



#### SCANTECH (HANGZHOU) CO., LTD. (HQ.)

Building 12, No.998, West Wenyi Road, Yuhang District, Hangzhou,

Zhejiang Province, China

Tel: 0086-571-85852597 Fax: 0086-571-85370381

E-mail: info@3d-scantech.com Website: www.3d-scantech.com

#### SCANTECH DIGITAL GmbH.

Dieselstrasse 18, 70771 Leinfelden-Echterdingen, Echterdingen industrial park

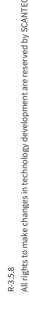
Tel: 0711 31013901

E-mail:info@3d-scantech.com

#### **SCANTECH DIGITAL Inc.**

611 Gateway Blvd. Suite # 120.South San Francisco, CA 94080

E-mail: info@3d-scantech.com



**Innovation Meets Digitization** 

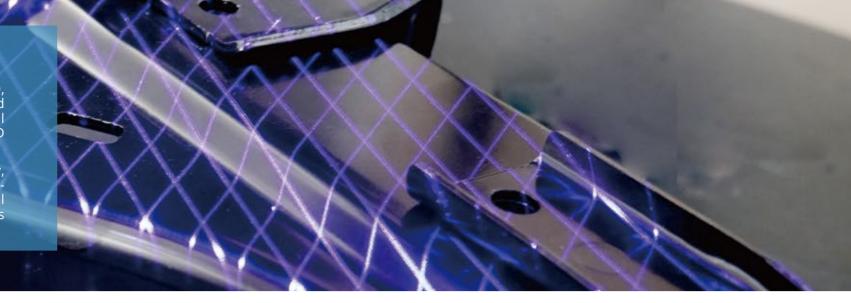


\_\_\_\_\_

### **Company Introduction**

SCANTECH (HANGZHOU) CO., LTD. is a global provider of comprehensive 3D solutions. We specialize in R&D, production, and sales of 3D scanners and 3D systems and boast a long history of developing hardware and software. We offer two main product categories: industrial high-precision 3D scanners and professional cost-effective 3D scanners, including portable 3D scanners, tracking 3D scanners, industrial automated 3D systems, and professional color 3D scanners.

Our products are widely used in industrial sectors such as aerospace, automotive, engineering machinery, transportation, 3C electronics, and green energy, as well as in digital application industries including education and research, 3D printing, art and museum, medical and health, public security and justice, virtual world, etc. We are dedicated to providing high-precision, portable, and intelligent 3D scanners to customers and striving to become a globally leading brand of 3D visual measurement.



#### **Composite 3D Scanner**



# KSCAN Experience Diverse Ultimate from Metrology Measurement



#### **Smart 3D Scanner**



Small Is the Brand-New Big

05

#### **Global 3D Scanner**



AX≡ Measuring An Ultra-wide 3D world

07

03

#### **Optical 3D Measurement System**



TRACKSCAN-SHARP
Extensive Tracking,
Accurate Measuring

00



TRACKSCAN - P
Intelligent Tracking without Targets

11

#### **Automated 3D System**



AM - □ = 5 K
Automated 3D Measurement
Station

13



AM-CELL C200
Standardized System
Explorer for Efficient
Automated Measurement

15

### **Photogrammetry System**



MSCAN-L15
Accuracy Trigger at
Large-scale Metrology

17



**3D Software** 

#### SEMBIVNADS

Integrated Scan & Inspection 3D Software

### **3D Scanning Application**

SCANTECH provides full high accuracy 3D measuring solutions according to the specific requirements of different industries. Our solutions are adapted to all kinds of areas such as aerospace, auto, transport, 3D printing, 3D visualization, home decoration, etc.







Automotive



Manufacturing



Mold



Health Care



Energy



Rail Transport



Antique & Sculpture



Education & Research

### **Comprehensive 3D Digitalization Expert**

Providing customized advanced 3D digitalization solutions based on different measuring requirements from different industries.

#### **Quality Control**

Identify the deviation from CAD data quickly.

#### **Reverse Engineering**

Create full concept CAD models or substitute part.

#### **Finite Element Analysis**

Provide reliable 3D data to FEA and CFD, solving complex manufacturing problem.

#### 3D Visualization

Finish 3D modeling in a short time for the VR/AR showcase online.

#### **Product Development**

Offer precise 3D data to improve the efficiency of designing, assembling, manufacturing as well as quality control.

#### **3D Printing**

Simplify the 3D rebuilding process for 3D printing.

#### **Automated 3D Inspection**

Automated real-time inspection, real-time feedback for intelligent, efficient production.



#### KSCAN-MAGIC

KSCAN-Magic Upgrade Series, the cutting-edging composite 3D scanner that integrates infrared and blue lasers in one versatile instrument, boasting five operating modes. This innovative 3D scanner series incorporates a multi-spectrum 3D scanning and calibration technique, combining exceptional efficiency and uncompromising accuracy. It features fast scanning speed, high accuracy, great detail capturing, large scanning area, and extended depth-of-field that greatly optimize the 3D measurement workflows and accelerate the product time-to-market.

