

# TECHNICAL SPECIFICATIONS

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

	MetraSCAN 357™	MetraSCAN BLACK™	MetraSCAN BLACK™ Elite
<b>ACCURACY</b> <sup>(1)</sup>	Up to 0.040 mm	0.035 mm	0.025 mm
<b>VOLUMETRIC ACCURACY</b> <sup>(2)</sup>	9.1 m <sup>3</sup>	0.086 mm	0.064 mm
	16.6 m <sup>3</sup>	0.122 mm	0.078 mm
<b>VOLUMETRIC ACCURACY WITH MaxSHOT Next™ Elite</b> <sup>(3)</sup>	0.060 mm + 0.015 mm/m		0.044 mm + 0.015 mm/m
<b>PROBING ACCURACY WITH HandyPROBE Next</b> <sup>(4)</sup>	Up to 0.030 mm	0.030 mm	0.025 mm
<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	1,800,000 measurements/s
<b>LIGHT SOURCE</b>	7 red laser crosses	7 blue laser crosses	15 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>	200 mm	250 mm	
<b>PART SIZE RANGE</b> (recommended)	0.2–6 m		
<b>SOFTWARE</b>	VXelements		
<b>OUTPUT FORMATS</b>	.dae, .fbx, .ma, .obj, .stl, .txt, .wrl, .x3d, .zpr, .3mf		
<b>COMPATIBLE SOFTWARE</b> <sup>(5)</sup>	3D Systems (Geomagic® Solutions), InnovMetric Software (PolyWorks), Metrologic Group (Metrolog X4), New River Kinematics (Spatial Analyzer), Verisurf, Dassault Systèmes (CATIA V5, SOLIDWORKS), PTC (Creo), Siemens (NX, Solid Edge), Autodesk (Inventor, PowerINSPECT)		
<b>WEIGHT</b>	Scanner: 1.38 kg Probe: 0.5 kg C-Track: 5.7 kg	Scanner: 1.49 kg Probe: 0.5 kg C-Track: 5.7 kg	
<b>DIMENSIONS</b> (LxWxH)	Scanner: 289 x 235 x 296 mm Probe: 68 x 157 x 340 mm C-Track: 1031 x 181 x 148 mm		
<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>	FR 2,838,198, EP (FR, UK, DE, IT) 1,492,995, US 7,487,063, CA 2,529,044		

(1) MetraSCAN BLACK and MetraSCAN BLACK|Elite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard. Probing error performance is assessed with diameter measurement on traceable sphere artefacts.

MetraSCAN 357: Typical value for diameter measurement on a calibrated sphere artefact.

(2) MetraSCAN BLACK and MetraSCAN BLACK|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.

MetraSCAN 357: Value for sphere spacing measurement on calibrated length artefacts.

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

(4) HandyPROBE Next and HandyPROBE Next|Elite performance assessment (ISO 17025 accredited) is based on partial procedure per ISO 10360-12 standard: *Probing size error* (6.2) and *Length error* (6.4). Performance is assessed on traceable sphere and length artefacts.

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



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