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NORTHEAST3D
SOLUTIONS

SCANTECHTM

3D Digitize Any Time Any Place

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CONTENTS

Composite 3D Scanner



KSCAN - MAGIC
Experience Diverse Ultimate from
Metrology Measurement
01



KSCAN
Infinite Possibilities to
Metrology Measuring
03

Global 3D Scanner



AXE
Measuring An Ultra-wide 3D World
05

Handheld 3D Scanner



PRINCE
Easily Scan Large Volume Even
Small Coin
07



HSCAN
Scan Object with Fast Speed
and Ultra-high Accuracy
09

Tracking 3D Scanner



TRACKSCAN



T-PROBE



E-TRACK

TRACKSCAN
Intelligent 3D Tracking with
Unrivalled-fast Measurement
17

AutoScan 3D System



AUTOSCAN
Unmanned Automatic 3D
Inspection Solution
13

Photogrammetry System



MSCAN
Accuracy Trigger at
Large-scale Metrology
15

Components



AIRGO
Get Free from PC, Deliver
Intelligent 3D Measurement
17

3D Software



SCANVIEWER
Integrated Scan & Inspection
3D Software
18



KSCAN – MAGIC

KSCAN-Magic composite 3D scanner opens up the first introduction of infrared laser + blue laser technology with five standard working modes.

Its unparalleled scanning speed, accuracy, detail, scanning area, and depth of field greatly optimize the 3D measurement workflows and accelerate the product time-to-market. 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

- Innovatively adopts infrared laser scanning technology.
- Ultimate scanning area reaches 1440 mm × 860 mm.
- Achieve precise wide range measurement with ease.

Extreme-clear Details

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

Metrology-grade NDT Measuring

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

Personalized Adjustment

- 925 mm depth of field.
- Freely adjust 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.
- By flexibly switching the scanning modes.
- Satisfy different application needs, dramatically improving working efficiency.

Single Laser Line Scanning

- Single laser line scanning mode accurately captures 3D data of inaccessible positions.

No Fear of Harshness

- Support super-high work adaptability in harsh environment.
- Realistically restores the precise 3D data of reflective and black surface.

Massive Functions

- Built-in photogrammetry system, intelligent edge detection, contact probing and pipe measurement.
- Fulfill diverse application needs.

KSCAN Technical Parameter

KSCAN Technical Parameter			
Type		KSCAN-Magic	KSCAN-Magic II
Scan mode	Ultra-fast scanning	11 blue laser crosses	13 blue laser crosses
	Hyperfine scanning	7 blue parallel laser lines	
	Large area scanning	11 parallel infrared laser lines	
	Deep hole scanning	1 extra blue laser line	
Laser lines in total		41	45
Accuracy		0.020 mm	
Scanning rate		Up to 1,350,000 measurements/s	Up to 1,650,000 measurements/s
Scanning area		Up to 1440 mm × 860 mm	
Photogrammetry system	Standard configuration	Built-in	
	Scanning area	3760 mm × 3150mm	
	Depth of field	2500 mm	
Laser class		CLASS II (eye-safe)	
Resolution		Up to 0.010 mm	
Volume accuracy	Work alone	Up to 0.010 mm + 0.030 mm/m	
	Work with 1m reference bar	Up to 0.010 mm + 0.020 mm/m	
	Work with MSCAN-L15	Up to 0.010 mm + 0.015 mm/m	
Stand-off distance		300 mm	
Depth of field		925 mm	
Portable CMM K-Probe	Optional	Support	
	Single point repeatability	0.030 mm	
	Tracking frequency	60 hz	
Intelligent edge inspection module	Optional	Support	
	Edge accuracy	0.030 mm	
Pipe inspection module	Optional	Support	
	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 ~ 40°C	
Interface mode		USB 3.0	
Patents		CN204902790U, CN206905709U, CN107202554, CN204902785U, CN106403845, WO2018049843, CN106500627, WO2018072434, CN106500628, WO2018072433, CN206132003U, CN104501740, US10309770B2	





KSCAN 3D scanner is a professional 3D scanner with the widest applications. It integrates two global innovations: photogrammetry function for scanning large objects & dual laser scan mode for high efficiency and ultra-detail.

