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# Innovation Meets Digitization ——



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# **Company Introduction**

SCANTECH is one of the earliest high-tech companies starting to research and develop handheld 3D visual measurement devices across the world.

Our products are sold to more than 60 countries and regions, serving over 5000 enterprises. The presence of our distributors and international sales and technical support teams has been expanded all across the globe, providing industrial frontier 3D measurement solutions for prominent enterprises and research institutions like COMAC, BMW, Volkswagen, GM, Apple, Siemens, JCB and Sany.

### **Composite 3D Scanner**



KSCAN
Experience Diverse Ultimate from Metrology Measurement

03

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



STMSCAN
Small Is the Brand-New Big

05

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



Measuring An Ultra-wide 3D world

**Optical 3D Measurement System** 



TRACKSCAN-SHARP
Extensive Tracking,
Accurate Measuring

00



TRACKSCAN-P
Intelligent Tracking without Targets

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### **Automated 3D System**



AM - □ = 5 K
Automated 3D Measurement
Station

13



AUTOSCAN-K

Highly Safe and Effective Automatic Inspection Syste

17

### **Photogrammetry System**



MSCAN-L15
Accuracy Trigger at
Large-scale Metrology

21

AM-CELL C200
Standardized System
Explorer for Efficient
Automated Measurement

ALJTOSCAN - T
Unmanned Automatic 3D
Inspection Solution

# **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



**VR Showcase** 



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**

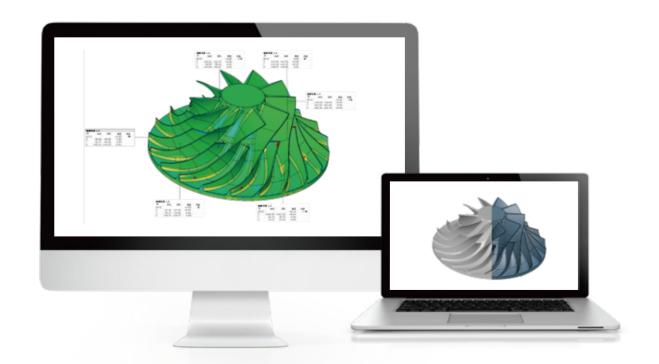
Offer precise 3D data to improve the efficiency of designing, assembling, manufacturing as well as quality control.

#### **3D Printing**

Simplify the 3D rebuilding process for 3D printing.

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

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



### K5CAN

KSCAN-Magic composite 3D scanner is the first to introduce infrared laser + blue laser technology, with five standard working modes.

Its unparalleled scanning speed, accuracy, details, scanning area, and depth of field of view, greatly optimize the 3D measurement workflows and accelerate the product time-to-market process. Geared to obtain data on hard-to-reach or complex surfaces, KSCAN-Magic series can be equipped with portable CMM K-Probe, providing a comprehensive 3D digital solution for precision measurement.

#### **Innovative Infrared Laser**

- Innovative adoption of infrared laser scanning technology.
- Ultimate scanning area of up to 1440 mm  $\times$  860 mm.
- Achieve precise wide range measurement with ease.

#### **Extreme-clear Details**

- Hyperfine scanning mode, accurately obtains complete data of complex objects.
- Easily capture every detail with a resolution of 0.010 mm.

#### Metrology-grade NDT measurement

- 0.020 mm of scanning accuracy and 0.030 mm/m of volumetric accuracy.
- Deliver ultra-high precision NDT in the aerospace industry.

#### **Personalized Adjustment**

- 925 mm depth of field.
- Flexible adjustment of the working distance based on the performance of details, efficiency and scanning area.

#### **Effortless Efficiency**

- 41 laser lines deliver ultra-fast scanning rate of 1,350,000 measurements/s.
- Flexible switch between scanning modes.
- Meets different application needs while dramatically improving working efficiency.

#### **Single Laser Line Scanning**

- Single laser line scanning mode, accurately captures 3D data in hard to reach or access positions.

#### No Fear of Harsh environments

- Support super-high work adaptability in harsh environment.
- Realistic restoration of precise 3D data from reflective and black surfaces.

#### **Impressive Functionality**

- Built-in photogrammetry system, intelligent edge detection, contact probing and pipe measurement functionalities.
- Meet with ease diverse application needs.



