





# Technical Specifications

Innovating technology that provides *accuracy, simplicity, portability* as well as real speed to your metrology-grade applications.

	HandySCAN MAX™	HandySCAN MAX™ Elite
Accuracy <sup>(1)</sup>	<b>0.150 mm</b> (0.0059 in)	<b>0.075 mm</b> (0.0030 in)
Volumetric accuracy <sup>(2)</sup> (based on part size)	<b>0.150 mm + 0.020 mm/m</b> (0.0059 in + 0.00024 in/ft)	<b>0.100 mm + 0.010 mm/m</b> (0.0030 in + 0.00012 in/ft)
Measurement capabilities (at a working distance of 0.5 m (1.65 ft))	 Pin	<b>2.50 mm</b> (0.0984 in)
	 Hole	<b>3.50 mm</b> (0.1378 in)
	 Step	<b>0.04 mm</b> (0.0016 in)
	 Wall	<b>2.00 mm</b> (0.0787 in)
Measurement resolution	<b>0.04 mm</b> (0.0016 in)	
Mesh resolution	<b>0.4 mm</b> (0.0157 in)	
Measurement rate	2 250 000 measurements/s	
Light source	38 blue laser lines	
Laser class	2M (eye-safe)	
Scanning area	<b>1 x 1 m</b> (3.3 x 3.3 ft)	
Stand-off distance	0.45 to 1.60 m (1.5 to 5.2 ft)	0.30 to 2.50 m (1.0 to 8.2 ft)
Depth of field	1.15 m (3.8 ft)	2.20 m (7.2 ft)
Part size range (recommended)	<b>1–10 m</b> (3.3–32.8 ft)	<b>1–15 m</b> (3.3–49.2 ft)
Software	VXelements	
Output formats	.dae, .fbx, .ma, .obj, .ply, .stl, .txt, .wrl, .x3d, .x3dz, .zpr, .3mf	
Compatible software <sup>(4)</sup>	3D Systems (Geomagic® Solutions), InnovMetric Software (PolyWorks), Metrologie Group (Metrolog X4), New River Kinematics (Spatial Analyzer), Verisurf, Dassault Systèmes (CATIA V5, SOLIDWORKS), PTC (Creo), Siemens (NX, Solid Edge), Autodesk (Inventor, PowerINSPECT)	
Weight	<b>1.22 kg</b> (2.7 lb)	
Dimensions (LxWxH)	<b>133 x 79 x 435 mm</b> (5.2 x 3.10 x 17.10 in)	
Connection standard	1 X USB 3.0	
Operating temperature range	5-40 °C (41-104 °F)	
Operating humidity range (non-condensing)	10-90%	
Certifications	EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), compatible with rechargeable batteries (when applicable), IP50, WEEE	
Patents	CA 2,600,926, US 7,912,673, CA 2,656,163, EP (FR, UK, DE) 1,877,726, AU 2006222458, US 8,032,327, JP 4,871,352, US 8,140,295, EP (FR, UK, DE) 2,278,271, EP (FR, UK, DE) 2,230,482, IN 266,573, US 7,487,063, CA 2,529,044, EP (FR, UK, DE) 3,102,908, US 10,271,039, JP 6,596,433, CA 2,938,104, KR 10-2424135	

<sup>(1)</sup> HandySCAN MAX and HandySCAN MAX|Elite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard. Probing error performance is assessed with diameter measurements on traceable sphere artefacts. Results are obtained at stand-off distance of 0.6 m and 1.2 m (1.98 ft and 3.96 ft).

<sup>(2)</sup> HandySCAN MAX and HandySCAN MAX|Elite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard. Sphere-spacing error is assessed with traceable length artefacts by measuring these at different locations and orientations within the working volume. Results are obtained at stand-off distance of 0.6 m and 1.2 m (1.98 ft and 3.96 ft) and 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 of the chosen system and model

<sup>(4)</sup> Also compatible with all major metrology, CAD, and computer graphic software through mesh and point cloud import.