



SIMSCAN - E

Intelligent, Wireless and
Palm-Sized 3D Scanner

Precision in Your Palm



Taiwan General Agent

LONGHAO OPTICAL TECHNOLOGY CO., LTD

TEL : 07-3741075 | 04-24963299#9

www.longhao.com.tw

longhaosales@gmail.com

Kaohsiung Head Office : 2F., NO.31, Zhunan Rd., Renwu Dist., Kaohsiung City 814, Taiwan

Taichung Office : 3F., NO.159-1, Sec.1, Zhongxing Rd., Dali Dist., Taichung City 412, Taiwan

Taoyuan Office : 25F., No. 1092, Zhongzheng Rd., Taoyuan Dist., Taoyuan City 330, Taiwan



Authorized distributor
LONGHAO
OPTICAL TECHNOLOGY CO., LTD

SCANTECH (HANGZHOU) CO., LTD.

SIMSCAN - E

The SIMSCAN-E is an intelligent, wireless, and palm-sized 3D scanner that combines a lightweight design with exceptional performance. Featuring advanced edge computing and wireless data transfer, it sets a new standard for flexible, wireless and free 3D scanning.

With robust algorithm and high-definition industrial cameras, SIMSCAN-E can capture 3D data with remarkable precision and efficiency, measuring up to 6.3 million measurements/s. It boasts three scanning modes, ultra-fast, hyperfine, and deep hole. This versatility allows it to handle a wide range of tasks effortlessly, from scanning in tight spaces to measuring complex structures.



Wireless Data Transfer

Dual-Power Design

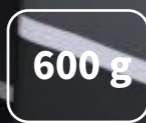
81 Blue Laser Lines

6,300,000 measurements/s

Dimension 203 × 80 × 44 mm



China Design
Silver Award



Net Weight



Scanning Rate up to
6,300,000 Measurements/s



0.020 mm

Accuracy

Compact and Wireless

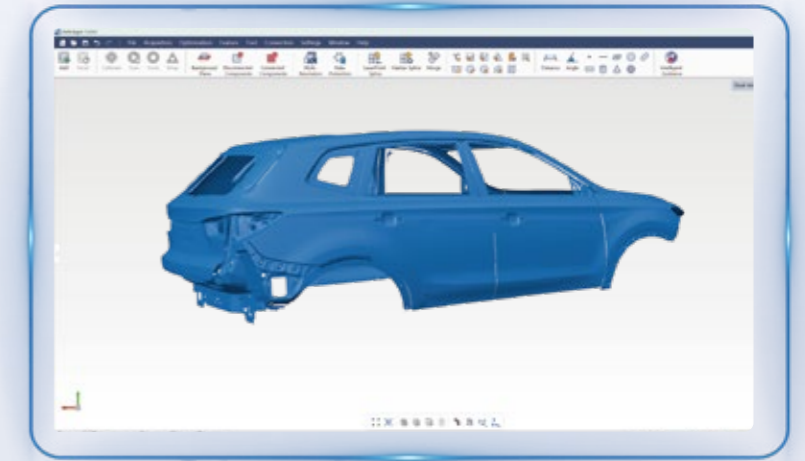
SIMSCAN's full-metal housing is featured by compact size and streamlined design. Weighted only 600 g and sized 203 × 80 × 44 mm, SIMSCAN portable 3D scanner brings unparalleled simplicity for scanning with one hand.

Enjoy robust data processing and say goodbye to tangled cables. With SIMSCAN-E's sophisticated edge computing and wireless data transfer, users are assured of freedom and flexibility for every scan. Whether you're 3D scanning on the complex shopfloor, at height, or outdoors without access to electricity, nothing can hold you back.

SIMSCAN-E features large-capacity batteries that offer a long operating time. Its dual-power design lets users easily swap batteries without interrupting the scanning process. The intelligent battery level indicator keeps you informed throughout the scanning process. Its detachable charging base allows for seamless switching between wireless and wired modes, adapting to different scenarios and needs.