#### **Technical Parameter**

Туре		KSCAN-Magic II	KSCAN-Magic	KSCAN20
	Ultra-fast scanning	13 blue laser crosses	11 blue laser crosses	7 red laser crosses
Scan mode	Hyperfine scanning	7 blue parallel laser lines		5 blue parallel laser lines
Scarrinode	Large area scanning	11 parallel infra	ared laser lines	-
	Deep hole scanning	1 extra blue	laser line	1 extra red laser line
Acc	uracy <sup>(1)</sup>		Up to 0.020 mm	
Scanr	ing rate	Up to 1,650,000 measurements/s	Up to 1,350,000 measurements/s	Up to 650,000 measurements/s
Scann	ing area	Up to 1440 m	m × 860 mm	Up to 550 mm × 600 mm
Photogrammetry	Scanning area	3760 mm >	< 3150mm	2500 mm × 3000 mm
system	Depth of field		2500 mm	
Lase	er class		CLASS II (eye-safe)	
Reso	olution		0.010 mm	
	Work alone	0.015 mm + 0.030 mm/m		0.015 mm + 0.035 mm/m
Volume accuracy (2)	Work with 1m reference bar	0.015 mm + 0.020 mm/m		
	Work with MSCAN-L15	0.015 mm + 0.012 mm/m		
Stand-o	ff distance	300 mm		
Depth	of field	925 mm		450 mm
Portable CMM Single point repeatability		0.030 mm		
K-Probe	Tracking frequency	60 hz		
Intelligent edge inspection module	Edge accuracy	0.030 mm		
Pipe inspection module	Output formats	YBC / LRA / compensation value		
Output formats		.stl, .ply, .obj, .igs, .stp, .wrl, .xyz, .dae, .fbx, .ma, .asc or customized		
Operating temperature range		-10°C - 40°C		
Interface mode		USB 3.0		
Patents		CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN2049444431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN206905709U, CN107202554B, CN209310754U, CN209485295U, CN209485271U, CN305446920S, CN209991946U, US10309770B2, KR102096806B1 KR102209255B1, US10914576B2, 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.





### 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

# 2)

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		
A	Accuracy <sup>(1)</sup>		Up to 0.020 mm	
Sca	inning rate	Up to 2,800,000 measurements/s	Up to 2,020,000 measurements/s	Up to 1,250,000 measurements/s
Sca	nning area	Up to 700 mm × 600 mm	Up to 650 m	m × 550 mm
La	aser class		Class II (eye-safe)	
Resolution		0.020 mm		
Valuma agguragu(i)	Work alone	0.015 mm + 0.035 mm/m		
Volume accuracy <sup>(2)</sup>	Work with MSCAN-L15	0.015 mm + 0.012 mm/m		
Stand-off distance		300 mm		
Dej	oth of field	550 mm		
Out	put formats	.pj3, .asc, .igs, .txt, .mk2, .umk, .stl, .ply, .obj		
Operating t	emperature 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		

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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**

Ту	/pe	AXE-B17	AXE-B11
C	Ultra-fast scanning	17 blue laser crosses	11 blue laser crosses
Scan mode	Deep hole scanning	1 extra bule laser line	
Accı	uracy <sup>(2)</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	lution	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, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized	
Operating temperature range		-10°C - 40°C	
Interface mode		USB 3.0	
Patents		CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN2049444431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN206905709U, CN107202554B, US20200225030A1, US10309770B2, KR102096806 KR102209255B1, US10914576B2, EP3392831A4	

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### 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

#### 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	Distance per i-Tracker	6000 mm	
Volur (with MSCAN p	netric accuracy photogrammetry system)	0.044 mm + 0.012 mm/m (>6m)	
	osition accuracy	0.050 mm	
Camera	a pixels of i-Tracker	25 megapixels	
Star	nd-off distance	300 mm	
D	epth of field	400 mm	
Part size r	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, CN2049444431U, 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, CN3077567975, CN218584004U	

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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.
- Integrated with Scantech's wireless communication link AirGo Pro to enable free and mobile 3D scanning.