Compared with other portable laser scanners, KSCAN improves the resolution from 0.050 mm to 0.010 mm, and the volumetric accuracy from 0.060 mm/m to 0.035 mm/m.

KSCAN supports probing function to accurately obtain the 3D data of hole, plane, edge, etc. It can work with Scan-Viewer to fulfill pipe inspection, deformation detection, GD&T, etc.

Unlimited Measuring Range

- Capture the 3D data of plane even coin realistically

Red & Blue Laser Modes

- High flexibility and efficiency
- Blue laser mode easily captures extreme details with 10μm resolution

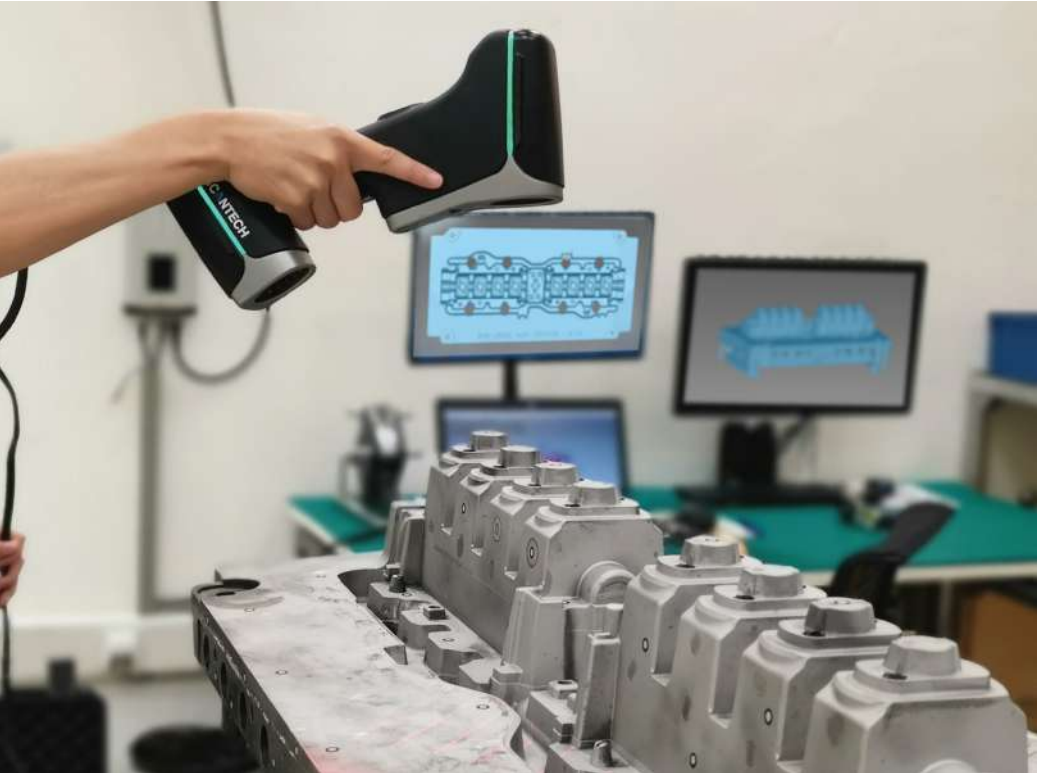
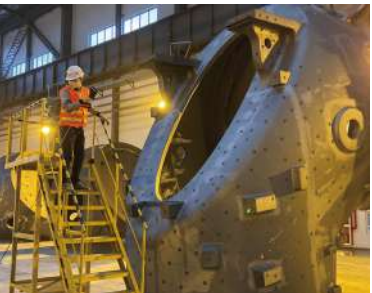
Probing Function

- Support holes, hidden points and feature measurement, assembly detection, etc.

