Industrial 3D
Measurement Solution

Company Introduction

Hangzhou Scantech Co., Ltd. is a high-tech enterprise specialized in developing, manufacturing and selling of intelligent visual inspection equipment. As one of the most professional 3D digital equipment suppliers, ScanTech has been granted and assigned numbers of technological patents.

R&D team developed series of 3D digital equipment with self-owned intellectual property rights, such as composite 3D scanner, handheld laser 3D scanner, global 3D scanner, color 3D scanner, tracking 3D scanner and global photogrammetry system.

Furthermore, our R&D team has established a joint development center with Norway Metronor which is a well-known optical metrology enterprise in Europe.

Rebuild Your 3D World

SCANTECH™
3D Digitization Expert

Authorized Distributor

HangZhou Scantech Co., Ltd.

CONTENTS

Application

3D Reconstruction Goes Everywhere

ScanTech offers complete 3D digital solutions to realize high accuracy 3D measurement. ScanTech 3D measurement technologies are applied to variety industries, such as automobiles and parts, aerospace, ship, rail, transportation, mechanical design and manufacturing, home decoration, heritage and ancient architecture, teaching and research, 3D printing, and 3D visualization.

ScanTech works out 3D digital solutions suited to your needs according to different industries and demands, and enables you to get ahead in your field.

KSCAN
3D Scanner
Infinite Possibilities to Metrology Measuring

Bring great convenience for 3D measurement due to high versatility

PRINCE
3D Scanner
Extreme Detail

Perfect performance with 120fps camera and 0.03mm accuracy

AXE
3D Scanner
High Volumetric Accuracy

Complete 3D reconstruction for large volume individually with 0.020mm+0.035mm/m accuracy

HSCAN
3D Scanner
Entry-level

Cost-effective for metrology-grade 3D measurement

TRACKSCAN T-PROBE E-TRACK

TRACKSCAN SYSTEM

Deliver high-precision 3D measurement solutions without attaching markers. Offer rapid and accurate data collection of overall size and key features by 3D laser scanning and probing function.

MSCAN-PLUS
Smart Photogrammetry System
Get Free from PC

Wireless working mode enables free operation from PC to efficiently perform wide measurement range

All-round 3D Digital Solution

ScanTech 3D measurement systems offer professional measurement technologies for variety industries

Rapid Prototyping
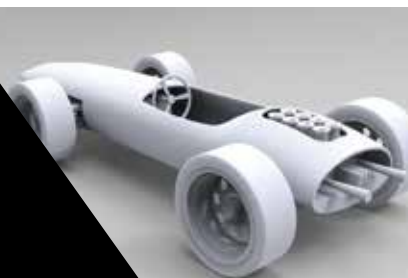
Reverse Engineering

3D Inspection

3D Visualization

High Precision 3D Measurement Solutions for Different Sizes

Recommend scan size

Products	Recommend scan size
TRACKSCAN	0.5m~10m
KSCAN	0.02m~10m
AXE	0.2m~10
PRINCE	0.01m~4m
HSCAN	0.05m~4m
HSCAN+MSCAN	0.2m~15m
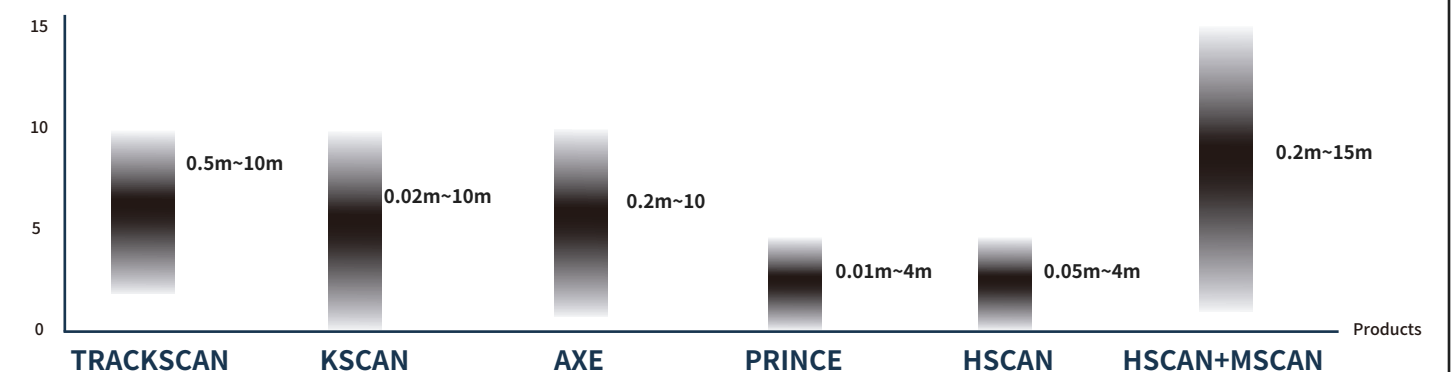
Complete Solution for Industrial 3D Measurement