#### 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

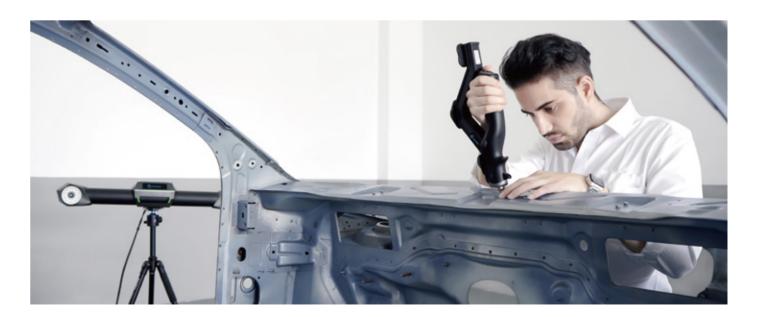
#### **Extendable Applications**

- 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**

Тур	e	TrackScan-P550	TrackScan-P542	
	Ultra-fast scanning	21 blue laser crosses	17 blue laser crosses	
Comments	Hyperfine mode B	7 blue parallel laser lines		
Scan mode	Deep hole scanning	1 extra blu	ne laser line	
Accu	racy <sup>(1)</sup>	Up to 0.	025 mm	
Measuren	nent rate	Up to 2, 600,000 measurements/s  Up to 2, 200,000 measurements/s		
Scannir	ng area	Up to 500 mi	m × 600 mm	
Laser	class	Class II(	eye-safe)	
Resol	ution	0.020	0 mm	
Volumetric (2)	10.4 m³	0.060	) mm	
accuracy	18.0 m <sup>3</sup>	0.075	5 mm	
Volumetric (With MSCAN photog	accuracy grammetry system )	0.044 mm + 0.012 mm/m		
Single-point	repeatability of CMM T-Probe	0.030 mm		
'	on accuracy	0.050 mm		
Object Size (I	Recommend)	100~8000 mm		
Stand-off	distance	300 mm		
Depth o	of field	400 mm		
Output f	ormats	.stl, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized		
Operating temp	perature 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,	

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# 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.
- -Automatically calibrate its sensor when environmental conditions changes.

#### **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
- -Work in unison with plug-and-play positioners to expand the workspace.
- -Work with different cobots.

### **Technical Specifications**

Туре	AM-DESK 60120
Dimension	1200*600*177 mm
Weight	75 KG
Turntable Payload	140 KG
Turntable Repeatability	0.05°
Turntable Accuracy	0.1°
Max Rotational Speed of Turntable	50°/S
Communication Interface	TCP/IP
Dahat Cupported	UR/UR5
Robot Supported	AUBO/i5; i7
Power Supply	110 V~220 V/50-60 Hz
Peak Power	900 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.









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 blue l	aser line
Ac	curacy*	Up to 0	.025 mm
Measur	ement rate	Up to 2,600,000 measurements/s	Up to 2,200,000 measurements/s
Scanning area		Up to 500 mm × 600 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> 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.

### ALITOSCAN - K

AutoScan-K series, an automatic 3D inspection system, can realize non-contact and non-destructive inspection using machine vision technology. While ensuring extra-high accuracy, it can effectively carry out online batch scanning and inspection. Featuring 24-hour constant operation, AutoScan-K 3D system helps enterprises reduce manufacturing costs, accelerate product time-to-market and increase return on investment.

Equipped with multiple working modes, AutoScan-K 3D system can adapt to the measurement in various industrial scenarios. Meanwhile, based on cutting-edge machine vision algorithms, it can precisely control the movements of the robot, realizing efficient and automatic batch inspection.

#### **Automatic Whole-process Inspection**

- AutoScan-K automatically conducts batch 3D scanning and inspection for data comparison.
- Generate inspection reports, after scanning routes and measurement process are set for different products.

#### Safe and Reliable NDT

- AutoScan-K truly achieves non-contact and non-destructive intelligent testing.
- Safe, reliable, and applicable in different workshop environment.
- Industrial intelligent rotary tables make efficient and blind-angle-free inspection possible.

#### **Secondary Development**

- The secondary development allows operators to control the system by calling the SDK interface.

#### **Personalized Operation**

- Multiple measurement modes are offered depending on the characteristics of different workpieces.
- To meet different inspection requirements, the workpieces can be clamped from multiple angles to set inspection routes.

#### **Precise and Effective Measurement**

- Inspect workpieces with different sizes, weights and pieces made from different materials.
- High density data scanning with the speed of up to 1,650,000 per second.
- Precise 3D inspection in harsh industrial environment with resolution up to 0.010 mm and volume accuracy up to 0.030 mm/m.