Faster Scanning Process

- Optimize each scanning procedure
- Greatly reduce the cost of device, time and labor

KSCAN Technical Parameter		
Type	KSCAN 20	
Scan mode	Standard mode R	Hyperfine mode B
Laser source	7 red laser crosses (+1 extra red laser line) 5 blue parallel laser lines	
Accuracy	Up to 0.020 mm	
Built-in photogrammetry	Support	
Hyperfine scanning	Support	
Volumetric accuracy (based on part size)	0.020 mm + 0.035 mm/m	0.010 mm + 0.035 mm/m
Volumetric accuracy with high-precision reference bar	0.020 mm/m	
Resolution	0.050 mm	0.010 mm
Measurement rate	650,000 measurements/s	
Laser class	CLASS II (eye-safe)	
Scanning area	Up to 550 mm × 600 mm	
Scanning area (photogrammetry)	2500 mm × 3000 mm	
Stand-off distance	500 mm	180 mm
Depth of field	620 mm	200 mm
Depth of field (photogrammetry)	2500 mm	
Single point repeatability	0.030 mm	
Tracking frequency (portable CMM)	60 hz	
Edge accuracy	0.030 mm	
Pipe inspection in software	Support YBC/LRA data	
Output formats	.stl, .ply, .obj, .igs, .stp, .wrl, .xyz, .dae, .fbx, .ma, .asc or customized	
Interface mode	USB 3.0	
Operating temperature range	-10 ~ 40 °C	
Patents	CN204902790U, CN206905709U, CN107202554, CN204902785U, CN106403845, WO2018049843, CN106500627, WO2018072434, CN106500628, WO2018072433, CN206132003U, US10309770B2	





AXE

AXE-B17 3D scanner utilizes optical measurement technology with a scanning speed of 2,000,000 measurements/s, quickly capturing 3D data of the object and getting precise deviations on the geometric surface.

With global initiative built-in photogrammetry system, AXE-B17 outputs ultra-large scanning area and metrology-grade measurement accuracy. Getting rid of limitations like size, shape, material and complexity of the object, AXE-B17 can freely choose working modes of efficient unrivalled-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.

Extreme-fast Response

- 17 crossed blue laser lines enable extreme fast and precise response.
- 2,000,000 measurements/s, offering extraordinary work efficiency.

Flexible Switching

- Working modes are capable of freely switching based on scanning needs.
- Efficient unrivalled-speed scanning; accurate deep hole scanning, dealing with intricate positions like deep holes and dead angles.

Unprecedented Patent

- Global initiative built-in photogrammetry system.
- Tailored for measuring medium to large-sized objects.
- 0.030 mm/m of volumetric accuracy.

Ultra-wide Vision

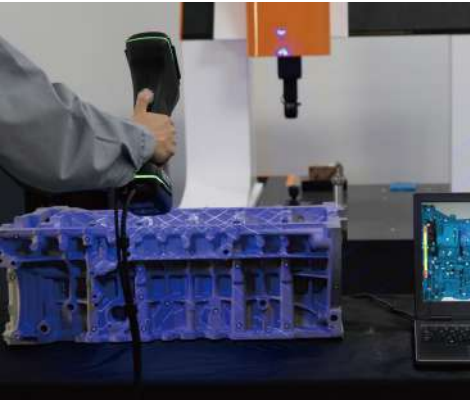
- Ultra-wide scanning area of 860 mm × 600 mm.
- Allow an optimal and smoother 3D scanning experience.

