

KEY SPECS

Range	Up to 110m	Range noise, 90% reflectivity	0.12mm @ 15m
Ranging error	<0.70mm @ 15m	Range noise, 10% reflectivity	0.30mm @ 15m
Angular accuracy	25 arcseconds	Color	Two fully integrated 5 megapixel cameras

Hassle-free export into a wide range of formats: Mesh: OBJ, PLY, WRL, STL, AOP, ASC, PTX, E57, XYZRG Point cloud: BTX, PTX, XYZ
CAD: STEP, IGES, X_T Measurements: CSV, DXF, XML

SYSTEM SPECIFICATIONS

Scanner type	Phase shift, hemispherical scanner with 360° × 270° FOV
Distance measurement method	Phase-shift
Laser wavelength	1550nm
Laser type	Continuous wave
Laser class: (IEC EN60825-1:2007)	Class 1
Internal coordinate representation unit	0.001 mm

Angular position data

Beam diameter at aperture	3 mm
Internal angular representation unit (vertical/horizontal)	1 arcsec

Scan density control: software selectable

Min. vertical point density	12 points/degree
Min. horizontal point density	2 points/degree
Max vertical point density	80 points/degree
Max horizontal point density	80 points/degree

Power specifications

External power supply voltage	14 - 24V DC, 30W
Internal battery, powers the scanner for up to 4 hours	Two Li-Ion 14V, 49Wh batteries
Power consumption	30 W

Computer requirements

Supported OS	Windows 7, 8 or 10 – x64
Minimum computer requirements	i5, i7 or i9 recommended, 32 GB RAM, NVIDIA GeForce 400 series

Artec RAY



ULTRA-HIGH PRECISION, FAST LASER SCANNER

The fastest, most accurate laser scanner for capturing large objects such as wind turbines, ship propellers, airplanes and buildings. Producing 3D data of the highest quality, Artec Ray scans with submillimeter distance accuracy and best in class angular accuracy.

CLEANEST 3D DATA CAPTURE FOR MINIMUM PROCESSING TIME

Furthermore, data capture is cleaner than that from any other 3D scanner of this type, with noise levels at an absolute minimum. This speeds up data processing significantly, making it a hassle free job.

IDEAL FOR CONSTRUCTION, INSPECTION AND PRODUCT DESIGN

APPLICATIONS



REVERSE
ENGINEERING



INSPECTION



CONSTRUCTION
(BIM)



PRODUCT
DESIGN



FORENSICS



HERITAGE
PRESERVATION



EASY 3D SCANNING, HIGH PRECISION RESULTS

SCANNING WITH ARTEC RAY IS EASY

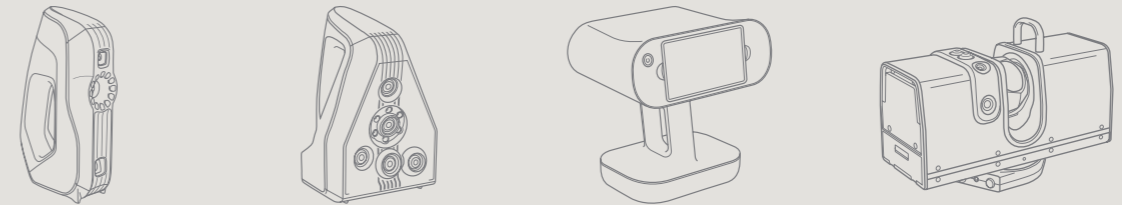
Just place it on a tripod in front of your object and press the button! Portable and compact, you can set it up indoors or outdoors, without need for a power source, since the internal battery will last you for up to 4 hours.

SOFTWARE

Scan and process directly in the powerful Artec Studio, then seamlessly export to Geomagic Design X.



THE FULL 3D SCANNING PACKAGE



Pair it with an Artec handheld scanner, such as Leo, Eva or Space Spider, to scan difficult to reach areas, e.g. the interior of a car, or to easily add intricate detail to a large-scale 3D model. Armed with Artec Ray and an Artec handheld scanner, there will be virtually no limits to what you can capture in 3D.

SPECIFICATIONS	High Quality mode	High Sensitivity mode
Recommended work range	1-50 m	1-110 m
Ranging error	<0.70 mm @ 15 m	<0.90 mm @ 15 m
Angular accuracy	25 arcsecs	25 arcsecs
Range noise, 90% reflectivity	0.12 mm @ 15 m	0.25 mm @ 15 m
Range noise, 10% reflectivity	0.30 mm @ 15 m	0.70 mm @ 15 m
Speed	208,000 pts/sec	
Full volume scan time	122,000 pts/sec	
Scanning modes	Autonomous or via USB	
Color	Two fully integrated 5 megapixel cameras	

FIELD-OF-VIEW PER SCAN

Horizontal (maximum)	360°
Vertical (maximum)	270°

PHYSICAL DIMENSIONS AND WEIGHT

Weight with battery	5.74 kg
Dimensions L x H x W	287 mm x 200 mm x 118 mm