New generation of 3D measurement technology

PRINCE 3D Scanner

Red & blue laser, extreme detail with 0.02 mm resolution, rapidly switch two working modes

TrackScan 3D System

No markers required, portable CMM, dual laser scan modes, composite positioning, dynamic reference, extendable measuring volume

T-Probe Portable CMM

Flexible probing function, high accurate measurement

E-Track Optical Tracker

Optical tracking technology, flexible and multiple tracking modes

KSCAN 3D Scanner

Multi-function, high precision, fast speed, ultra-detail, portable CMM, edge inspection

KSCAN

Infinite Possibilities to Metrology Measuring

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 0.050mm to 0.010mm, 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 ScanViewer to fulfill pipe inspection, deformation detection, GD&T and so on.

Unlimited Measuring Range

- Capture the 3D data of plane even coin realistically

Probing Function

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

Red & Blue Laser Modes

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

Faster Scanning Process

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

KSCAN Technical Parameter		
Type	**KSCAN20**	
Scan mode	Standard mode R	Hyperfine mode B
Laser source	14 red laser crosses (+1 extra red laser line)	5 blue parallel laser lines
Accuracy	Up to 0.020 mm	
Built-in photogrammetry	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 (optional)	
Measurement 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	
Stand-off distance	200 mm ~ 420 mm	
Depth of field	Up to 550 mm	
Portable CMM	Optional	
Single point repeatability	0.030 mm	
Intelligent edge inspection	Optional	
Edge accuracy	0.030 mm	
Software	ScanViewer	
Piple inspection in software	Optional (support lra data)	
Output formats	.stl, .ply, .obj, .igs, .stp, .wrl, .xyz, .dae, .fbx, .ma, .asc	
Interface mode	USB 3.0	
Operating temperature range	-10~40 °C	
Patents	CN204902790U, CN206905709U, CN107202554, CN204902785U, CN106403845, WO2018049843, CN106500627, WO2018072434, CN106500628 , WO2018072433, CN206132003U, US10309770B2	