#### **Five Modes at Your Fingertips**

#### Large-area Scanning

KSCAN-Magic innovatively adopts large-area scanning powered by 11 infrared parallel laser lines. Its ultimate scanning area reaches 1440 mm  $\times$  860 mm, achieving wide-range measurement with ease.

#### **Ultra-fast Scanning**

It can 3D scan with 17 blue laser crosses and capture up to 4,150,000 measurements per second, greatly improving work efficiency.

#### **Hyperfine Scanning**

With 7 parallel blue laser lines, KSCAN-Magic Upgrade Series 3D scanner can accurately obtain complete data of complex objects, easily capturing every detail with a maximum resolution of 0.010 mm.

#### Deep Hole Scanning

This mode can accurately capture 3D data of deep holes and hard-to-reach areas.

#### Built-in Large-area Photogrammetry

The built-in infrared photogrammetry system, with a shooting area of 3760 mm \* 3150 mm, can efficiently reduce the accumulated errors caused by large-sized measurements, ensuring volumetric accuracy.

#### **Metrology-grade NDT Measuring**

Its scanning accuracy is of up to 0.020 mm, and its volumetric accuracy is 0.015 mm + 0.012 mm/m when paired with MSCAN-L15 photogrammetry system, which delivers ultra-high precision NDT for various industries.

#### **Flexible Uses**

KSCAN-Magic is lightweight and portable and can conduct 3D measurements anywhere and anytime regardless of vibrations, temperature, and humidity. Moreover, KSCAN-Magic is capable of 3D scanning various surfaces, including reflective and black surface, to capture precise 3D data.

#### **Massive Functions**

**Intelligent edge inspection:** It boasts an optional module for intelligent edge inspection. Users can inspect closed features precisely and obtain repeatable results.

**Contact probing:** It can be paired with a portable CMM K-Probe to probe inaccessible areas and complex parts.

**Pipe measurement:** It is capable of 3D scanning pipes of different sizes and materials for reverse engineering and inspection.

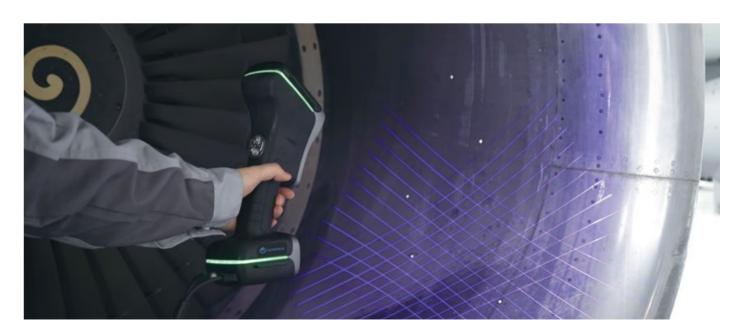
**Automated 3D system:** It can be paired with Scantech's automated 3D inspection system to conduct automated batch inspections.

#### **Technical Parameter**

Туре		KSCAN-Magic	KSCAN-Magic II
	Ultra-fast scanning	11 blue laser crosses	17 blue laser crosses
Scan mode	Hyperfine scanning	7 blue parallel laser lines	
Scarrinoue	Large area scanning	11 parallel infra	ared laser lines
	Deep hole scanning	1 extra blue	e laser line
	Accuracy (1)	up to 0.0	020 mm
	Scanning rate	Up to 2,700,000 measurements/s	Up to 4,150,000 measurements/s
	Scanning area	Up to 1440 mi	m × 860 mm
	Laser class	CLASS II (	(eye-safe)
	Resolution	Up to 0.0	010 mm
hotogrammetry	Scanning area	3760 mm × 3150 mm	
system	Depth of field	2500 mm	
	Work alone	0.015 mm + 0.030 mm/m	
Volume <sup>(2)</sup> accuracy	Work with 1m reference bar	0.015 mm + 0.020 mm/m	
	Work with MSCAN-L15	0.015 mm + 0.012 mm/m	
	Stand-off distance	300 mm	
	Depth of field	925 mm	
Output formats		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Operating temperature range		-10°C - 40°C	
Interface mode		USB 3.0	
Patents		CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN20917685U CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN206905709U CN107202554B, CN209310754U, CN209485295U, CN209485271U, CN305446920S CN209991946U, US10309770B2, KR102096806B1, KR102209255B1, US10914576	

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





### SIMSCAN

SIMSCAN, the only palm-sized Smart 3D scanner in the market so far, is specially designed for 3D scanning narrow and hard-to-reach areas. Featuring a full-metal housing, it is incredibly sturdy and reliable. SIMSCAN has become a disruptive innovation among professional 3D scanners due to its compact size, simplicity, and robust performance.

