

Artec Spider II

Industry-leading ultra-high resolution 3D scanner



High 3D point accuracy: 0.05 mm

Capture the geometry of your items with astonishing precision.



Impressive 3D resolution: 0.05 mm

Make extremely accurate 3D models of small industrial objects or sections of larger objects in fine detail.



Effortless data capture

Spider II requires minimal setup and no targets for tracking. Simply point, shoot, and capture with incredible realism.



3D scanner for intricate details or small objects in full color

Break new ground with the Artec Spider II, designed to easily capture complex objects, sharp edges, and fine lines, with an impressive level of detail. The 3D scanner's 0.05 mm resolution means that everything from inscriptions on a coin to larger industrial parts of an engine is faithfully digitized. The data you capture is of top quality, representing flawless geometry acquisition in a rich color palette for true-to-life 3D models.



Comfortable scanning speed

Designed for fast capture at a rate of 30 FPS, the Artec Spider II lets you scan intuitively, and at a pace natural to you.



Realistic color

The Artec Spider II doesn't just capture in high resolution, it's paying attention to texture, too.



Capture complex geometry

Scan deeper and in more detail with Spider II – even deep holes and sharp edges are easily transformed into highly accurate data.



Safe scanning

Safe for eyes, easy on parts, and completely contact free, the Spider II can be used to capture any object, whether they be body parts, for medical applications, forensic use, and more.



Truly portable

Weighing just 950 grams, Spider II is lightweight, ergonomic, and easy to deploy whenever, wherever you need it.



Easy integration

The advanced Spider II is perfectly compatible with all other Artec scanners, bringing its features and capabilities to the Artec ecosystem, and making work with different scanners for different object sizes hassle free.

Artec Studio

An all-in-one software for capturing, editing, and analyzing incredibly detailed digital twins

Intuitive data capture

Artec Studio gives real-time scan feedback, so even newcomers can capture complete, detail-rich 3D models.

Fast, automated processing

Ask Autopilot to process your data, or set up custom, automatic workflows that meet your exact needs.

Built-in 3D modeling toolkit

Expert tools make it easy to align & fuse different datasets, then make essential edits for polished results.

Top-class software integration

Seamlessly export to third-party software for access to more advanced reverse engineering and inspection tools.

Go from scan-to-CAD

Extract key geometry data, modify with boolean operations, and convert to CAD with auto-surfacing.

Inspection tools built-in

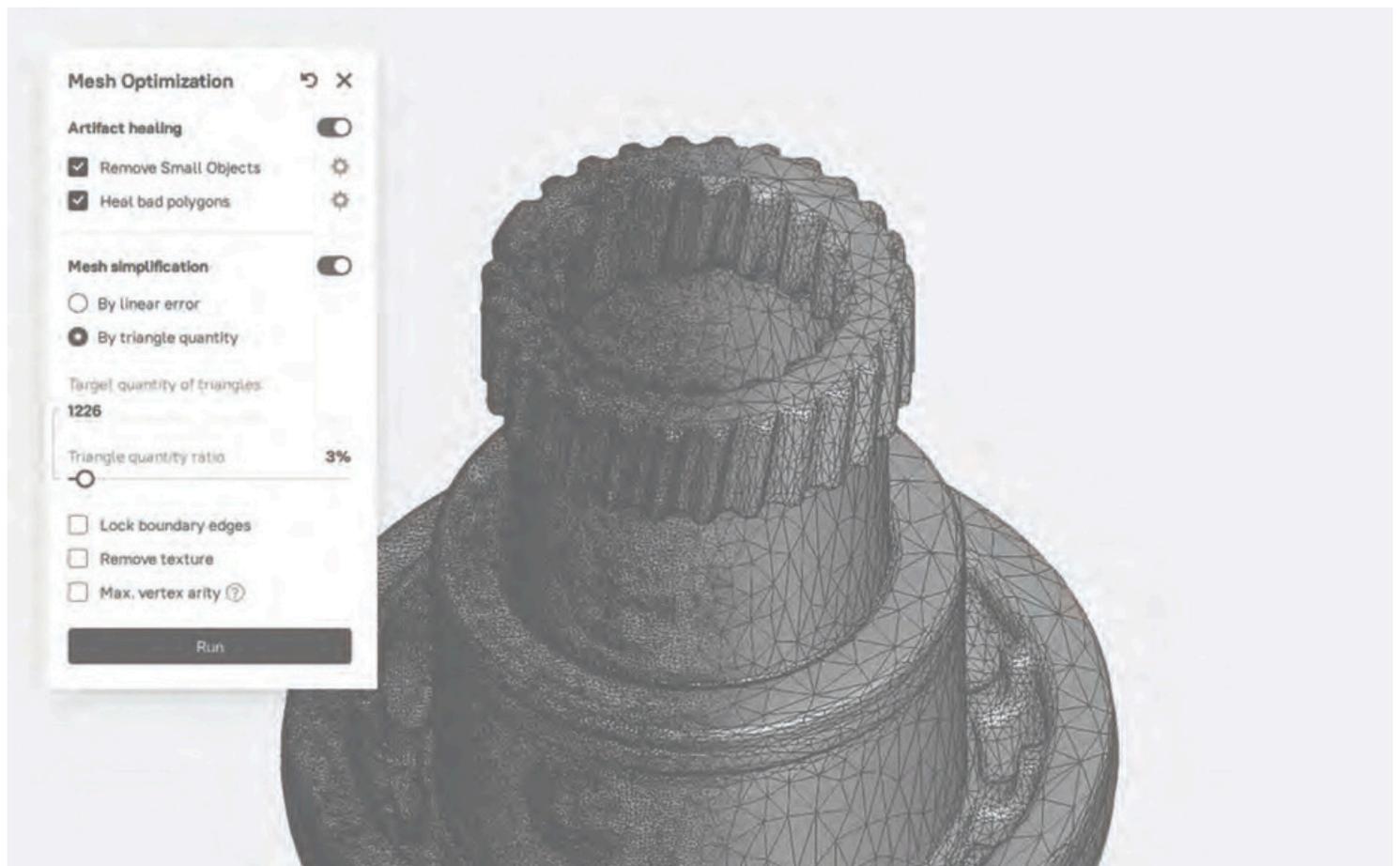
Divide scans into sections, uncover defects with 3D compare map, and ensure product standards with tolerance checking.

