want to scan for medical purposes, industrial quality control, or reverse engineering, Eva and 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 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 Spider are used to customize, innovate and streamline a wide range of different industries.

In focus: Reverse engineering

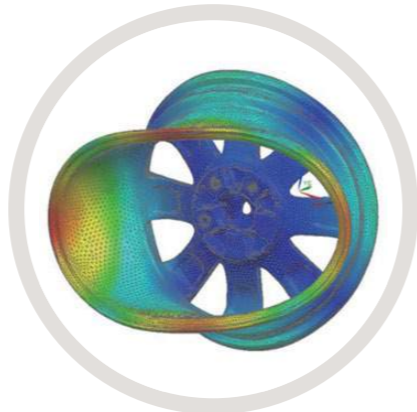Test and redesign a part without manufacturing defects using 3D scan data.

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 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.

RENDER

GEOMETRY

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

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 Spider on africanfossils.org free online lab.

3D model of prehistoric giant crocodile with measurements.

836.39
409.60

3D scanning has never been so portable

Artec handheld 3D scanners are compatibile 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

Powers the scanner for up to

6 hours

Compatible tablets & lightweight laptops*

Tablets: Surface Pro 4, Wacon Cintiq Companion 2, Razer Edge Pro, Surface Pro 3
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 Spider:
What you need to know

Extremely versatile

Scan a broad range of objects with Artec Eva and Spider. Use Eva for medium to large objects and 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 Spider processes up to one million points per second, far quicker than a laser scanner, and produces 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 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 use laser-free technology and are totally safe to use 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, 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 10

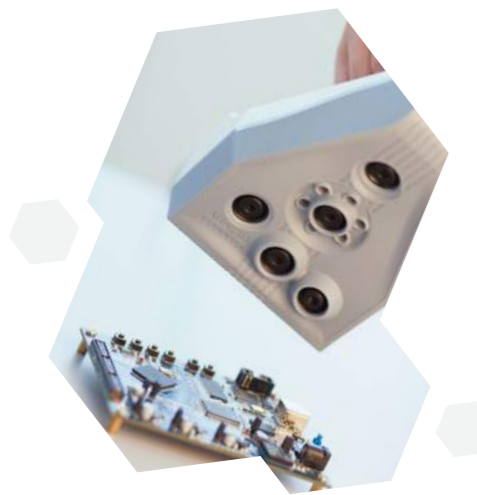## Industry-acclaimed software for advanced 3D scanning and data processing

Scan and process your 3D data faster than ever with Artec's newest version of its professional software.

Featuring the most powerful algorithms and advanced features for optimizing your 3D data with speed, ease and accuracy.

Export your 3D model into the format you need: OBJ, PLY, WRL, STL, AOP, ASCII, Disney PTX, E57, XYZRGB

Use models in a wide range of software:

AUTODESK.   **DS SOLIDWORKS**

Geomagic®   **blender**

3D scanning has never been easier

° Powerful texture and geometry tracking, keeping total control of your movements

° Automatic continuous scanning immediately picks up scanning where you left off

° Tracking alignment correction automatically realigns scans during capture

° Build your 3D model while you scan with real-time fusion mode

° Turn off the flash for scanning photosensitive objects

Fast, accurate scan alignment

° Auto-align different scanning sessions while scanning or during post-processing

° Align even very challenging shapes with non-rigid align, even if the scanned person moved significantly during capture
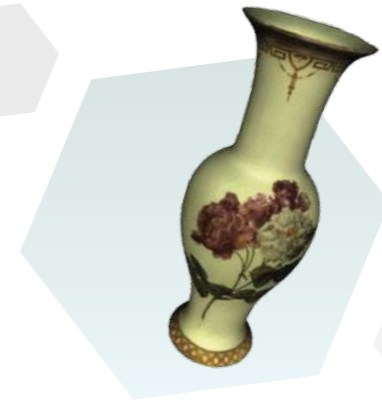
Fuse and post process your model

° Post processing one click Auto-Mode

° Use loop closure for fast processing of large 360° scans

° Sharp fusion and smooth fusion—special algorithms to finish off any parts that you may have missed while scanning

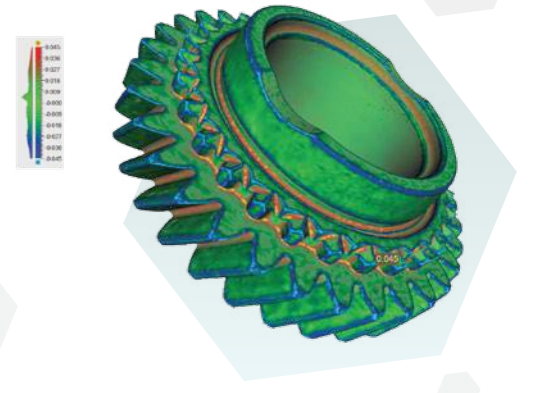° Super fast mesh simplification: Now up to 90% faster than AS9

