

HYPERSCAN

Key features

HYPERSCAN enhances productivity across a wide range of manufacturing environments with fast, accurate scanning for parts of all sizes, even in unstable or dynamic conditions. Combining real-time dynamic tracking, multi-mode scanning, and target-free operation in a compact, user-friendly system, it streamlines workflows, reduces setup time, and delivers reliable results in both manual and automated applications.

Speed



Scanning speed

High-speed laser scanning engine collects 8.3 million pts/sec, enabling rapid inspection of even large or detailed parts.



Target-free

Features a target-less scanning system that uses an optical tracking unit.



Intelligent voice assistant

Simplify user operation with voice control and enable the user to focus on what is needed.



Uninterrupted tracking

Just pick up the sensor head and start scanning, multi camera tracking capability extends scanning volume & efficiency.



Versatility



Multi-mode scanning

Switch between Standard, Fine, Line, or Hole Flash modes to match surface conditions, part size, or required detail, all from one device.



Handheld and fixed

Supports dual-mode operation, functioning seamlessly in both handheld and automated robot configurations.



Portable

Its lightweight, ergonomic design and real-time dynamic tracking enable mobile use.



Resistance to instability

Real-time dynamic tracking allows the user to scan in confidence in unstable and vibration conditions.



Freedom to move around

New heights in scanning - eliminates cables through Wi-Fi connection powered by battery autonomy.

Automation



Robot integration

Seamlessly integrates with robotic arms or automated systems for unattended scanning.



Real-time tracking

Maintains real-time tracking of moving parts or turntables, ensures continuous scanning without disruptions.



Smart scanning

Within a single workflow, delivering flexibility without added complexity.



Turnkey solution

HYPERSCAN is compatible with Hexagon's PRESTO system (automated scanning inspection cell).

Technical specifications

Model		HYPERSCAN ULTRA		HYPERSCAN SUPER	
Measurement rate		8 300 000 pts/s			
Scanning area		Up to 610 × 640 mm			
Light source		81 blue laser lines + extra single laser line + 34 blue laser lines			
Resolution		Up to 0.02 mm			
Accuracy (sensor only) ¹		Up to 0.02mm			
Volumetric accuracy ² (by tracking distance)	3.5 m (13 m³)	0.060 mm	0.05 mm		
	4.2 m (22 m³)	0.075 mm	0.05 mm		
	5.5 m (50 m³)	0.09 mm	0.075 mm		
	6.3 m (74 m³)	N/A	0.09 mm		
	7 m (100 m³)	N/A	0.14 mm		
Hole Flash Capture accuracy		0.03 mm			
Edge Detection accuracy		Up to 0.05mm			
Galaxy leap		Supported			
Stand-off distance (by scanning mode)	Fine Scan	150-250 mm			
	Standard & Single laser	200-450 mm			
	Long range	200-750 mm			
Tracker frequency		100 Hz			
HYPERSCAN main unit	Weight	1.5 kg			
	Dimensions	204 × 263 × 280mm			
HYPERTRACK main unit	Weight	5.7 kg	7.4 kg		
	Dimensions	678 × 159 × 125mm	1078 × 159 × 125mm		
Wireless scanning module		Supported			
Part size range (recommended)		0.1-8 m	0.1-12 m		
Connection standard		USB 3.0//Ethernet			
Working temperature		-10 to 40°C			
Working humidity (non-condensing)		10-90% RH			
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 optical tracking 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 optical tracking 3D scanner.

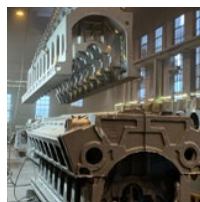
¹ Probing error size [PS]: Local quality parameter. Deviation from the fitted sphere radius to the calibrated radius.

² Sphere spacing error [SSE]: Global quality parameter. Deviation from distance of fitted spheres to calibrated distance.

Typical industry sectors



Railway



General
manufacturing



Energy



Automotive



Construction

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that use data from design and engineering, production and metrology to make manufacturing smarter.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us [@HexagonAB](https://twitter.com/HexagonAB).