Fast, Smooth, and Efficient

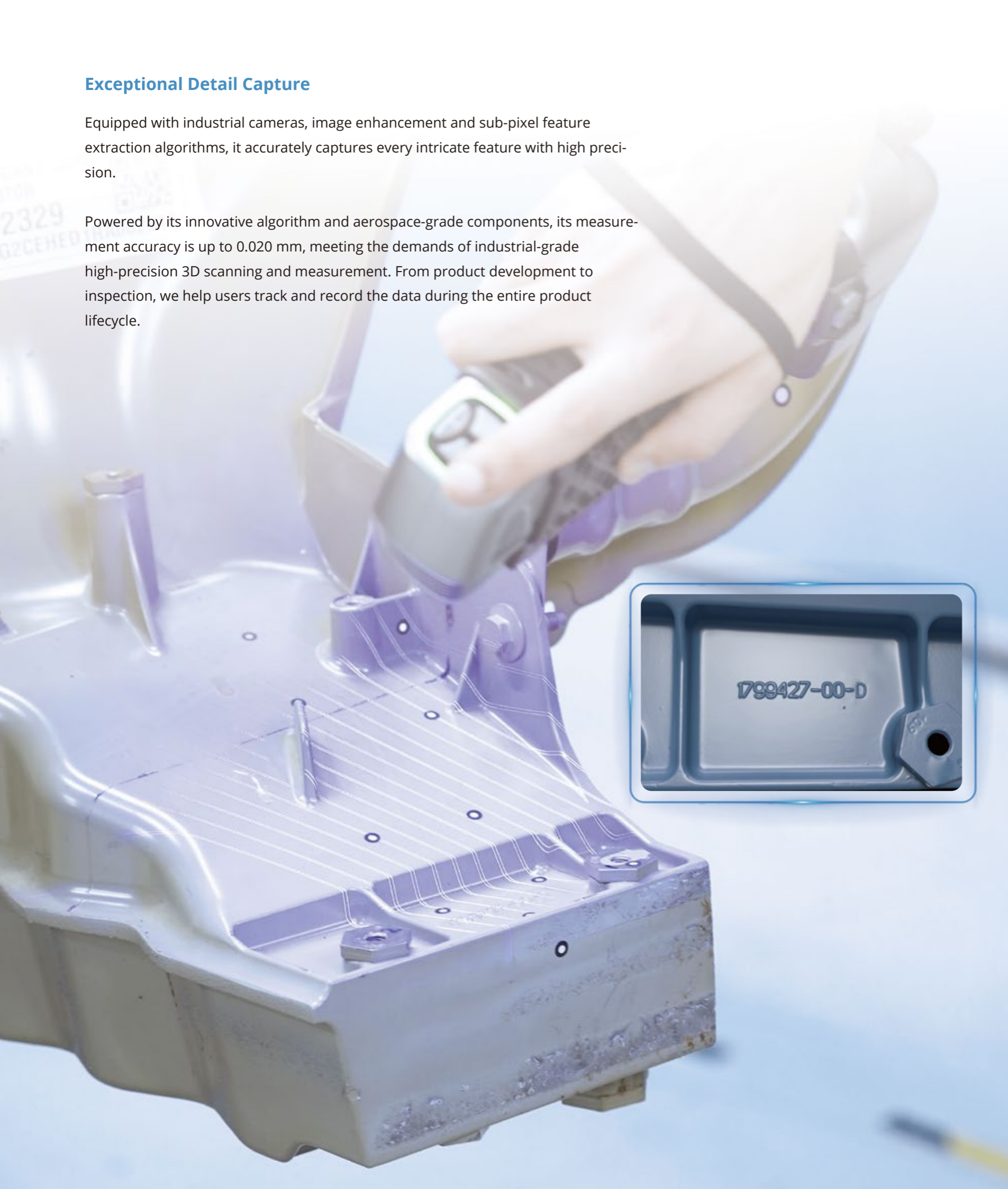
Thanks to its advanced algorithm, SIMSCAN-E delivers a high measurement rate of 6.3 million measurements/s. Coupled with 81 blue laser lines and a 180-FPS frame rate, it ensures efficient and smooth scanning experiences.



Exceptional Detail Capture

Equipped with industrial cameras, image enhancement and sub-pixel feature extraction algorithms, it accurately captures every intricate feature with high precision.

