IT3D GROUP

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SCANOLOGY IT3D GROUP

SIMSCAN Gen2

Smart Handheld 3D Scanner

FAST PRECISE POWER IN YOUR PALM

SIMSCAN Gen2 is a palm-sized industrial 3D laser scanner engineered for precise scanning for small to normal-sized part even in tight, hard-to-reach spaces. Its lightweight, ergonomic design ensures comfortable and long-term use.

Powered by advanced algorithms and 27 laser crosses, SIMSCAN delivers fast data capture with a measurement rate of up to 5.8 million measurements/s. Recognized with the German Red Dot and China Design Silver Awards, it stands out as a sleek, efficient, and user-friendly tool—ideal for professionals and newcomers to high-precision 3D scanning.

5,800,000
measurements/s

ISO & VDI/VDE
certified

0.020 mm
accuracy

27
laser crosses

Sleek and Compact

SIMSCAN Gen2 features a sleek, ergonomic design with a full-metal, aerospace-grade housing for durability and comfort. Compact and lightweight, it fits easily in one hand for effortless scanning, even in tight spaces. It combines style, strength, and usability in one compact device.

Dimension

203 mm × 80 mm × 44 mm

Weight

570 g

reddot

Reddot winner 2021

Flexible Modes for Diverse Needs

The 3D laser scanner offers three scanning modes, adapting to diverse needs. Easy to use for both professionals and beginners, it effortlessly handles GD&T measurements, assembly analysis, maintenance, modifications and more.

Ultra-fast scanning

Hyperfine scanning

Deep hole scanning

High-Speed Scanning

It enables fast 3D scanning with a measurement rate of up to 5.8 million measurements/s. Powered by advanced algorithms, 27 blue laser crosses and fast data capturing, it ensures smooth and efficient 3D digitizing to obtain precise digital twins.

5,800,000

measurements/s

Industrial-grade Accuracy

SIMSCAN Gen2 delivers high-precision 3D measurements with an accuracy of up to 0.020 mm and high repeatability, making it ideal for applications that demand meticulous detail and reliability. Its metrology-grade performance ensures consistent, accurate results across various industrial scenarios, from product development to quality inspection.

Excellent for Details

Equipped with 17 parallel laser lines, it rapidly generates point clouds for efficient, high-precision data capture—even in tight spaces.

17

parallel laser lines

It excels at capturing complex structures, fine details and even black and reflective surfaces. An additional blue laser line is dedicated to deep-hole scanning, making it ideal for accessing confined areas such as holes and slots. Ideal for thorough inspection of complex parts.

Complex structures

Fine details

Black surfaces

Reflective surfaces

Cater to Needs of Various Sectors

Aerospace

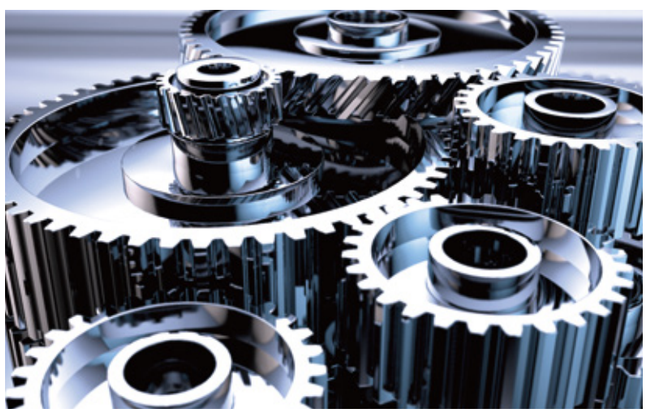
Metrology-grade 3D scanning for product development and MRO workflow.

Automotive

Enhance work efficiency with precise 3D measurement instruments from concept design to manufacturing.

Mold

Portable 3D scanner to optimize mold design, mode corrosion detection and archiving.



Energy & Heavy Industry

Empower the development of the energy industry and promote the upgrading of the heavy machine industry.

Rail Transport and Shipbuilding

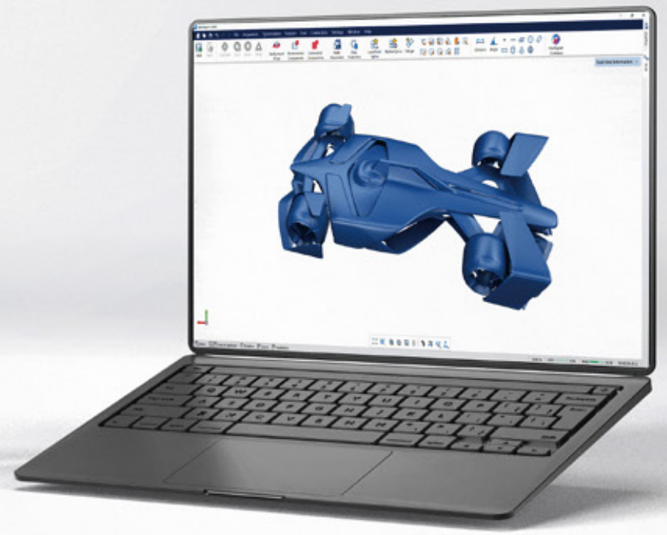
Provide accurate measurement results for product development, virtual assembly, and repeatable analysis.

Non-industry

To meet the needs for 3D digitization for industries, including medical field, architecture, science, education and entertainment.