KSCAN
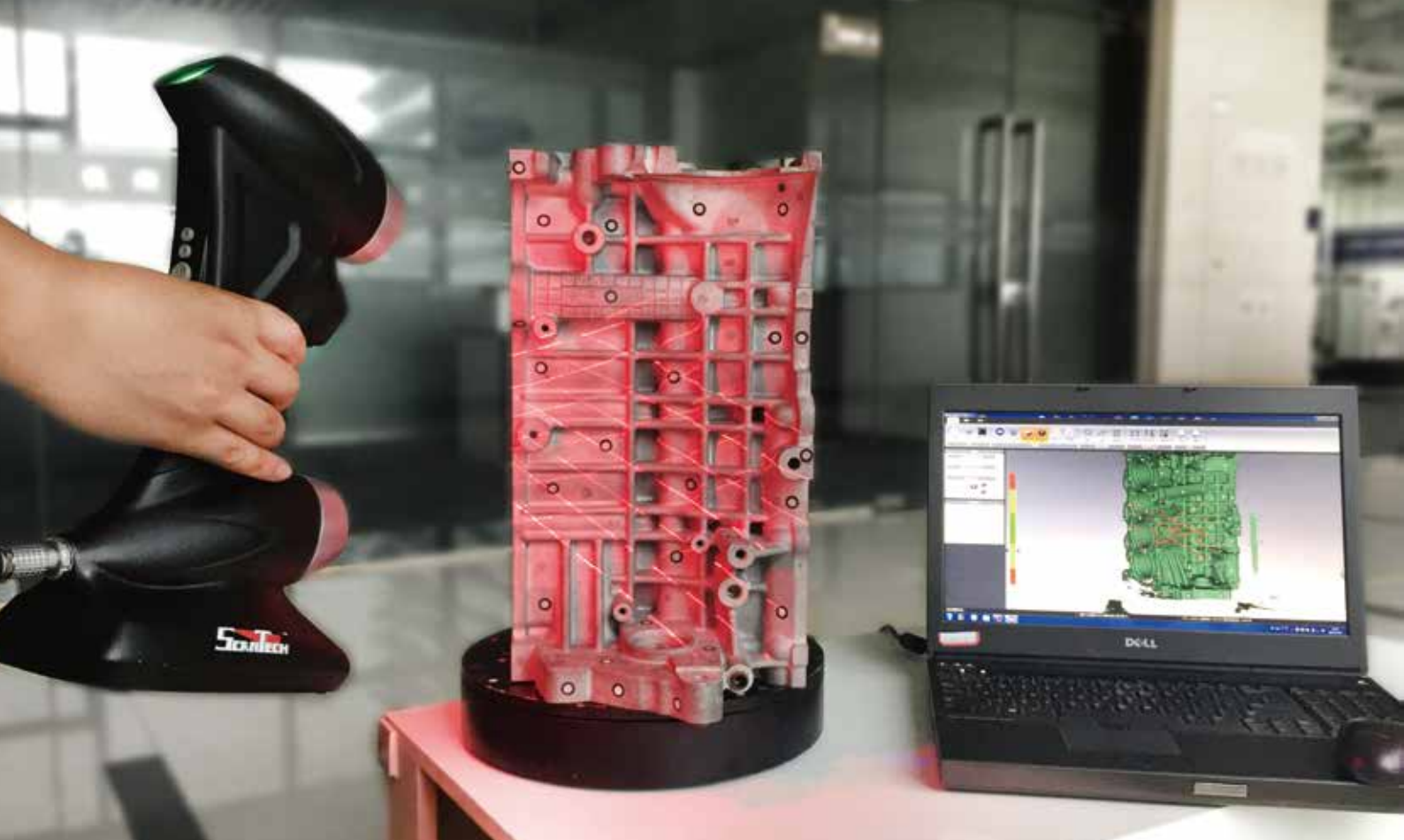
PRINCE

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
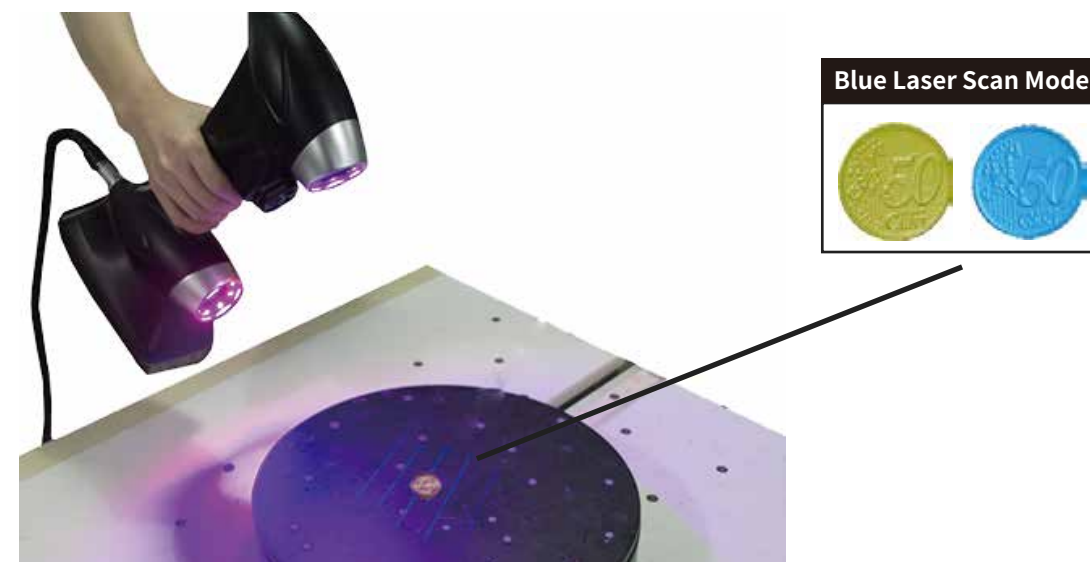- 480,000 measurements/s

