HEXAGON

Data sheet

ATLASCAN Pro

Engineered for people, not just parts

ATLASCAN Pro is a versatile handheld 3D scanner that combines speed, portability, and accuracy in a user-friendly and cost-effective package. Designed to be lightweight, intuitive, and easy to learn, ATLASCAN Pro makes advanced scanning and reverse engineering accessible to everyone. From quick setup to guided workflows, it eliminates complexity so teams can be productive from day one.

Direct scan-to-CAD workflow

ATLASCAN Pro integrates seamlessly with Geomagic Design X Go, enabling direct scan-to-CAD workflows. Complex parts are quickly converted into editable models, accelerating reverse engineering and reducing manual rework

High-frame rate capture

Rapid acquisition speeds accelerate prototyping and validation cycles. By reducing scan times, ATLASCAN Pro keeps projects on schedule and supports faster iteration

3 scan modes

Standard, fine and single line scanning modes let you tailor your scanner performance to the application at hand, for greater efficiency or resolution as needed

Multi-size target recognition

Maximise efficiency by using different target sizes (3/6/12/16 mm) for different applications during the scanning process

Automated mesh generation and hole filling

Built-in automation produces watertight models with minimal input. By eliminating tedious manual mesh editing, teams save time and keep downstream workflows moving smoothly

Integration with additive workflows

Ideal for 3D printing environments, ATLASCAN Pro validates first prints against CAD intent. Early error detection reduces waste, prevents failed builds, and lowers costs

High data density point mesh/ point clouds

Capture edges, fine surfaces, and complex geometries with high-resolution point clouds. The result is CAD models with the detail and precision needed for critical applications

Portable and lightweight

ATLASCAN Pro is easy to transport and share between teams or classrooms. Its portability maximises usage while maintaining consistent scanning quality

Wireless scanning module

This optional module provides additional freedom of movement, with wireless connection and battery-powered autonomy that ensure you can operate in remote areas

Affordable entry-level package

With pricing designed for SMEs and educators, ATLASCAN Pro opens the door to professional handheld scanning. It makes advanced technology accessible without compromising capability

Wide scanning area with adjustable resolution

From small components to larger assemblies, ATLASCAN Pro adapts instantly. Its adjustable resolution ensures flexibility across a broad range of part sizes and applications

Dynamic scanning

No fixing or special setup required, accelerating throughput. Unaffected by unstable environments.

Automation-ready

Seamless automation with TCP/IP compatibility, cobot mounting, and an integrator kit, helping to boost throughput, ensure consistent results, and reduce manual effort.

Certification

System is certified in line with the VDI/VDE 2634-3 to assure reliability and comparability with an ISO 17025-certified laboratory

Technical specifications

Scanning modes		Standard, single line and fine
Measurement rate		Standard and single line: Up to 4 000 000 pts/s Fine: 1 720 000 pts/s
Scanning area		Up to 720 x 640 mm (single line mode: 300 mm)
Light source		26 blue laser lines + single blue laser line + 14 blue laser lines
Resolution		Up to 0.01 mm
Accuracy [1]		Up to 0.03 mm
With targets	Volumetric accuracy-standard [2]	0.03 + 0.05 mm/m
	Volumetric accuracy with scale bar [3]	0.03 + 0.035 mm/m
Stand-off distance (by scanning mode)	Fine scan	150-250 mm
	Standard and single laser	200-450 mm
	Long range	200-750 mm
Part size range (recommended)		0.1-4 m
Weight		1 kg
Dimensions		295 × 135 × 75 mm
Connection standard		USB 3.0 (or wireless)
Working temperature		-10 to 40°C
Working humidity (non-condensing)		10%-90%
Export formats		.asc, .stl, .obj, .ply, .txt, .xyz, customisable
Compatible software		Hexagon (Inspire, PC-DMIS, DESIGNER, Geomagic) Third-party software (PolyWorks, Metrologic and any other software that can import point clouds or STL file format)

Defining accuracy: Having a reliable basis for the stated accuracy of our handheld 3D scanner systems is vital. That is why we measure every scanner against our defined Scanner Acceptance Test. Based on VDI/VDE Guideline 2634 Part 3, this Scanner Acceptance Test uses these quality parameters to ensure users have full confidence in the accuracy of their Hexagon handheld 3D scanner.

[1] Probing error size [PS]: Local quality parameter. Deviation from the fitted sphere radius to the calibrated radius.
[2] Sphere spacing error [SSE]: Global quality parameter. Deviation from distance of fitted spheres to calibrated distance.
[3] Rectangle scale bar for Galaxy mode.

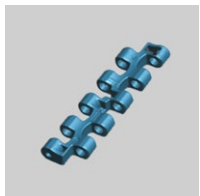
Typical industry sectors

General manufacturing

Automotive

Energy

3D printing



Consumer products

Hexagon is the global leader in measurement technologies. We provide the confidence that vital industries rely on to build, navigate, and innovate. From microns to Mars, our solutions ensure productivity, quality, safety, and sustainability in everything from manufacturing and construction to mining and autonomous systems.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,800 employees in 50 countries and net sales of approximately 5.4bn EUR.

Learn more at hexagon.com