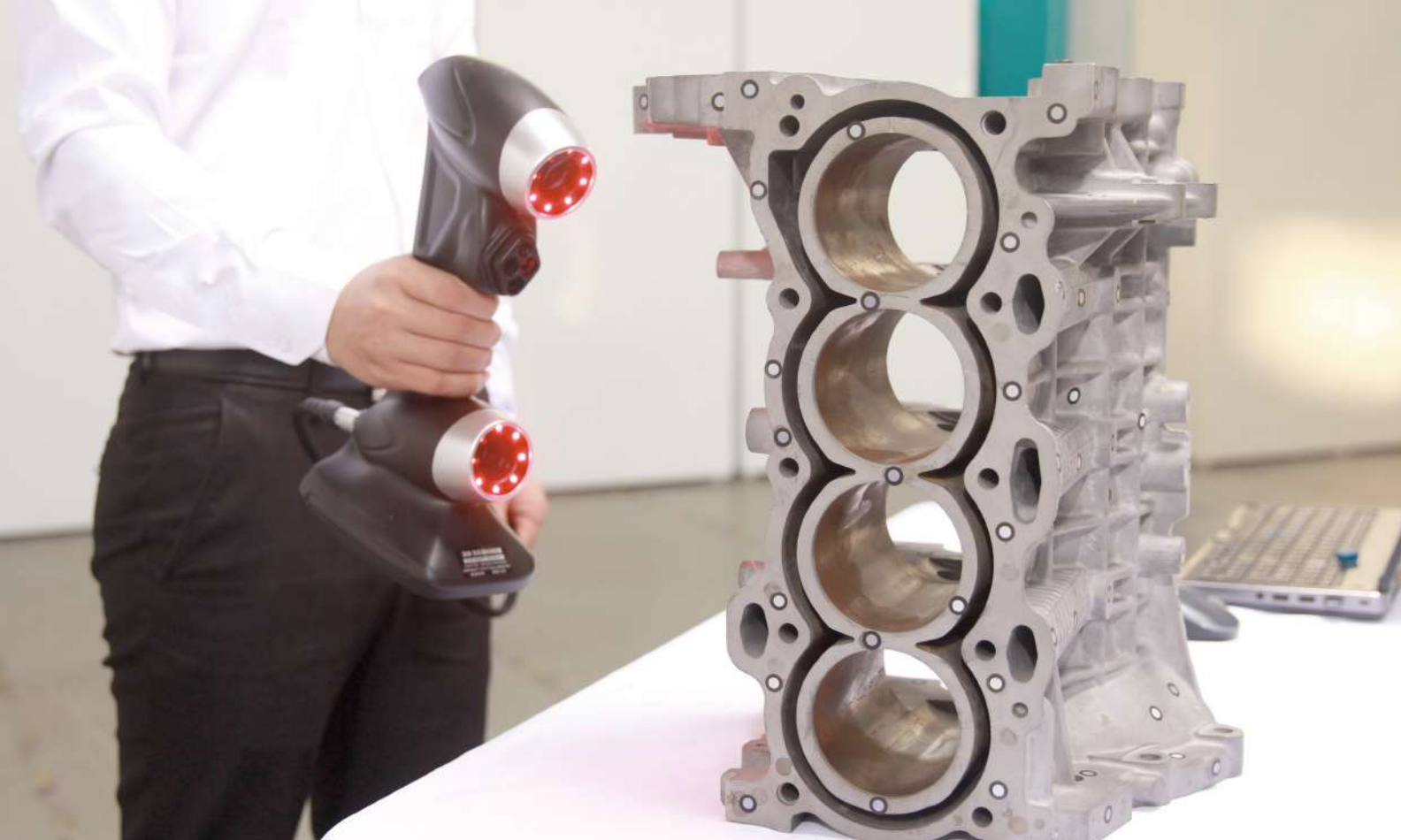
Stand-alone Operation

- Operate alone to perform precise 360 ° real-time 3D inspection.