SIMSCAN performs high-quality 3D scanning regardless of any restrictions from the working environment. It is ideal for 3D scanning both narrow spaces and large-scale parts. Users can accurately capture every detail of objects and construct 3D models in a very short amount of time with the help of this metrology-grade 3D measurement instrument.

#### **Single-handed Control**

- Full-metal housing.
- A weight of only 570 g and a size of 203  $\times$  80  $\times$  44 mm.
- Brings unparalleled simpleness for scanning anything with one hand.

#### **Narrow-space Measuring Booster**

- A short camera distance around 130 mm.
- Capable of capturing accurate data in hard-to-reach areas.

#### **Remarkable Portability**

- Compact size and excellent portability.
- Conduct 3D measurements anywhere and anytime.

#### **Detail, Everywhere**

- Built-in HD cameras and three scanning modes.
- High-precision scanning with an accuracy up to 0.020 mm.

#### **Smooth 3D Experience**

- Scanning rate up to 2.8 million measurement/s.
- Designed to offer users a smooth and efficient 3D digitizing experience

Reddot award 2021 winner

#### **Automated 3D Measurement**

- Paired with Scantech's automated 3D measurement system.- Automated high-batch measurements supported.
- Improves efficiency for all stages of manufacturing.

#### **Technical Parameter**

Туре		SIMSCAN42	SIMSCAN30	SIMSCAN22	
	Ultra-fast scanning	17 blue laser crosses	11 blue laser crosses	7 blue laser crosses	
Scan mode	Hyperfine scanning	7 blue parallel laser lines			
	Deep hole scanning	1 extra blue laser line			
	Accuracy <sup>(1)</sup>		Up to 0.020 mm		
Sca	anning rate	Up to 2,800,000 measurements/s	Up to 2,020,000 measurements/s	Up to 1,250,000 measurements/s	
Sca	inning area	Up to 700 mm × 600 mm	Up to 650 m	m × 550 mm	
La	aser class		Class II (eye-safe)		
Re	esolution	0.020 mm			
Volume accuracy <sup>(2)</sup>	Work alone	0.015 mm + 0.035 mm/m			
volume accuracy.	Work with MSCAN-L15	0.015 mm + 0.012 mm/m			
Stand-off distance		300 mm			
De	pth of field	550 mm			
Out	put formats	.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.			
Operating temperature range		-10°C - 40°C			
Interface mode		USB 3.0			
Dimensions		203 mm × 80 mm × 44 mm			
Weight		570 g			
Patents		CN204329903U, CN104501740B, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204902785U, CN106403845B, CN110030946B, CN111833392A, CN212300269U, CN211904059U, CN211696268U, CN306053019S, CN212606697U, CN111932465A, CN111694665A, CN306321502S, EP3392831A4			

(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.





The AXE-B17 3D scanner utilizes optical measurement technology with a scanning speed of 2,000,000 measurements/s, quickly capturing the 3D data of an object to obtain precise deviations information off the geometry of a surface.

With built-in photogrammetry, the AXE-B17 outputs data from a ultra-large scanning area with metrology-grade measurement accuracy. Regardless of limitations in size, shape, material and complexity of the object, the AXE-B17 can flexibly choose working modes with efficient, unrivaled-speed scanning and accurate deep hole scanning. It generates high precision 3D inspection of medium to large-sized projects without the aid of extra devices.

#### **Extremely fast Response**

 With its 17 cross-blue laser lines, the AXE-B17 enables extremely fast and precise response with 2,000,000 measurements/s, offering an extraordinary work efficiency.

#### **Unprecedented Patent**

- Our global initiative, built-in photogrammetry system is tailored for measuring medium to large-sized objects, with 0.030 mm/m of volumetric accuracy.

#### Flexible Switching between Scanning Modes

 Offers flexibility of switching between scanning modes adjusted to your scanning needs: Efficient and unrivaled scanning speed, Accurate scanning in deep holes, suitable to work on intricate positions, such as deep holes and dead

#### **Ultra-wide Vision**

- Ultra-wide scanning area of 860 mm  $\times$  600 mm which allows an optimal and smoother 3D scanning experience.

