

Professional 3D scanning solutions



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

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.



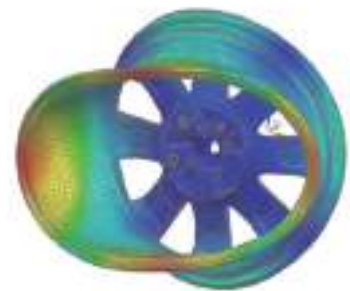
Scan your object fast and
with high accuracy



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*.



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

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 0.1 mm 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)



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



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



High resolution

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



3D video mode

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



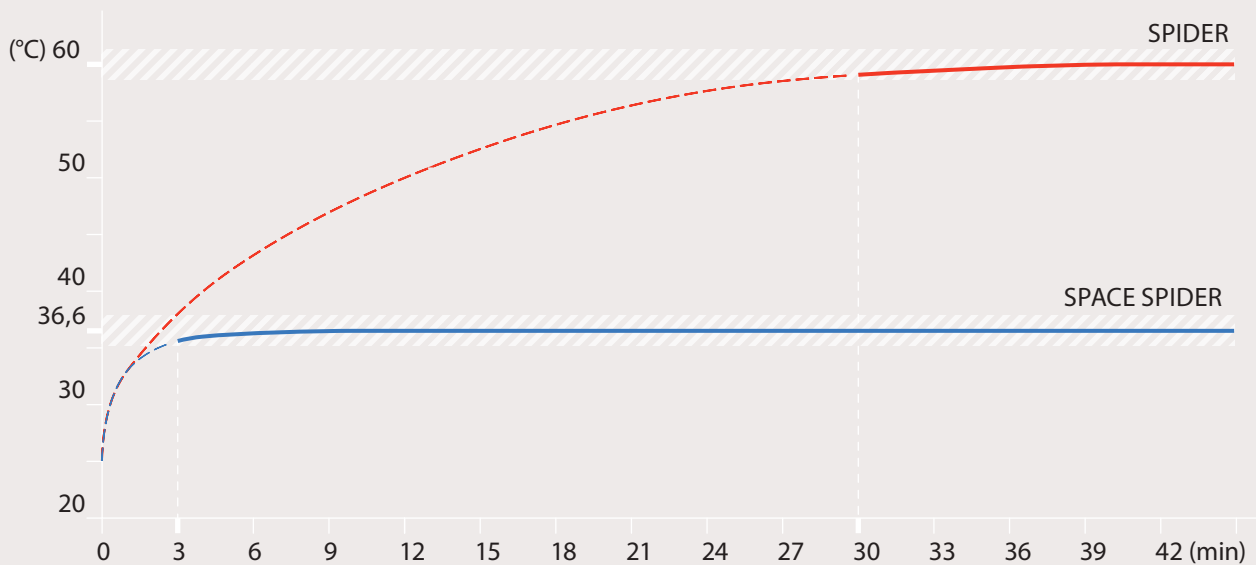
Bundling

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

	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, HxW @ closest range	214x148 mm	90x70 mm
Linear field of view, HxW @ furthest range	536x371 mm	180x140 mm
Angular field of view, HxW	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, HxDxW	261.5x158.2x63.7 mm	190x140x130 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

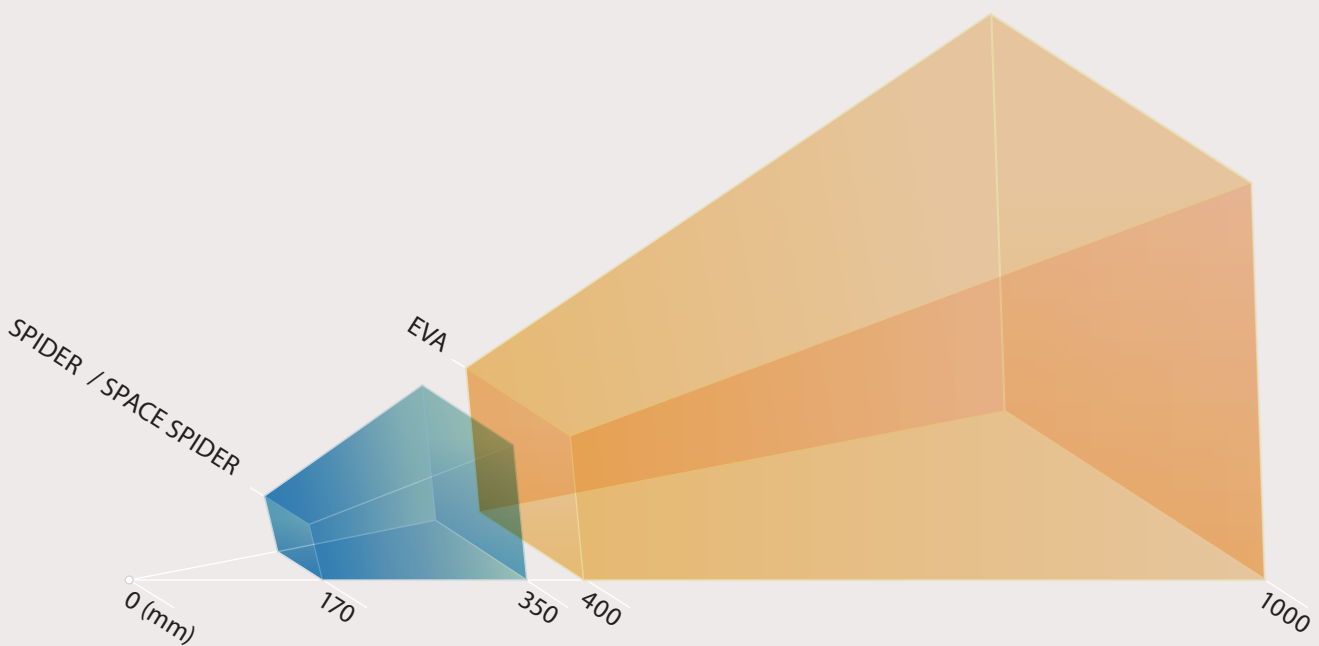
Warm up period for achieving maximum accuracy



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





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