AXE Technical Parameter

Type		AXE-B17	AXE-B11	AXE-G7
Laser source		17 blue laser crosses (+1 extra blue laser line)	11 blue laser crosses (+1 extra blue laser line)	7 red laser crosses (+1 extra blue laser line)
Deep hole scanning		Support		
Accuracy		0.020 mm		
Measurement rate		2,000,000 measurements/s	1,300,000 measurements/s	800,000 measurements/s
Scanning area		860 mm × 600 mm	550 mm × 600 mm	550 mm × 500 mm
Standard configuration		Built-in		
Scanning area (photogrammetry)	Scanning area	3760 mm × 3150 mm	2500 mm x 3000 mm	
	Depth of field	2500 mm		
Laser class		CLASS II (eye-safe)		
Resolution		0.025 mm		0.100 mm
Volume accuracy	Work alone	0.020 mm + 0.030 mm/m	0.020 mm + 0.035 mm/m	
	Work with 1m reference bar	0.020 mm + 0.020 mm/m		
	Work with MSCAN-L15	0.020 mm + 0.015 mm/m		
Stand-off distance		300 mm		
Depth of field		500 mm		
Output formats		.stl, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized		
Operating temperature range		-10 ~ 40°C		
Interface mode		USB 3.0		
Patents		CN204902790U,CN206905709U,CN107202554,US10309770B2		





PRINCE

PRINCE 3D scanner with two different working modes. It makes full use of high adaptability of red laser scan mode and ultra-detail capturing capacity of blue laser scan mode, truly performing a perfect combination of easy operation and high detail.

Dual Scan Mode

- Red & blue laser scan modes
- Rapidly switch two working modes
- Extreme high detail capturing
- Easy to scan large and small objects

High Precision

- Metrology-grade accuracy up to 0.030 mm
- Accuracy is insensitive to instable environment

High Efficiency

- 3 or 7 red laser crosses
- 5 blue parallel laser lines
- Scan deep hole by single red laser line
- 480,000 measurements/s

Ultra-high Detail

- Resolution up to 0.020 mm
- Equip with 120 fps camera
- Easily scan object smaller than coins

PRINCE Technical Parameter

Type	PRINCE 335		PRINCE 775	
Scan mode	Standard mode R	Hyperfine mode B	Standard mode R	Hyperfine mode B
Laser source	3 red laser crosses (+ 1 extra red laser line)	5 blue parallel laser lines	7 red laser crosses (+ 1 extra red laser line)	5 blue parallel laser lines
Deep hole scanning	Support			
Hyperfine scanning	Support			
Accuracy	0.030 mm			
Camera frame rate	60 fps	120 fps	60 fps	120 fps
Measurement rate	265,000 measurements/s	320,000 measurements/s	480,000 measurements/s	320,000 measurements/s
Scanning area	225 mm × 250 mm	200 mm × 200 mm	275 mm × 250 mm	200 mm × 200 mm
Laser class	CLASS II (eye-safe)			
Resolution	0.050 mm	0.020 mm	0.050 mm	0.020 mm
Volumetric accuracy (without extra device)	0.020 mm + 0.080 mm/m	0.010 mm + 0.080 mm/m	0.020 mm + 0.060 mm/m	0.010 mm + 0.060 mm/m
Volumetric accuracy (with MSCAN-L15)	0.020 mm + 0.015 mm/m	0.010 mm + 0.015 mm/m	0.020 mm + 0.015 mm/m	0.010 mm + 0.015 mm/m
Stand-off distance	300 mm	150 mm	300 mm	150 mm
Depth of field	250 mm	100 mm	250 mm	100 mm
Output formats	.stl, .ply, .obj, .igs, .wrl, .xyz, .dae, .fbx, .ma, .asc or customized			
Weight	0.95 kg			
Dimensions	315 × 165 × 105 mm			
Operating temperature range	-10 ~ 40°C			
Interface mode	Gigabit Lan			