#### **Intelligent Rotary Table**

- The industrial intelligent and automatic rotary tables adapt to various fixtures and clamps.
- Without attaching markers on the object, quick and reliable clamping can be achieved to greatly simplify the preparation workflows before 3D scanning.



#### **Technical Parameter**

Туре		AutoScan-KM II	AutoScan-KM	AutoScan-K20
	Ultra-fast scanning	13 blue laser crosses	11 blue laser crosses	7 red laser crosses
Scan mode	Hyperfine scanning	7 blue parallel laser lines		5 blue parallel laser lines
	Large area scanning	11 parallel infra	red laser lines	-
	Deep hole scanning	1 extra blue	e laser line	1 extra red laser line
Accu	racy <sup>(1)</sup>		Up to 0.020 mm	
Scanni	ng rate	Up to 1,650,000 measurements/s	Up to 1,350,000 measurements/s	Up to 650,000 measurements/s
Scanni	ng area	Up to 1440 m	m × 860 mm	Up to 550 mm × 600 mm
Photogrammetry	Scanning area	3760 mm >	3150mm	2500 mm × 3000 mm
system	Depth of field		2500 mm	
Laser class		CLASS II (eye-safe)		
Resolution		0.010 mm		
	Work alone	0.015 mm + 0.030 mm/m		0.015 mm + 0.035 mm/m
Volumetric accuracy <sup>(2)</sup>	Work with 1m reference bar	0.015 mm + 0.020 mm/m		
	Work with MSCAN-L15	0.015 mm + 0.012 mm/m		
Depth	of field	925 mm		450 mm
Output formats		.stl, .ply, .obj, .igs, .stp, .wrl, .xyz, .dae, .fbx, .ma, .asc or customized		
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, CN106403845U CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN206905709U, CN107202554U CN209310754U, CN209485295U, CN209485271U, CN305446920S, CN209991946U, US10309770B2, KR1022096806E KR102209255B1, US10914576B2, 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.



# ALITOSCAN-T

The AutoScan-T, automated 3D system, is a new upgrade of an intelligent automatic inspection system. It is specially designed for automated quality control in shop-floor conditions. It helps companies to achieve a perfect balance between cost and efficiency.

AutoScan-T conducts non-destructive scanning without the use of markers. Its seamless connection with production line greatly contributes to reductions on the workload. The AutoScan-T military-grade manufacturing quality offers strong anti-interference, and high adaptation to complex and harsh workshop environment. It can be extensively used in national defense, energy, 5G telecommunication, mold manufacturing, etc. AutoSca-T users can easily operate the system simply with "one-click start," offline programming, and compatibility with 3D multiple inspection software solutions.

#### **Seamless Integration in the Production Line**

- Based on automatic optical tracking for seamless integration in the production line.
- Designed for online batch inspection.
- Greatly enhanced iterative efficiency of the production process.

#### **Accelerated Precise Inspection**

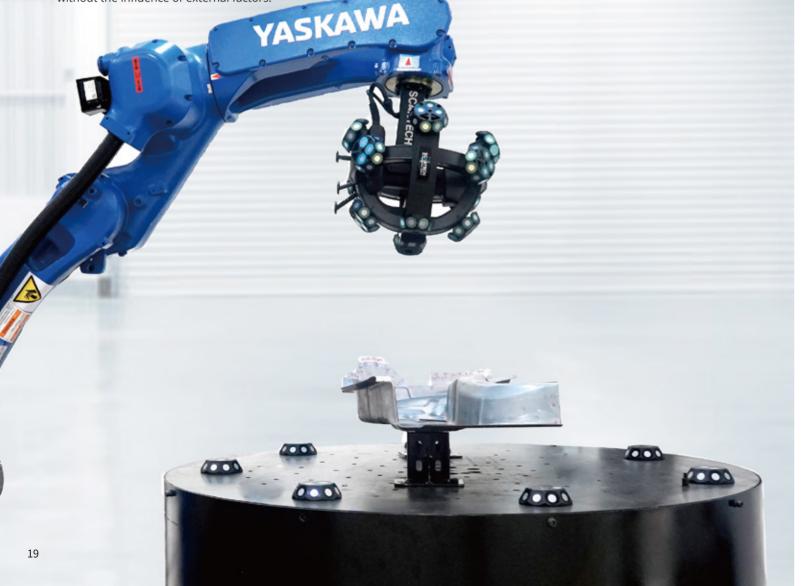
- Adoption of blue laser and synchronous tracking technologies.
- Reach up to 2,600,000 measurements/s with an accuracy of 0.025 mm.
- Efficient and flexible automated manufacturing can be achieved without the influence of external factors.