Smart geometry editing

° Defeature brush to perfect your 3D models, removing outliers and imperfections in geometry in one click

° Eraser: Lasso mode for total control

° Eraser: Cutoff plane selection mode. Remove the floor/table captured in your scan at the press of a button

Rapid, automatized and precise texture editing

° Fastest ever texture mapping: now up to five times faster than AS9

° Auto texture correction and healing brush automatically reproduce missing texture to an astonishing degree of accuracy

Analyze your 3D model

° Surface distance maps

° Export linear, geodesic and sections measurements in DXF, CSV and XML

° Measure the surface and volume of your model

° Annotate your 3D models

Eva

€13 700

The fastest Artec handheld 3D scanner

Eva + Spider Bundle

€24 700

Spider

€15 700

Named best hardware at Solidworks World 2015.

Eva + Space Spider Bundle

€29 700

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

Space Spider New!

€20 700

Metrological device for superior precision

Long-term repeatability in data capture

Automatic temperature stabilization

Two year warranty

Developed for the **International Space Station**

Artec Studio 10
Ultimate

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

Artec Studio 10
Professional

For use with all Artec 3D scanners

	Annual	Annual	Lifetime
1 license	€800	€400	€1000
3 licenses	€2000	€1000	€2500

*Compatible sensors: Kinect for Windows V2, Kinect for Windows V1, Intel RealSense F200 (IVCAM), Intel RealSense R200 (DS4), ASUS Xtion sensors, PrimeSense Carmine.

Where to buy
Artec Scanners

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

www.artec3d.com/where_to_buy

Global support, training and integration

offered by every distribution center and online by Artec's dedicated support team.

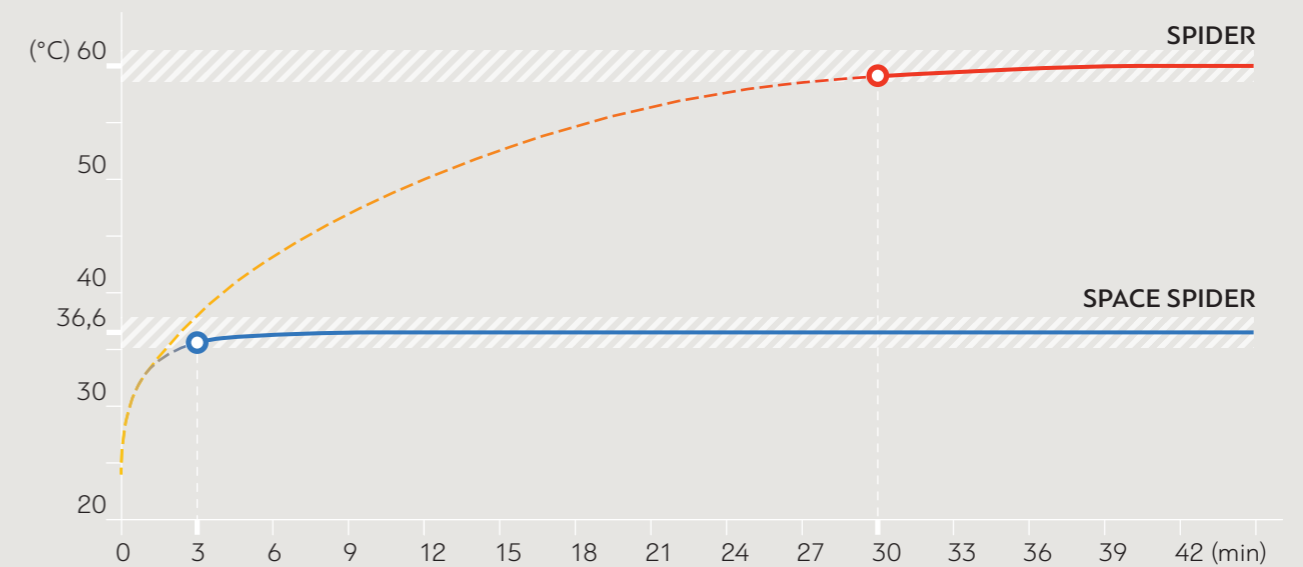## Optional extras:

Battery pack

Shoulder bag

Hard carry case

Artec Scanning SDK free to download

	EVA	SPIDER / 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 (no laser)	blue LED
Working distance	0.4 – 1 m	0.17 – 0.35 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	0.0005 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, 12Gb RAM, NVIDIA GeForce 400 series	i5 or i7 recommended, 18Gb RAM, NVIDIA GeForce 400 series
Calibration	no special equipment required	

Space Spider vs. Spider
Warm up period for achieving maximum accuracy

SPIDER

SPACE SPIDER

(°C) 60

50

40

36,6

30

20

0   3   6   9   12   15   18   21   24   27   30   33   36   39   42 (min)

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

SPIDER / SPACE SPIDER

EVA

0 (mm)   170   350   400   1000