Patents

CN204854633U, WO2017028600, CN105068384, WO2017020648, CN204854633U, CN105049664, CN204902785U, CN104501740 CN204944431U, WO2017024869, CN204963812U, CN106403845, WO2018049843, CN106500627, WO2018072434, CN106500628, WO2018072433, CN206132003U, US10309770B2





HSCAN Technical Parameter		
Type	HSCAN331	HSCAN771
Laser source	3 red laser crosses (+1 extra red laser)	7 red laser crosses (+1 extra red laser)
Deep hole scanning	Support	
Accuracy	0.030 mm	
Measurement rate	265,000 measurements/s	480,000 measurements/s
Scanning area	Up to 225 mm × 250 mm	Up to 275 mm × 250 mm
Laser class	CLASS II (eye-safe)	
Resolution	0.050 mm	
Volumetric accuracy (without extra device)	0.020 mm + 0.080 mm/m	0.020 mm + 0.060 mm/m
Volumetric accuracy (with MSCAN)	0.020 mm + 0.025 mm/m	
Stand-off distance	300 mm	
Depth of field	250 mm	
Output formats	.stl, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized	
Weight	0.95 kg	
Dimensions	315 × 165 × 105 mm	
Operating temperature range	-10 ~ 40°C	
Interface mode	Gigabit Lan	
Patents	CN204902790U, CN206905709U, CN107202554, CN204902785U, CN106403845, WO2018049843, CN106500627, WO2018072434, CN106500628, WO2018072433, CN206132003U, CN104501740, US10309770B2	

HSCAN

HSCAN 3D scanner adopts multiple beam laser to obtain 3D point cloud from objects’ surface, and recognizes the spatial position through reflective markers to complete 3D point cloud reconstruction.

High Efficiency

- 7 red laser crosses
- Deep hole scanning by single red laser line
- 480,000 measurements/s

High Precision

- Metrology-grade accuracy up to 0.030 mm
- Accuracy is insensitive to instable environment

Self-position

- No additional positioning device required
- Move object freely
- Won’ t affect data quality and accuracy by changing enviornment

Portable& Flexible

- Less than 1kg weight
- Easy to operate with one laptop
- Work in narrow space such as car interior dashboard

Real-time Visualization

- Real-time display and match
- Rapidly get 3D data of deep hole, dead angles,etc.
- Obvious advantages for scanning complex objects





TrackScan-P42 adopts intelligent optical tracking measurement technology and high-quality optical equipment, carrying out ultra-high precision dynamic 3D measurement without markers.

By freely switching multiple working modes, TrackScan-P42 caters to different scanning situations. The equipped wireless portable CMM T-Probe precisely captures high-precision 3D data of gaps, hole positions, grooves and complex surface. By working with robot-arm, TrackScan-P42 can also realize intelligent online automated 3D inspection.

Intelligent Tracking Without Markers

- Deliver instant scanning without markers, greatly improving work efficiency and decreasing cost.

Strong Anti-interference Capability

- Easily capture 3D data for shiny and black surface.
- Strong anti-interference capability of environment, vibrations and thermal variations.

Extendable Measuring Volume

- Measuring range is dynamically extended by adjusting the positions of E-Track, - The accuracy still gets maintained.

Accurate Composite Positioning

- Support modes of camera tracking and marker tracking.
- In the blind area of E-Track, the scanner can recognize the markers to keep working.

Unrivaled-fast & Detail-maker

- 17 crossed blue laser lines enable ultra-fast scanning rate of 1,900,000 measurements/s.
- 7 parallel blue laser lines work for detail capturing.
- Single blue laser line aims to fast obtain 3D data of inaccessible area.

Wireless Portable CMM

- Designed for getting precise 3D data of holes and hidden points.
- High single point repeatability of 0.030 mm.

Wide Scanning Area

- E-Track dual cameral sensors reach wider measurement area and dynamically track the parts.

Aerospace-grade Materials

- Shaped of integrated design and made from aerospace-grade carbon fiber materials, sturdy and durable.