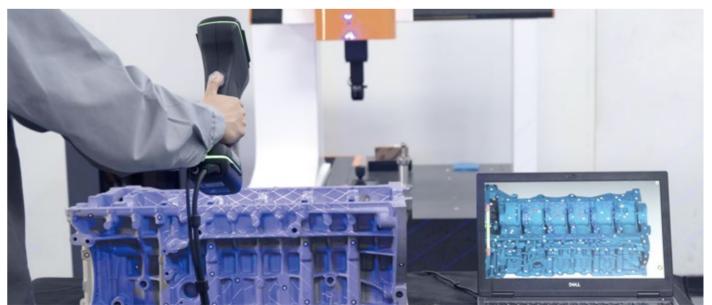


#### **Technical Parameter**

Туре		AXE-B17	AXE-B11
Scan mode	Ultra-fast scanning	17 blue laser crosses	11 blue laser crosses
	Deep hole scanning	1 extra bule laser line	
Accı	ıracy <sup>(1)</sup>	Up to 0.020 mm	
Measure	ment rate	Up to 2,000,000 measurements/s	Up to 1,300,000 measurements/s
Scanni	ng area	Up to 860 mm × 600 mm	Up to 550 mm × 600 mm
Scanning area	Scanning area	3760 mm x 3150 mm	2500 mm x 3000 mm
(photogrammetry)	Depth of field	2500	) mm
Laser	class	CLASS II (eye-safe)	
Resol	ution	0.025 mm	
	Work alone	0.020 m m+ 0.030 mm/m	0.020 m m+ 0.035 mm/m
Volume accuracy (2)	Work with 1m reference bar	0.020 mm + 0.020 mm/m	
	Work with MSCAN-L15	0.020 mm + 0.012 mm/m	
Stand-of	f distance	300mm	
Depth of field		500mm	
Output formats		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Operating temperature range		-10°C - 40°C	
Interface mode		USB 3.0	
Patents		CN204329903U, CN104501740B, CN104165600B, CN2049881 CN105068384B, CN105049664B, CN204902784U, CN2049638 CN209197685U, CN209263911U, CN206905709U, CN1072025 KR102209255B1, US10914576B2, EP3392831A4	12U, CN204902785U, CN204902790U, CN106403845

(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.





### TRACKSCAN-SHARP

TrackScan-Sharp, consisting of a portable 3D scanner i-Scanner and an optical i-Tracker, is a new generation of Scantech's optical 3D measurement system for measuring large-scale parts. It brings optical measurement to a whole new level by offering a tracking distance of up to 6 meters, a volumetric range of 49 m<sup>3</sup>, and volumetric accuracy of up to 0.049 mm (10.4 m<sup>3</sup>).

Engineered with i-Tracker's on-board processor for edge computing, 25-megapixel industrial cameras, and cutting-edge technologies, the TrackScan-Sharp is ideal for measuring large-sized parts or multiple parts at the same time without the hassle of moving trackers frequently.

#### **Ultra-high Pixels for Intricate Details**

- Equipped with a brand-new 25-MP industrial camera.
- DLA technology, long-distance depth of field, and strong anti-interference ability.
- Acquire clear images in a range as long as 6 meters.

#### **Edge Computing & Impressive Performance**

- i-Tracker's onboard processor for efficient image processing and data computation.
- i-Tracker delivers coordinates in real time to save the computer's computing power.

#### **Fast 3D Scanning**

- Measure parts without having to stick reference targets.
- Measure multiple parts at the same time.

#### **Vast Applications**

- Shadow-less-light edge detection.
- Obtain the 3D data of objects with different surfaces.
- Paired with a portable CMM T-Probe to probe inaccessible areas with single-point repeatability of up to 0.025 mm.
- Tracker can be used to form M-Track, an intelligent robotic path planning and guiding system.

#### Large-volume Measurement

- Wide measurement volume and robust edge measurement algorithm.
- One-stop scanning of large-scale parts.
- No need of frequent movements of tracker.

#### **New Era of Data Transmission**

- Transfer data both with and without wires.
- Wired mode in line with industrial measurement standards.
- Optional and convenient wireless mode supports different applications.

#### Remarkable Accuracy

- Metrology-level and high-precision measurement.
- Large tracking volume, increased by around 200%.

#### **Innovative Design**

- Made of aerospace-grade carbon fiber in a sphere shape, suitable for heavy use.
- Ergonomic handle can ensure the long-session use.
- Intuitive light band that shows operating status.
- Hollow grille design helps cameras remain at a stable temperature.

#### **Technical Parameter**

Туре		TrackScan-Sharp 49	
	Ultra-fast scanning	21 blue laser crosses	
Scan mode	Hyperfine scanning	7 blue parallel laser lines	
	Deep-hole scanning	1 blue laser line	
	Accuracy (1)	Up to 0.025 mm	
Mea	surement rate	Up to 2,600,000 measurements/s	
Sc	canning area	Up to 500 mm × 600 mm	
I	Laser class	Class II (eye-safe)	
	Resolution	0.020 mm	
	10.4 m³ (Tracking distance 3.5 m)	0.049 mm	
Volumetric accuracy (2)	28.6 m³ (Tracking distance 5.0 m)	0.067 mm	
	49.0 m³ (Tracking distance 6.0 m)	0.089 mm	
Tracking I	Distance per i-Tracker	6000 mm	
Volur (with MSCAN p	netric accuracy hotogrammetry system)	0.044 mm + 0.012 mm/m (>6m)	
Hole p	osition accuracy	0.050 mm	
Camera	a pixels of i-Tracker	25 megapixels	
Stan	nd-off distance	300 mm	
De	epth of field	400 mm	
Part size ra	ange (recommended)	0.1 m-12 m	
Operating	temperature range	0 °C-45 °C	
Operating humidity range (non-condensing)		10-90% RH	
Interface mode		USB 3.0, Network Interface	
Certification		CE, RoHS, WEEE	
Patents		CN106500627B, CN106500628B, CN206132003U, CN204854633U, CN204944431U, CN204902788U, CN204963812U, CN204902785U, CN106403845B, US10309770B2, CN204854633U, CN105068384B, CN105049664B, CN106403845B, CN214375417U, CN214379242U, CN214379241U, CN214149174U, CN109000582B, CN112802002B, CN210567185U, CN211121096U, CN114001671B, CN114001696B, CN114554025B, CN114205483B, US10309770B2, US11060853B2, KR102096806B1, EP3392831B1, CN218411072U, CN115325959B, CN218103238U, CN218103220U, CN114627249B, US11493326B2, CN115695763B, CN307756797S, CN218584004U	