#### **Multiple Configurations**

- Connects and works in conjunction with Scantech's handheld 3D scanner, portable CMM, MSCAN photogrammetry system, rotary platforms, and guide rails.
- Performs simultaneous optical tracking and scanning of customized solutions.

#### Military-grade Quality

- Unsusceptible or unaffected to changes in temperature, presence of vibration, dust. etc.
- Military-grade design presents offers remarkable adaptability
   to harsh industrial conditions.

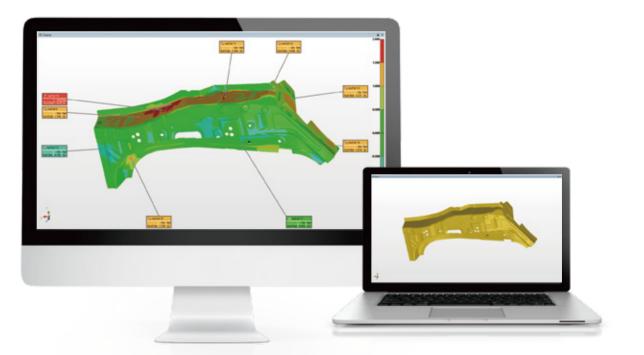


#### **Technical Parameter**

Тур	e	AutoScan-T550	
	Ultra-fast scanning	21 blue laser crosses	
Scan mode	Hyperfine mode B	7 blue parallel laser lines	
	Deep hole scanning	1 extra blue laser line	
Accur	acy <sup>(1)</sup>	Up to 0.025 mm	
Measurem	ent rate	Up to 2, 600,000 measurements/s	
Scannin	g area	Up to 500 mm × 600 mm	
Laser	class	CLASS II (eye-safe)	
Resolu	ıtion	0.020 mm	
Volumetric (2)	10.4 m <sup>3</sup>	0.060 mm	
accuracy	18.0 m <sup>3</sup>	0.075 mm	
Volumetric (with MSCAN-L15 phot	accuracy ogrammetry system)	0.044 mm + 0.012 mm/m	
Stand-off	distance	300 mm	
Depth o	ffield	400 mm	
Output f	ormats	.stl, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized	
Operating temperature range		-10°C - 40°C	
Interface mode		USB 3.0	
Patents		CN106500627, CN106500628, CN206132003U, CN204854633U, CN204944431U, CN204902788U, CN204963812U, CN204902785U, CN106403845, US10309770B2, CN204854633U, CN105068384B, CN105049664B, CN106403845B, CN111694665A, CN214375417U, CN214379242U, CN214379241U, CN109000582B, CN112802002B, CN210567185U, CN211412112096U, CN21414774U, CN114001671B, CN1114001696B, CN114554025B, CN114205483B, CN113514008AUS10309770B2, US11060853B2, KR102096806B1, EP3392831B1	

(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.





# 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**

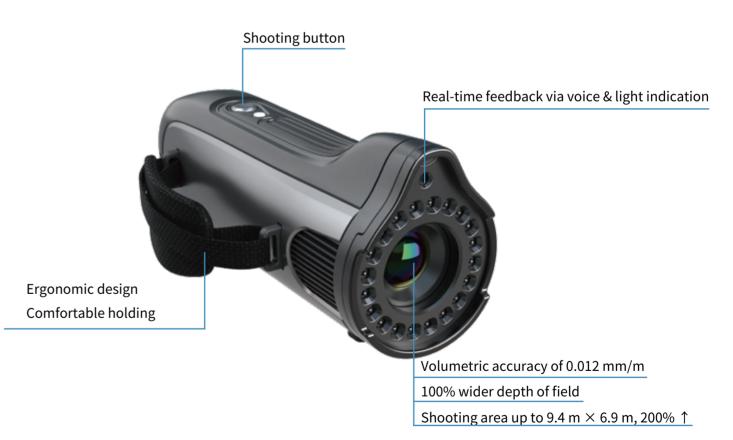
- Support HDR mode, blue LED light yields higher accuracy inspection values.

