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. 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.

**APPLICATIONS**

- REVERSE ENGINEERING
- INSPECTION
- CONSTRUCTION (BIM)
- PRODUCT DESIGN
- FORENSICS
- HERITAGE PRESERVATION

**SYSTEM SPECIFICATIONS**

- **Scanner type:** Phase shift, hemispherical scanner with 360° × 270° FOV
- **Distance measurement method:** Phase-shift
- **Laser wavelength:** 1550 nm
- **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 - 24 V DC, 30 W
  - 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

**KEY SPECS**

- **Range:** Up to 110 m
- **Ranging error:** <0.70 mm @ 15 m
- **Angular accuracy:** 25 arcseconds
- **Range noise, 90% reflectivity:** 0.12 mm @ 15 m
- **Range noise, 10% reflectivity:** 0.30 mm @ 15 m
- **Color:** Two fully integrated 5 megapixel cameras
- **Noise levels:** at an absolute minimum
- **Scan density control:** software selectable
- **Power specifications:**
  - External power supply voltage: 14 - 24 V DC, 30 W
  - Internal battery, powers the scanner for up to 4 hours: Two Li-Ion 14V, 49Wh batteries
  - Power consumption: 30 W
- **Supported OS:** Windows 7, 8 or 10 – x64
- **Minimum computer requirements:** i5, i7 or i9 recommended, 32 GB RAM, NVIDIA GeForce 400 series

**Mesh:** OBJ, PLY, WRL, STL, AOP, ASC, PTX, E57, XYZRG
**CAD:** STEP, IGES, X_T
**Measurements:** CSV, DXF, XML

**Hassle-free export into a wide range of formats:**

- **Mesh:** OBJ, PLY, WRL, STL, AOP, ASC, PTX, E57, XYZRG
- **CAD:** STEP, IGES, X_T
- **Measurements:** CSV, DXF, XML

**Applications**

- REVERSE ENGINEERING
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- PRODUCT DESIGN
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- 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

<table>
<thead>
<tr>
<th></th>
<th>High Quality mode</th>
<th>High Sensitivity mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended work range</td>
<td>1-50m</td>
<td>1-110m</td>
</tr>
<tr>
<td>Ranging error</td>
<td>&lt;0.70 mm @ 15 m</td>
<td>&lt;0.90 mm @ 15 m</td>
</tr>
<tr>
<td>Angular accuracy</td>
<td>25 arcsecs</td>
<td>25 arcsecs</td>
</tr>
<tr>
<td>Range noise, 90% reflectivity</td>
<td>0.12 mm @ 15 m</td>
<td>0.25 mm @ 15 m</td>
</tr>
<tr>
<td>Range noise, 10% reflectivity</td>
<td>0.30 mm @ 15 m</td>
<td>0.70 mm @ 15 m</td>
</tr>
<tr>
<td>Speed</td>
<td>208,000 pts/sec</td>
<td>122,000 pts/sec</td>
</tr>
<tr>
<td>Full volume scan time</td>
<td></td>
<td></td>
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<tr>
<td>Scanning modes</td>
<td>Autonomous or via USB</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two fully integrated 5 megapixel cameras</td>
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FIELD-OF-VIEW PER SCAN

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Horizontal (maximum)</td>
<td>360°</td>
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<tr>
<td>Vertical (maximum)</td>
<td>270°</td>
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PHYSICAL DIMENSIONS AND WEIGHT

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<thead>
<tr>
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<tbody>
<tr>
<td>Weight with battery</td>
<td>5.74 kg</td>
</tr>
<tr>
<td>Dimensions L x H x W</td>
<td>287 mm x 200 mm x 118 mm</td>
</tr>
</tbody>
</table>