<sup>(1)</sup> ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1951 specification, probing error (size) (PS) performance is evaluated.

<sup>(2)</sup> ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1951 specification, sphere spacing error (SD) performance is evaluated.

Туре		T-PROBE	
Accuracy		0.025 mm	
Volumetric accuracy	10.4 m <sup>3</sup>	0.049 mm	
volumetric accuracy	28.6 m <sup>3</sup>	0.067 mm	
Measu	irement rate	60 measurements/s	
Part size range (recommended)		0.2 m-6 m	
Weight		450 g	
Dimension		345*55*121 mm	
Operating temperature range		0 °C-40 °C	
Operating humidity range		10-90 % RH	
Patents		CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN2049444431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN211121096U, US10309770B2, KR102096806B1	

10

g path planning and guiding system. temperature.



### TRACKSCAN-P

Engineered with intelligent optical tracking measurement and high-resolution cameras, TrackScan-P can precisely measure parts without having to stick reference targets.

This optical 3D measurement system, consisting of a portable 3D scanner and an optical tracker E-Track, suits well for 3D scanning large-scale objects. It can be widely applied for quality control, product development, reverse engineering, and more in industries such as aerospace, automotive, rail transport, and mold.

#### **Optical Tracking for Instant 3D Scanning**

- TrackScan-P 3D system's optical tracking allows users to start scanning instantly without having to stick targets, significantly improving efficiency and decreasing costs.

#### **Precise Edge Detection**

- Users can inspect circles, grooves, and machined holes of stamping parts in various finishes on the site. The efficient edge detection is enabled thanks to its gray value measurement and optional auxiliary light module.

#### **Extendable Applications**

- Measurement range can be dynamically extended by adding more F-Tracks
- Paired with a portable CMM T-Probe to probe inaccessible areas with high single-point repeatability of 0.030 mm.

#### **Unrivaled-fast & Detail-maker**

 TrackScan fits different scanning situations with an accuracy of up to 0.025 mm and an ultra-fast measurement rate of up to 2,600,000 measurements/s.

#### **Strong Adaptability**

Made from aerospace-grade materials, it is sturdy and reliable.
 It also boasts a strong anti-interference capability to operate smoothly. Due to its advanced algorithm, TrackScan is robust in capturing 3D data of reflective and dark surfaces.

#### **Extendable Applications**

- Be mounted on a robotic arm to form an automated 3D measurement system AutoScan-T
- Combined with path planning software for intelligent robotic path planning and guiding.

#### **Technical Parameter**

Туре		TrackScan-P550	TrackScan-P542
	Ultra-fast scanning	21 blue laser crosses	17 blue laser crosses
	Hyperfine mode B	7 blue parallel laser lines	
Scan mode	Deep hole scanning	1 extra blu	ie laser line
Accur	racy (1)	Up to 0.	025 mm
Measurem	nent rate	Up to 2,600,000 measurements/s	Up to 2,200,000 measurements/s
Scannin	g area	Up to 500 mm	
Laser	class	Class II(	(eye-safe)
Resolu	ıtion	0.02	0 mm
Volumetric (2)	10.4 m³	0.060	) mm
accuracy	18.0 m <sup>3</sup>	0.075 mm	
Volumetric (With MSCAN photog	accuracy rammetry system )	0.044 mm + 0.012 mm/m	
Single-point r portable C	epeatability of MM T-Probe	0.030 mm	
Hole position	on accuracy	0.050 mm	
Object Size (F	Recommend)	100~8000 mm	
Stand-off	distance	300 mm	
Depth o	of field	400 mm	
Output fo	ormats	.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Operating temp	erature range	-10°C - 40°C	
Operating humidity (Non-condensation)		10%-90% RH	
Interface mode		USB 3.0	
Certification		CE, UL	
Patents		CN204963812U, CN204902785U, CN106403845, CN105049664B, CN106403845B, CN111694665A CN109000582B, CN112802002B, CN210567185U	CN204854633U, CN204944431U, CN204902788U, US10309770B2, CN204854633U, CN105068384B, CN214375417U, CN214379242U, CN214379241U, CN211121096U, CN214149174U, CN114001671B, CN113514008A, US10309770B2, US11060853B2,

(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.