TrackScan Technical Parameter

Type		TrackScan-P42	TrackScan-P30	TrackScan-P22
Scan mode	Ultra-fast scanning	17 blue laser crosses	11 blue laser crosses	7 red laser crosses
	Hyperfine mode B	7 blue parallel laser lines		
	Deep hole scanning	1 extra blue laser line		
Laser lines in total		42	30	22
Accuracy		0.025 mm		0.030 mm
Measurement rate		1, 900,000 measurements/s	1, 200,000 measurements/s	480,000 measurements/s
Scanning area		310 mm × 350 mm		275 mm × 250 mm
Laser class		Class II (eye-safe)		
Resolution		0.020 mm		
Volumetric accuracy	9.1 m³	0.064 mm		
	16.6 m³	0.078 mm		
Volumetric accuracy (With MSCAN-L15 photogrammetry system)		0.044 mm + 0.015 mm/m		
Portable CMM T-Probe	Optional	Support		
	Single point repeatability	0.030 mm		
Part size range (recommended)		200 ~ 6000 mm		
Stand-off distance		300 mm		
Depth of field		320 mm		
Output formats		.stl, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized		
Operating temperature range		5 ~ 40°C		
Interface mode		USB 3.0		
Patents		CN106500627, CN106500628, CN206132003U, CN204854633U, CN204944431U, CN204902788U, CN105068384, CN105049664, CN204963812U, CN204902785U, CN106403845, US10309770B2		



AutoScan-T42 takes scanning speed and numerous data-processing to the next level. With high accuracy and strong reliability, automated 3D system greatly simplifies workflows and optimizes production cycle. Working with industrial robot for intelligent online quality control inspection, AutoScan-T42 achieves no human intervention and automatically completes batch inspection, avoiding the mistakes made by human factors and generating easy-to-understand inspection reports.

Based on different work environments, it can be equipped with various 3D scanning devices. Such versatile 3D solutions provide a technical support for automated 3D measurement at medium-large size work-pieces.



No Human Intervention Needed

- Intelligent on-line inspection liberates manpower thoroughly.
- Generate easy-to-understand inspection report automatically.
- One-click start and offline programming realize 24/7 automated batch 3D inspection.

High Workshop Adaptability

- Strong anti-interference to guarantee accurate 3D inspection under complex workshop conditions.

Broad Compatibility

- Meet different work environmental requirements.
- Be equipped with various 3D inspection devices.
- Truly delivering versatile and reliable 3D inspection solutions.

Synchronous Tracking

- By precisely synchronizing object movement and scanner movement.
- Realize incredible accurate data acquisition.

AutoScan Technical Parameter

Type		AutoScan-T42	
Scan mode		Standard mode R	Hyperfine mode B
Laser source		17 blue laser crosses (+ 1 extra red laser line)	7 blue parallel laser lines
Deep hole scanning		Support	
Hyperfine scanning		Support	
Accuracy		0.025 mm	
Measurement rate		1,900,000 measurements/s	
Scanning area		Up to 310 x 550 mm	
Laser class		Class II (eye-safe)	
Resolution		0.020 mm	
Volumetric accuracy	9.1 m³	0.064 mm	
	16.6 m³	0.078 mm	
Volumetric accuracy (With MSCAN-L15 photogrammetry system)		0.044 mm + 0.015 mm/m	
Part size range (recommended)		200 ~ 6000 mm	
Stand-off distance		300 mm	
Depth of field		320 mm	
Output formats		.stl, .ply, .obj, .igs, wrl, .xyz, .dae, .fbx, .ma, .asc or customized	
Operating temperature range		5 ~ 40°C	
Interface mode		USB 3.0	
Patents		CN106500627, CN106500628, CN206132003U, CN204854633U, CN204944431U, CN204902788U, CN105068384, CN105049664, CN204963812U, CN204902785U, CN106403845, US10309770B2	



MSCAN-L15

Accuracy Trigger at Large-scale Metrology



MSCAN-L15 photogrammetry system is tailored to deliver high-precision geometric measurements of large-scale workpieces. With a large shooting area and wide depth of field, it performs volumetric accuracy of 0.015 mm/m for large-scale projects.

