

HandySCAN 3D | PRO Series Technical specifications

The HandySCAN 3D | PRO Series sets the standard in portable 3D measurement for product development and reverse engineering.

Built on trusted and proven technology, it delivers unmatched accuracy, resolution, and simplicity—anywhere, on any surface, no matter how complex.

Its advanced technical specifications make it the go-to solution for technology innovators and engineering professionals seeking a powerful, accessible way to accelerate product development, cut time-to-market, and lower development costs.



[HandySCAN PRO](#)

Accuracy

Up to 0.030 mm⁽¹⁾
(0.0012 in)⁽¹⁾

Volumetric accuracy (based on part size)

0.020 mm + 0.060 mm/m⁽²⁾
(0.0008 in + 0.00072 in/ft)⁽²⁾

Volumetric accuracy with MaxSHOT Next™|Elite

0.030 mm + 0.015 mm/m⁽³⁾
(0.0012 in + 0.00018 in/ft)⁽³⁾

Measurement capabilities

(at a working distance of 0.35 m (1,2ft))



Pin

1.00 mm
(0.0393 in)



Hole

1.50 mm
(0.0591 in)



Step

0.030 mm
(0.0012 in)



Wall

0.75 mm
(0.0295 in)

Measurement resolution

0.025 mm
(0.0010 in)

Mesh resolution

0.100 mm
(0.0039 in)

Measurement rate

1,200,000 measurements/s

Light source

23 blue laser lines⁽⁴⁾

Scanner Controls

Touchscreen display

Working Distance

250 to 450mm
(9.8 x 17.7 in)

Depth of field

200 mm
(7.9 in)

Part size range (recommended)

0.05-4 m
(0.15-13.1 ft)

Output formats

.dae, .fbx,.iges, .ma, .obj, .ply, .step, .stl, .txt, .wrl, .x3d, .x3dz, .zpr, .3mf

Reverse Engineering Software

Scan-to-CAD Pro (included)

Compatible software

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)⁽⁵⁾

Weight

920 g
(2.0 lb)

Dimensions
(LxWxH)

79 x 150 x 304 mm
(3.2 x 5.9 x 12 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, EP (FR, UK, DE) 3,102,908, US 10,271,039, JP 6,596,433, CA 2,938,104, KR 10-2424135, EM 009203334-0001, EM 009203334-0002, EM 009203334-0003, EM 009203334-0004, EM 009203334-0005, EM 009203334-0006, CN 220,206,623 U, CN 308805542 S, CN 221,445,081 U

(1) Typical value for diameter measurement on a calibrated sphere artefact.

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

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

(4) Laser class: 2M (eye safe).

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