### AM-DESK

AM-DESK is an automated 3D measurement station consisting of an intelligent control system, multiple servo-mechanists, a safety system, a motion control system, measurement and analysis software, and SPC batch analysis software. Thanks to its compact size and easy installation, the station can cater to different needs with great flexibility.

AM-DESK can be paired with different collaborative robots and Scantech's entire fleet of 3D scanners to measure numerous parts automatically. It suits well for on-site inspections on shop floors, in labs, and under harsh conditions to ensure continuous 3D measurement with high precision.

#### **Robust Performance**

- -Trusted 3D measurement station for various tasks whether in lab or on the shop floor. -Enables fast and automated inspections for parts ranging from casting parts, plastic parts to stamping parts within 100 kilograms.
- -Generate inspection reports automatically by comparing actual 3D coordinates and CAD data.

#### **Safety Guard**

- -CE marked, meeting EU's safety, health, and environmental requirements.
- -Highly safe methods, including serial arrangement for emergency stop, a buzzer to indicate potential dangers, and controllable force distance with servo-mechanists. -Supports 10-grade collision detection and sensor safety detection.

#### **Easy Programming & Automated Calibration**

- -One-button start to conduct complex measurement tasks via pre-programmed measuring paths.
- -Engineers and operators with different levels of expertise and programming skills can operate it with ease.
- -fully and automatically calibrate\* its sensor when environmental conditions changes.
- \* AM-DESK Lite does not support fully automated calibration

#### **Quick Installation & High Flexibility**

- -Weighs 75 kg with a footprint of 1 square meter.
- -Installed within 5 minutes with 110-220 V mains electricity.
   -Work in unison with plug-and-play positioners to expand the workspace\*.
- -Work with different cobots and Scantech's entire fleet of 3D scanners.
- \* AM-DESK Lite does not support the connection to multiple positioners.

#### **Technical Specifications**

Туре	AM-DESK 60120	AM-DESK Lite	
Dimension	1200*600*177 mm	1200*600*180 mm	
Weight	75 KG	70 KG	
Turntable Payload	≤ 140 KG	≤ 75 KG	
Max Rotational Speed of Turntable	50°/S	40°/S	
Communication Interface	TCP/IP	TCP/IP	
Robot Supported	UR/UR5, AUBO/i5; i7	ELITE EC66, UR5, AUBO i5, JAKA ZU5, Han's E05-L, FAIR FR5	
Power Supply	110V-220 V/50-60 Hz	220 VAC/50-60 Hz	
Peak Power	900 W	700 W	

#### 3D Software - FlexScan

FlexScan is an in-house developed software of Scantech designed for automated 3D measurement. It can support the functioning of robots such as KUKA, ABB, AUBO, FANUC, YASKAWA, and more.





Product and Solution Management



Data Capturing and Pre-processing



Data Optimization and Output

## AM-CELL C200

AM-CELL C200 is the all-in-one optical automated 3D measurement system designed for measuring medium-sized parts, taking measurements to the next level. It offers an automated measurement solution for full life-cycle quality control, giving companies the possibility to increase automation, enhance intelligence and upgrade the business.

#### **Lightweight Standardized Product**

- A standardized 3D solution to measure parts.
- 70% lighter and 60% smaller than its predecessor.
- Installed within 2 days.
- Support labor-free automated measurement and manual robot teaching for quick path planning.

#### **Innovation to Keep You Safe**

- Active safety system.
- Cobot and turntables equipped with servo-mechanists with force feedback.
- Ten-grade collision detection.
- No need for a physical fencer.

#### **Information-driven Quality Control**

- Work with different MES systems and various automated quality control software -Invoke templates, calculate data, generate inspection reports, and analyze the statistics.
- Gain insights that can boost production efficiency and ensure precise quality control.

#### **Modular Design and Flexible Layouts**

- Be deployed in L-shaped, I-shaped, T-shaped, and separate layouts.
- Connected with different external devices to enable flexible measurements.
- Work with multiple positioners.
- No downtime for changing parts.

#### **Intelligent 3D Optical Measurement**

- Compatible with Scantech's TrackScan-P series optical tracking 3D systems.
- Automatically measure parts without sticking targets.
- Measure hundreds of parts efficiently and stably with reliable and repeatable results.
- Edge inspection with gray-value measurement.

#### **Vast Applications Deliver New Experiences**

- Shop floor: on-site measurement regardless of lighting and temperature variations.
- CMM room: safely and steadily run without special requirements for settings.
- Educational settings: user-friendly for teachers and even students without much expertise.