Merge different types of data

Combine point clouds captured using one or more Artec 3D scanners, or add drone photogrammetry data, for large 3D models with incredible detail where it counts.

Updated yearly

Each new version of Artec Studio brings upgrades that enhance users' 3D data capture experience and deliver even better results.



Use a combination of scanners to digitize a whole environment

Artec 3D scanners can easily be combined for high-accuracy and high-resolution captures of complex environments with objects of varying sizes and detail. For example, a modern airplane hangar with aircraft, service vehicles, and equipment.





1

Artec Ray II

Scan size: Large – extra large
Hangar architecture & overall aircraft exterior, fuselages, wings, service vehicles.



1

Artec Metrology Kit

Scan size: Medium – extra large
Turbines, fuselages, wings, vehicle chassis, satellites, helicopters, ships.



2

Artec Leo

Scan size: Medium – large
Aircraft landing gear, doors, engines, flaps, airplane and service vehicle interiors.



3

Artec Spider II

Scan size: Small – medium
Instrument panels, circuits, hydraulics, avionics, antennas, gearboxes.

Artec Spider II Specifications

Resolution & accuracy

Resolution, up to	0.05 mm
Accuracy, up to	0.05 mm
3D accuracy over distance, up to	0.05 mm + 0.3 mm/m

Scanning range

Size of scanning object/area	S-M
Working distance	0.19 – 0.3 m
Volume capture zone	1,800 cm ³
Linear field of view H×W @ closest range	128 × 104 mm
Linear field of view H×W @ furthest range	171 × 152 mm
Depth of field	110 mm

Speed

3D reconstruction rate for real-time fusion, up to	30 fps
Data acquisition speed, up to	8 mln points/s

Scanning algorithms

Target-free technology	Yes
Hybrid geometry and texture tracking	Yes

Texture

Texture resolution	5 MP
Colors	24 bpp

Hardware

Scanner type	Handheld
Power source	AC / DC power adapter, DC 24V
Interface	Compatible with Thunderbolt 4 hosts
3D structured-light source	450 nm LED
Texture illumination source	White LED CRI > 95, color temperature 4000 K
Dimensions HxDxW	187 × 156 × 118 mm
Weight	0.95 kg / 2.1 lbs
Warranty	2 years

Compatibility

Supported OS	Windows 10 (x64), Windows 11
Recommended computer parameters	13th or 14th Gen Intel Core i7 or i9 processors, RTX 4070 8 GB
Minimum computer requirements	12th Gen Intel Core i9 processor, RTX 4060 8 GB

Output formats

3D mesh	OBJ, PLY, WRL, STL, AOP, ASC, PTX, E57, XYZRGB
CAD	STEP, IGES, X_T
Measurements	CSV, DXF, XML