

# HandySCAN 3D | SILVER Series

## TECHNICAL SPECIFICATIONS

The HandySCAN 3D technical specifications make it the industrial standard in portable 3D measurement technology.

Featuring accuracy, portability, simplicity, versatility, and a trusted patented technology, the SILVER Series captures highly accurate and repeatable 3D measurements of any complex surface in any location.

Thanks to this 3D scanner's specifications, it is an ideal tool for technology innovators and engineering professionals looking for a powerful and accessible way to improve product development, shorten time-to-market, and reduce development costs.

## Technical Specifications

Proven and trusted technology that provides accuracy, portability, simplicity, and versatility to your innovative applications.

	HandySCAN SILVER™	HandySCAN SILVER™ Elite
<b>Accuracy<sup>(1)</sup></b>	Up to 0.040 mm (0.0016 in)	Up to 0.030 mm (0.0012 in)
<b>Volumetric accuracy<sup>(2)</sup> (based on part size)</b>	0.020 mm + 0.100 mm/m (0.0008 in + 0.0012 in/ft)	0.020 mm + 0.060 mm/m (0.0008 in + 0.0007 in/ft)
<b>Volumetric accuracy with MaxSHOT Next  Elite<sup>(3)</sup></b>	0.020 mm + 0.015 mm/m (0.0008 + 0.00018 /ft)	
<b>Measurement capabilities (at a working distance of 0.3 m (1 ft))</b>	<b>Pin</b>	1.00 mm (0.0393 in)
	<b>Hole</b>	1.50 mm (0.0591 in)
	<b>Step</b>	0.030 mm (0.0012 in)
	<b>Wall</b>	0.75 mm (0.0295 in)
<b>Measurement resolution</b>	0.030 mm (0.0012 in)	
<b>Mesh resolution</b>	0.100 mm (0.0039 in)	

<b>Measurement rate</b>	800,000 measurements/s	
<b>Light source<sup>(4)</sup></b>	14 blue laser lines	14 blue laser lines (+ 1 extra line)
<b>Working distance</b>	200 to 450 mm (7.9 x 17.7 in)	
<b>Depth of field</b>	250 mm (9.8 in)	
<b>Part size range (recommended)</b>	0.05-4 m (0.15-13.1 ft)	
<b>Software</b>	VXelements	
<b>Output formats</b>	.dae, .fbx, .ma, .obj, .ply, .stl, .txt, .wrl, .x3d, .x3dz, .zpr, .3mf	
<b>Compatible software<sup>(5)</sup></b>	3D Systems (Geomagic® Solutions), InnovMetric Software (PolyWorks), Metrologic Group (Metrolog X4), New River Kinematics (Spatial Analyzer), Verisurf, Dassault Systèmes (CATIA, SOLIDWORKS), PTC (Creo), Siemens (NX, Solid Edge), Autodesk (Inventor, PowerINSPEC)	
<b>Weight</b>	0.94 kg (2.1 lb)	
<b>Dimensions (LxWxH)</b>	79x 142 x 288 mm (3.1 x 5.6 x 11.3 in)	
<b>Connection standard</b>	1 X USB 3.0	
<b>Operating temperature range</b>	5-40 °C (41-104 °F)	
<b>Operating humidity range (non-condensing)</b>	10-90%	
<b>Certifications</b>	EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), compatible v rechargeable batteries (when applicable), IP50, WEEE	
<b>Patents</b>	CA 2,600,926, CN 200680014069.3, US 7,912,673, CA 2,656,163, EP (FR, UK, DE) 1,877,72 AU 2006222458, US 8,032,327, JP 4,871,352, US 8,140,295, EP (FR, UK, DE) 2,278,271, E (FR, UK, DE) 2,230,482, IN 266,573, US 7,487,063, CA 2,529,044, EP (FR, UK, DE) 3,102,90 US 15/114,563, CN 201580007340X	

<sup>(1)</sup> Typical value for diameter measurement on a calibrated sphere artefact.

<sup>(2)</sup> Value for spheres spacing measurement on a calibrated length artefact. Results are obtained using integrated photogrammetry with volumetric accuracy optimization.

<sup>(3)</sup> The volumetric accuracy of the system when using a MaxSHOT 3D cannot be superior to the default accuracy for a given model.

<sup>(4)</sup> Laser class: 2M (eye safe).

<sup>(5)</sup> Also compatible with all major metrology, CAD, and computer graphic software through mesh and point cloud import.