Compatible with 3D inspection devices, MSCAN-L15 can fulfill stricter measurement accuracy requirements. Unique HDR mode makes strong environment adaptability. Due to the ergonomic design, it creates great portability and can be held for a long time.

Metrology-grade Accuracy

- Volumetric accuracy is up to 0.015 mm/m, increased 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 reaches higher inspection accuracy.

Multi-adaptors

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

MSCAN Technical Parameter

Type		MSCAN-L15	
Volume accuracy		0.015 mm/m	
Volumetric accuracy (work with 3D scanners)	PRINCE 335 PRINCE 775	0.020 mm + 0.015 mm/m 0.010 mm + 0.015 mm/m	(Standard mode R) (Hyperfine mode B)
	KSCAN 20	0.020 mm + 0.015 mm/m 0.010 mm + 0.015 mm/m	(Standard mode R) (Hyperfine mode B)
	HSCAN 331 HSCAN 771	0.020 mm + 0.015 mm/m	
	AXE-G7 AXE-B11	0.020 mm + 0.015 mm/m	
	TrackScan-P22	0.044 mm + 0.015 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	





AirGO completely breaks through traditional 3D scanning methods and gets free from PC and cables. It can display 3D model directly on hand and truly perform efficient as well as flexible 3D measurement.

AirGO integrates calculation, display and power supply. It replaces PC to calculate scan data, display 3D model individually and supply power for 3D scanners.

Free Scanning

- Work without PC.
- Handily display to perform high efficient 3D scanning in real-time.

Real-time Guidance

- Real-time feedback on 5.5” HD display screen to conduct scanning process effectively.

Unlimited Scanning

- Get rid of cables to deliver unlimited range measurment.

Wireless Transmission

- Massive scanning data can be wireless transmitted to PC to get a quicker analysis.

AirGO Technical Parameter		
Type	AirGO	
Working mode	Intelligent mode	Standard mode
Software	ScanViewer (intelligent)	ScanViewer (standard)
Dimensions	190×150×50 (mm)	
Weight	0.98 kg	
Display	5.5 "	
Screen resolution	1920 × 1080	
Battery	19400 mAh	
Battery life	Standby 6 hours/ scan 2 hours (support two batteries)	
Support series	HSCAN/PRINCE/AXE series	

SCANVIEWER

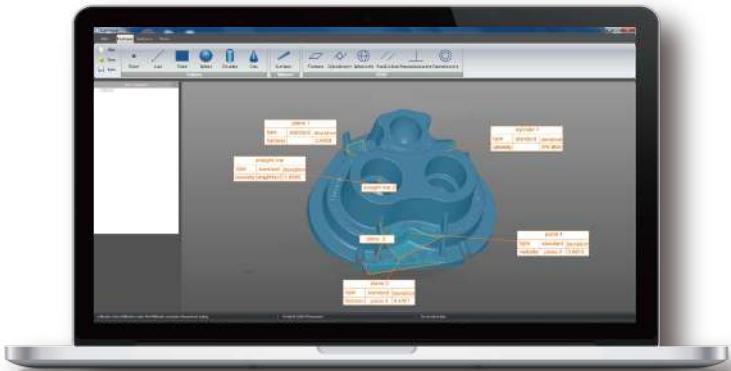
Integrated Scan & Inspection 3D Software

ScanViewer is a free & powerful 3D software, including inspection and scanning functions such as Distance, GD&T and Color map.

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 to scanning data.



Color Map

Multiple alignment function is available to merge scanning data & CAD file for inspection, quickly generating report for easy analysis and adjustment.

