

# TECHNICAL SPECIFICATIONS

Innovating technology that provides *TRUaccuracy™*, *TRUsimplicity™*, *TRUportability™* as well as real speed to your metrology-grade applications.

	HandySCAN 307™	HandySCAN BLACK™	HandySCAN BLACK™IElite
<b>ACCURACY</b> <sup>(1)</sup>	Up to 0.040 mm	0.035 mm	0.025 mm
<b>VOLUMETRIC ACCURACY</b> <sup>(2)</sup> (based on part size)	0.020 mm + 0.100 mm/m	0.020 mm + 0.060 mm/m	0.020 mm + 0.040 mm/m
<b>VOLUMETRIC ACCURACY WITH MaxSHOT Next™IElite</b> <sup>(3)</sup>	0.020 mm + 0.015 mm/m		
<b>MEASUREMENT RESOLUTION</b>	0.100 mm	0.025 mm	
<b>MESH RESOLUTION</b>	0.200 mm	0.100 mm	
<b>MEASUREMENT RATE</b>	480,000 measurements/s	800,000 measurements/s	1,300,000 measurements/s
<b>LIGHT SOURCE</b>	7 red laser crosses	7 blue laser crosses	11 blue laser crosses (+ 1 extra line)
<b>LASER CLASS</b>	2M (eye safe)		
<b>SCANNING AREA</b>	275 x 250 mm	310 x 350 mm	
<b>STAND-OFF DISTANCE</b>	300 mm		
<b>DEPTH OF FIELD</b>	250 mm		
<b>PART SIZE RANGE</b> (recommended)	0.1–4 m	0.05–4 m	
<b>SOFTWARE</b>	VXelements		
<b>OUTPUT FORMATS</b>	.dae, .fbx, .ma, .obj, .ply, .stl, .txt, .wrl, .x3d, .x3dz, .zpr, .3mf		
<b>COMPATIBLE SOFTWARE</b>	3D Systems (Geomagic® Solutions), InnovMetric Software (PolyWorks), Dassault (CATIA V5 and SOLIDWORKS), PTC (Creo), Siemens (NX and Solid Edge), Autodesk (Inventor, Alias, 3ds Max, Maya, Softimage)		
<b>WEIGHT</b>	0.85 kg	0.94 kg	
<b>DIMENSIONS (LxWxH)</b>	77 x 122 x 294 mm	79 x 142 x 288 mm	
<b>CONNECTION STANDARD</b>	1 X USB 3.0		
<b>OPERATING TEMPERATURE RANGE</b>	5–40°C		
<b>OPERATING HUMIDITY RANGE</b> (non-condensing)	10–90%		
<b>CERTIFICATIONS</b>	EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), compatible with 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) 1,877,726, 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 15/114,563, CN 201580007340X		

(1) HandySCAN BLACK and HandySCAN BLACKIElite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard. Probing error performance is assessed with diameter measurements on traceable sphere artefacts.  
HandySCAN 307: Typical value for diameter measurement on a calibrated sphere artefact.

(2) HandySCAN BLACK and HandySCAN BLACKIElite (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.  
HandySCAN 307: Value for spheres spacing measurement on a calibrated length artefact.

(3) The volumetric accuracy of the system when using a MaxSHOT 3D cannot be superior to the default volumetric accuracy of the chosen system and model.



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