Ultra-high Detail

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

PRINCE775 Technical Parameter

Scan mode	Standard mode R	Hyperfine mode B
Laser source	7 red laser crosses (+ 1 extra red laser line)	5 blue parallel laser lines
Measurement rate	480,000 measurements/s	320,000 measurements/s
Laser class	CLASS II (eye-safe)	
Resolution	0.050 mm	0.020 mm
Accuracy	Up to 0.030 mm	
Volumetric accuracy	0.020 mm+0.060 mm/m	0.010 mm+0.060 mm/m
Volumetric accuracy (with MSCAN)	0.020 mm+0.025 mm/m	0.010 mm+0.025 mm/m
Depth of field	250 mm	100 mm
Effecive working range	200 mm~450 mm	100 mm~200 mm
Output formats	.stl, .ply, .xyz, .dae, .fbx , .ma , .obj, .asc	
Operating temperature range	-10℃~40℃	

PRINCE335 Technical Parameter

Scan mode	Standard mode R	Hyperfine mode B
Laser source	3 red laser crosses (+ 1 extra red laser line)	5 blue parallel laser lines
Measurement rate	265,000 measurements/s	320,000 measurements/s
Laser class	CLASS II (eye-safe)	
Resolution	0.050 mm	0.020 mm
Accuracy	Up to 0.030 mm	
Volumetric accuracy	0.020 mm+0.080 mm/m	0.010 mm+0.080 mm/m
Volumetric accuracy (with MSCAN)	0.020 mm+0.025 mm/m	0.010 mm+0.025 mm/m
Depth of field	250 mm	100 mm
Effecive working range	200 mm~450 mm	100 mm~200 mm
Output formats	.stl , .ply, .xyz, .dae, .fbx, .ma, .obj, .asc	
Operating temperature range	-10℃~40℃	

Blue Laser Scan Mode

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

HSCAN Technical Parameter

Type	HSCAN300	HSCAN331	HSCAN771
Weight	0.9kg		
Laser class	CLASS II (eye-safe)		
Laser source	3 parallel laser lines	3 red laser crosses (+1 extra laser line)	7 red laser crosses (+ 1 extra laser line)
Measurement rate	205,000 measurements/s	265,000 measurements/s	480,000 measurements/s
Scanning area	225 mm x 250 mm		275 mm x 250 mm
Resolution	0.050 mm		
Accuracy	Up to 0.040 mm	Up to 0.030 mm	Up to 0.030 mm
Volumetric accuracy	0.020 mm+0.100 mm/m	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		
Deep hole scanning	—	Support	Support
Output formats	.stl, .ply , .xyz , .dae, .fbx, .ma , .obj, .asc		
Operating temperature range	-10℃~40℃		
Interface mode	Gigabit Lan		
Patents	CN204902790U, CN206905709U, CN107202554, CN204902785U, CN106403845, WO2018049843, CN106500627,WO2018072434, CN106500628, WO2018072433, CN206132003U, CN104501740, US10309770B2		

HSCAN

AXE Technical Parameter

Type	AXE-B11
Laser source	11 blue laser crosses + 1 extra blue laser line
Deep hole scanning	Support
Built-in photogrammetry system	Support
Measurement rate	1,300,000 measurements/s
Laser class	CLASS II (eye-safe)
Resolution	0.100 mm
Accuracy (300mm ball bar)	Up to 0.020 mm
Volumetric accuracy (without extra device)	0.020 mm+0.035 mm/m
Scanning area	420 mm×380 mm
Stand-off distance	450 mm
Depth of field	500 mm
Output formats	. ply, .xyz, .dae, .fbx, .ma, .obj, .asc, .stl or customized
Operating temperature range	-10°C~40°C
Interface mode	USB 3.0
Patents	CN204902790U, CN206905709U, CN107202554, US10309770B2

AXE

AXE-B11 3D scanner opens up a new 3D experience to large-scale 3D measurement without extra device.