### **Technical Specification**

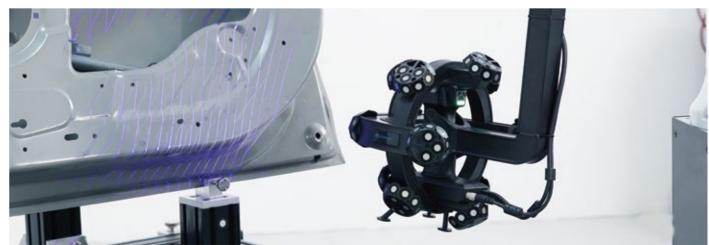
Туре	AM-CELL C200
Object Payload	200KG
Maximum Object Size	D=Φ1500 mm,H=1500 mm
Total Power	2.5KW
Robot Unit Dimension	976×566×945 mm
Positioner Unit Dimension	1300×800×570 mm
TrackStation Dimension	820×820×2300 mm (Max 3300 mm)
Control System	Siemens S7 Series
Robot	Han's E10-L
Minimum Computer Configuration	10th Gen Intel Processor with 8 Cores & 16 Threads/ Nvidia 4G Discrete Graphics Card/32G RAM/1T SSD
Operating Voltage	220 VAC (Single-phase Electric Power) (1)
Time to Install and Test	2 Days <sup>(2)</sup>

 $<sup>(1) \</sup> Scantech \ offers \ transformers \ to \ customers \ in \ low-voltage \ areas.$ 

#### **Technical Specification**

Туре		TrackScan-P550	TrackScan-P542
	Ultra-fast scanning	21 blue laser crosses	17 blue laser crosses
Scan mode	Hyperfine scanning	7 blue parallel laser lines	
	Deep hole scanning	1 blu	e laser line
Acc	curacy*	Up to	0.025 mm
Measur	rement rate	Up to 2,600,000 measurements/s	Up to 2,200,000 measurements/s
Scanning area		Up to 500 mm	
Laser class		Class II (eye-safe)	
Resolution		Up to 0.020 mm	
Volumetric accuracy (With MSCAN photogrammetry system )		0.044 mm + 0.012 mm/m	
Hole position accuracy		0.050 mm	
Stand-off distance		300 mm	
Depth of field		400 mm	

 $<sup>^{\</sup>star}$  ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1951 specification, probing error (size) (PS) performance is evaluated.



<sup>(2)</sup> The calculation is based on the single-position layout provided that all the arrangements for installation are in place.



### MSCAN-L15

The Scantech MSCAN-L15 photogrammetry system is designed to deliver high-precision geometric measurements of large-scale parts or components. With a large working or shooting area, and wide depth of field, the MSCAN-L15 reaches a volumetric accuracy of 0.015 mm/m on large-scale projects, and parts from 2 m to 10 m in size.

Compatible with different 3D inspection devices, the MSCAN-L15 can meet stricter measurement accuracy requirements. A unique HDR mode offers strong environment adaptability. Due to its ergonomic design, it is greatly portable and can be held on the hand for an extended period.

The MSCAN-L15 ensures precise, efficient and easy-to-use 3D solutions for large-scale projects in 3D inspection, product development, quality control, etc.

#### **Metrology-grade Accuracy**

- Volumetric accuracy of up to 0.012 mm/m, boosting the accuracy by 40%.

#### **Deformation Detection**

- Obtain precise 3D data of the deformed workpieces and generate intuitive deviation values.

#### **HDR Mode**

- Support HDR mode, blue LED light yields higher accuracy inspection values.

#### Multiple add-ons

- Users can inspect key positions (such as cylindrical axial distance and hole center) of the parts by using different add-ons.

#### **Technical Parameter**

Туре		MSCAN-L15	
Volumetric accuracy		0.012 mm/m	
	KSCAN	0.015 mm + 0.012 mm/m	
Volumetric accuracy (work with 3D scanners)	SIMSCAN	0.015 mm + 0.012 mm/m	
(work with 3D scanners)	AXE	0.020 mm + 0.012 mm/m	
	TrackScan-P	0.044 mm + 0.012 mm/m	
Device type		Industrial camera and lens (not DSLR)	
Weight		≤0.58 KG	
Obtain mark point position		Real-time calculate & display	
Interface mode		Gigabit Lan	
Depth of field		6.5 m	
Shooting area		Up to 9.4 m x 6.9 m	
Operating temperature range		-10°C - 40°C	
Patents		CN306051753S	