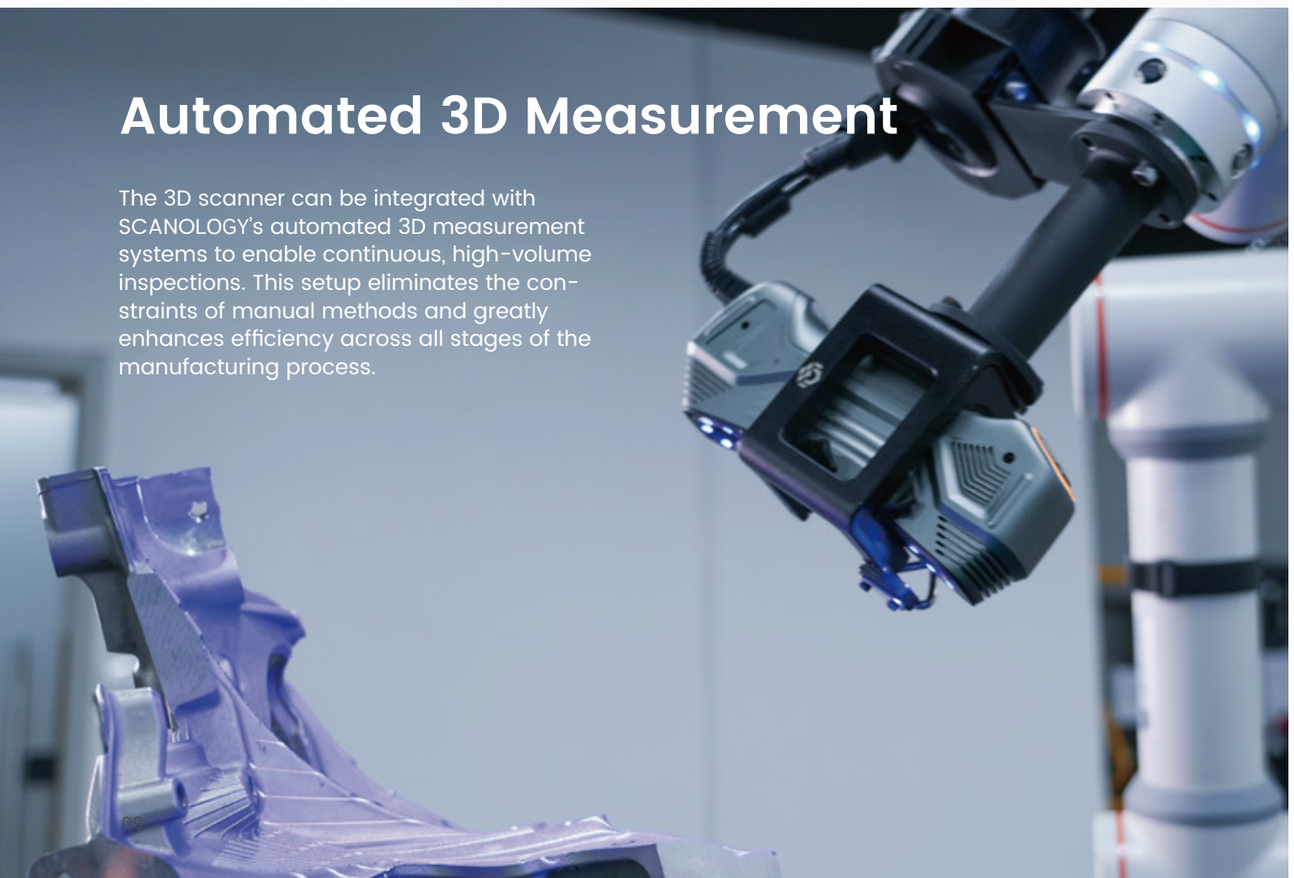
DefinSight to Power 3D Scanning

- An all-in-one software
- Fast data processing
- Real-time Meshing
- Compare scans to CAD data
- Intuitive reports



Automated 3D Measurement

The 3D scanner can be integrated with SCANOLOGY's automated 3D measurement systems to enable continuous, high-volume inspections. This setup eliminates the constraints of manual methods and greatly enhances efficiency across all stages of the manufacturing process.



Type		SIMSCAN 30 Gen2	SIMSCAN 42 Gen2
Scan mode	Ultra-fast scanning	17 blue laser crosses	27 blue laser crosses
	Hyperfine scanning	17 blue parallel laser lines	
	Deep hole scanning	1 extra blue laser line	
Accuracy (1)		Up to 0.020 mm	
Scanning rate up to		4,580,000 measurements/s	5,800,000 measurements/s
Scanning area up to		700 mm × 600 mm	
Laser class		Class II (eye-safe)	
Resolution up to		0.020 mm	
Volume accuracy (2)	Standard	0.015 mm + 0.035 mm/m	
	Paired with MSCAN-L15	0.015 mm + 0.012 mm/m	
Stand-off distance		300 mm	
Depth of field		550 mm	
Output formats		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Interface mode		USB 3.0	
Dimensions		203 mm × 80 mm × 44 mm	
Weight		570 g	
Operating temperature range		-10°C - 40°C	
Operating humidity (non-condensing)		10 - 90% RH	
Patents		CN204329903U, CN104501740B, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B,CN204902784U, CN204902785U, CN106403845B, CN110030946B, CN212300269U, CN211904059U,CN211696268U, CN306053019S, CN212606697U, CN306321502S，CN214149177U，CN214747767U，CN216115893U，CN114001671B，CN113470180B，CN113218417B，CN111833392B，CN115682981B	

(1) ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1951 specification, probing error (size) (PS) performance is evaluated.
(2) ISO 17025 accredited: Based on VDI/VDE 2634 Part3 standard and JJF 1951 specification, sphere spacing error (SD) performance is evaluated.