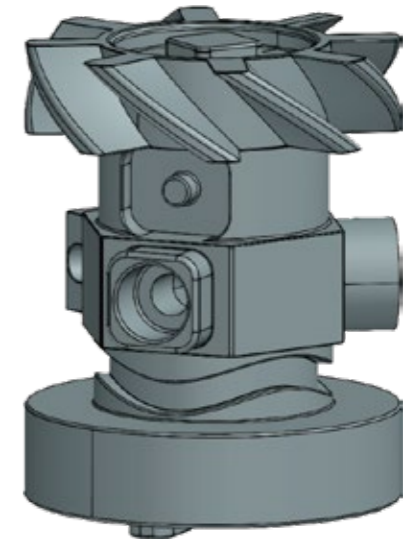
Powered by its innovative algorithm and aerospace-grade components, its measurement accuracy is up to 0.020 mm, meeting the demands of industrial-grade high-precision 3D scanning and measurement. From product development to inspection, we help users track and record the data during the entire product lifecycle.



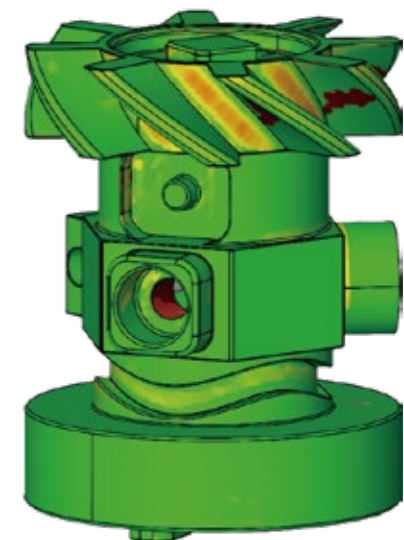
01
Scan Data



02
CAD Model



03
Color Map



Excellent for Narrow Spaces

Flexible and lightweight, this portable 3D scanner supports instant scanning in various environments. Its short-distance camera design, with a steep view angle, greatly enhances the ability to scan hidden areas such as gaps, slots, deep holes, and channels. This significantly improves data integrity, providing more complete 3D data for further design, inspection, analysis, and more.

Diverse Operating Modes

Users can switch between different scanning modes, handling parts of various materials, shapes, and sizes to meet diverse needs for data acquisition and inspection.

Ultra-fast scanning

63 blue laser lines for efficient scanning to evaluate the geometry and dimensions of parts quickly.



Hyperfine scanning

17 parallel blue laser lines for swift detail capturing of intricate features and complex structures.



Deep hole scanning

1 blue laser line for measuring deep holes and hard-to-reach areas.



Driven by Powerful and Efficient Software

SIMSCAN-E operates with brand-new software platform DefinSight, equipped with cutting-edge algorithms and innovative layout, to simplify and speed up 3D scanning.



Smart Guide

DefinSight's customized smart guide follows a user-centered design, making it easy for both beginners and experienced users to get started. Users can simplify complex parameter settings into linear workflows to make it accessible for novice users.



Real-time Meshing

The latest meshing algorithm offers fast mesh generation in real time, delivering high-quality data and good visual representation.



Magic Button Control

Its optimized magic button control allows for customized and intuitive operations, which brings intelligent and efficient 3D scanning to the next level.



Technical Specifications

Type		SIMSCAN-E
Scan mode	Ultra-fast scanning	63 blue laser lines (Triple Cross Technology)
	Hyperfine scanning	17 blue parallel laser lines
	Deep hole scanning	1 extra blue laser line
Accuracy ⁽¹⁾		0.020 mm
Scanning rate up to		6,300,000 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.
Dimensions		203 mm × 80 mm × 44 mm
Weight		600 g
Operating temperature range		-10°C–40°C
Operating humidity range (non-condensing)		10-90% RH
Interface mode		USB3-B
Patents		CN204329903U, CN104501740B, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204902785U, CN106403845B, CN110030946B, CN212300269U, CN211904059U, CN211696268U, CN306053019S, CN212606697U, CN306321502S

(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 Part 3 standard and JJF 1951 specification, sphere spacing error (SD) performance is evaluated.

*Our company reserves the right to interpret and modify the parameters and images in this manual within the scope of law.