#### 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 acc	curacy	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	

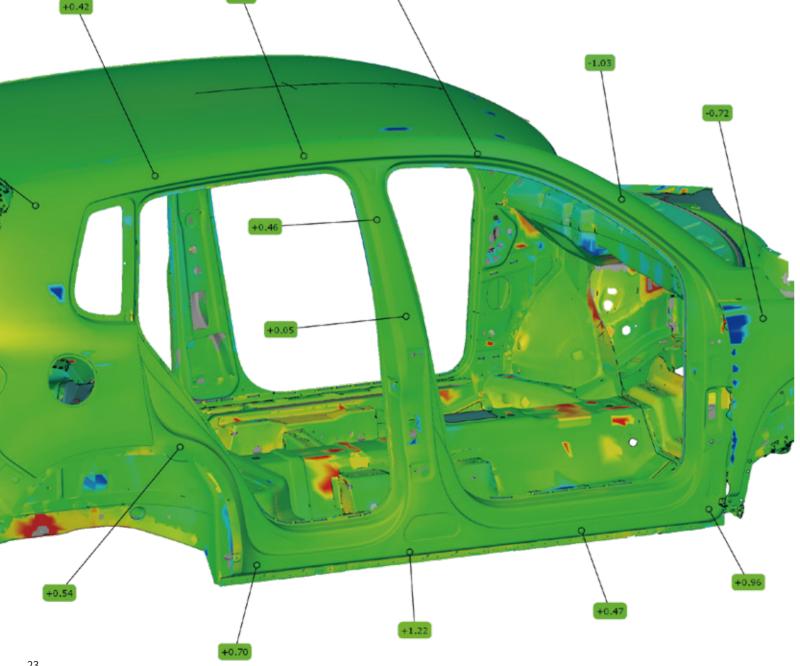


# **SCANVIEWER**

# **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.

### **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.





















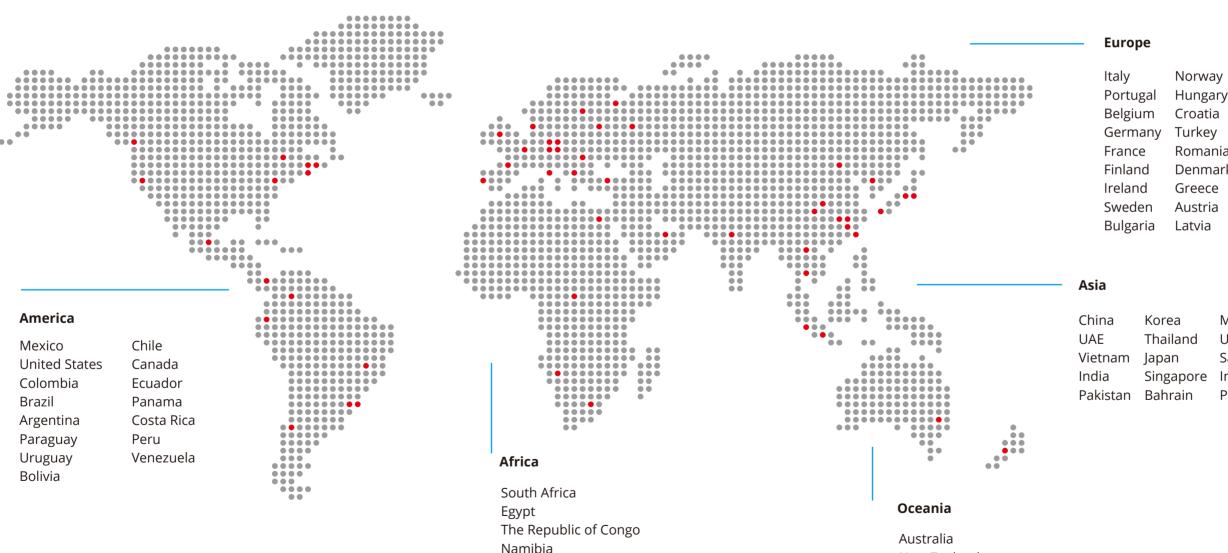












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