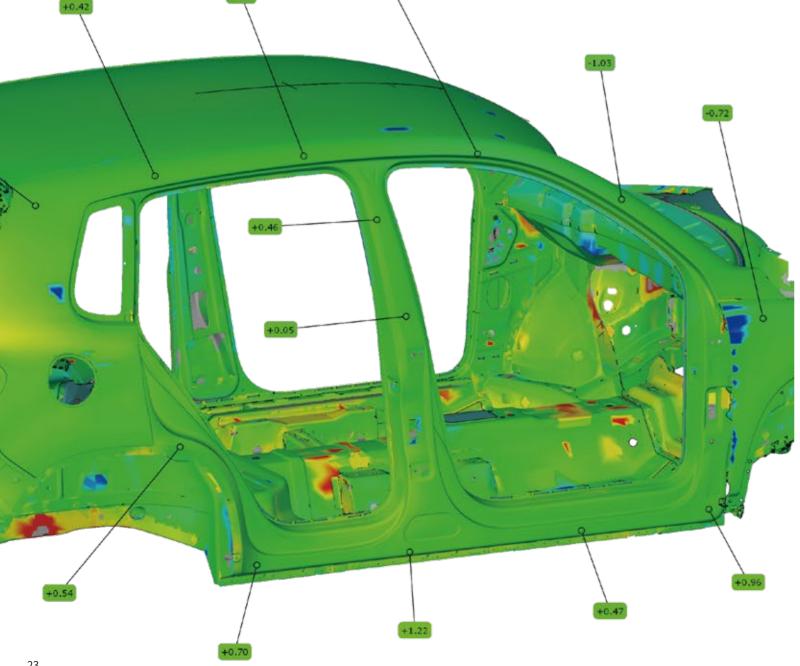


### **SCANVIEWER**

### **Integrated Scan & Inspection 3D Software**

ScanViewer is a free & powerful 3D software that includes inspection and scanning functions such as feature relationships, distance, GD&T and color mapping.

Scanned data can be used for rapid prototyping, reverse engineering, inspection comparison, 3D display, etc.



### **Characteristics**

ScanViewer penetrates all aspects of product R&D, design and production



#### GD&T

Users can directly create features, feature analysis, distance measurement, dimension analysis and geometric tolerance according of scan data.



#### **Color Map**

Multiple alignment function is available to merge scan data & CAD files for off-line inspection, quick generation of reports for easy analysis and adjustment.



#### **Pipe Inspection**

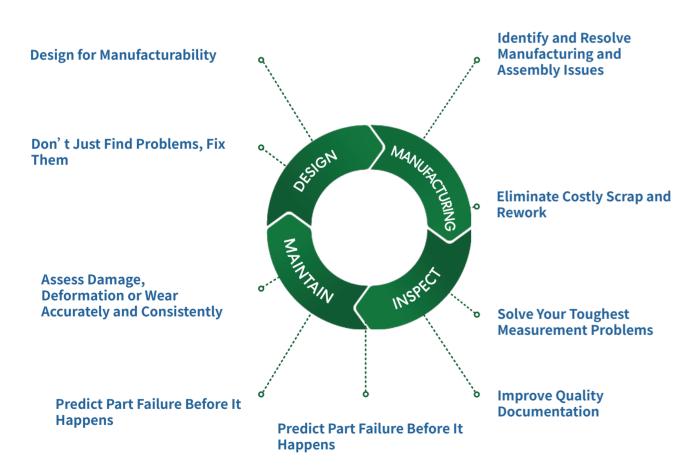
ScanViewer includes professional pipe inspection function that can directly export YBC/LRA data to eliminate deviations of pipe bender.



### What Is Geomagic Control X for Scantech?

Geomagic Control X for Scantech(CXS) is a professional metrology software that lets you capture and process the data from Scantech's 3D scanners to measure, understand, and communicate inspection results to ensure quality everywhere. With CXS, more people in your organization can:

### What Can You Do with Geomagic Control X for Scantech?



### **Professional Inspection Capabilities**



## Use Scantech's handheld 3D Scanners with Confidence

CXS was born to work with data from Scantech's handheld 3D scanners, including composite 3D scanner KSCAN and optical tracking 3D scanner Track-Scan.



#### **Automate the Entire Process**

Every aspect of your inspection project is recorded in CXS's model manager.

Additional parts can be inspected with a few clicks – or no clicks at all.



### Combine 3D Scans with T-Probe

Get the best of both worlds – noncontact scanning and contact probes – in one integrated software interface.



## Inspect Surface Damage or Wear

CXS can automatically interpolate what a scanned object's ideal shape is and measure deviation to quantify even minor surface imperfections.



#### 2D and 3D GD&T

With extensive Geometric Dimensioning & Tolerancing tools, you can analyze size, form, orientation, and location of features.



#### **CXS** measure

- Linear, angular, radial, elliptical, bore depth, counterbore, countersink, and thicknes.
- Straightness, flatness, circularity, cylindricity, parallelism, perpendicularity and more.



#### Align the Way You Want

- Automatic feature-based alignment
- Best fit alignment with constraint options
- RPS, datum, and 3-2-1 alignments



#### **Compare Scans to CAD**

Beautiful, intuitive color maps show you what is in and out of tolerance and by how much.CXS supports myriad comparison techniques,



## Clear, Interactive 3D Reports for Everyone

Build reports the way you want with templates. And don't worry if you decide to change or add something later – reports update automatically.



#### **Worldwide Customers**

SCANTECH products are sold to more than 60 countries and regions, serving over 5000 enterprises such as COMAC, BMW, Volkswagen, GM, Apple, Siemens, JCB and Sany.































28