The 11 crossed blue lasers greatly increase measurement rate to 1,300,000 measurements/s. The single blue laser line can rapidly obtain 3D data of deep hole and inaccessible positions of complex object.

The built-in photogrammetry function can scan large-scale objects with ultra-high accuracy individually.

Accurate Measurement

- Built-in photogrammetry system
- Volumetric accuracy up to 0.025 mm/m
- Accuracy up to 0.02 mm

Super-efficiency

- Measure large-scale objects by 1,300,000 measurements/s
- Time-effective and labor-saving
- 420 mm × 380 mm of scan area highly reduces the quantity of markers

Dual Scanning Mode

- High-efficiency mode for large-scale scanning
- Single line scanning mode to meet special requirements, such as deep hole and dead angle inspection

Versatile Combination

- Fulfill different measurement demands by freely matching with the accurate reference bar, Helpers engineer kit, etc.

AXE

AXE Technical Parameter

Type	AXE-G7
Laser source	7 red laser crosses +1 extra red laser line
Deep hole scanning	Support
Measurement rate	800,000 measurements/s
Laser class	CLASS II（eye-safe）
Resolution	0.100 mm
Accuracy (300mm ball bar)	Up to 0.020 mm
Volumetric accuracy (without extra device)	0.020 mm+0.035 mm/m
Scanning area	420 mm×380 mm
Output formats	.stl, .ply, .xyz, .dae, .fbx, .ma, .obj, .asc or customizable
Operating temperature range	-10℃~40℃
Interface mode	Gigabit Lan
Patents	CN204902790U, CN206905709U, CN107202554, US10309770B2

AXE-G7 combines the whole characteristics and functions of normal handheld 3D scanners. The biggest breakthrough is to overturn the measurement way for large volume. AXE-G7 operates high accuracy scanning for large volumes without extra device.

High Precision

- No need to work with global photogrammetry system
- Volumetric accurancy up to 0.02 mm+0.035 mm/m
- Accuracy far exceeds normal handheld 3D scanners

Fast Speed

- Cut half quantity of markers
- 800,000 measurements/s

Flexibility & Portability

- Easy operation
- Handheld measurement
- Easy to perform 3D measurement individually for large volumes

Large Measurement Range

- Double scan area
- Efficiently complete 3D reconstruction of large volumes

TRACKSCAN
Precise 3D Scanning without Markers

TrackScan 3D system delivers high-precision 3D measurement solution without markers.

In combination with 3D laser scanning technology and flexible probing function, it offers rapid and accurate data collection of overall size and key features.

TrackScan 3D System can work with Robot-Arm to provide the automatic 3D measurement solution for manufacturers.

No Markers Required

- Optical tracking technology
- High accuracy 3D scanning without markers
- Delivering easy-operation, time-effective and labor-saving

Composite Positioning

- Camera tracking and marker tracking modes
- Recognize the markers in blind area of the E-Track
- Keep working in narrow space, such as cockpit and car interior dashboard

Two Laser Sources in One Scanner

- High flexibility and efficiency under red laser scan mode
- Easily capture extreme details with 0.020 mm resolution under blue laser mode

Dynamic Reference

- Work normally during part's position shifting or E-Track movement

Integrated Design

- Sturdy and durable
- Insensitive to environment instability, vibrations thermal variations, etc.

Extendable Measuring Volume

- Dynamically extended by adjusting the positions of the E-Track
- The accuracy still gets maintained

TrackScan Technical Parameter

Type	TrackScan-P22	
Scan mode	Standard mode R	Hyperfine mode B
Laser source	7 red laser crosses (+ 1 extra red laser line)	7 blue parallel laser lines
Accuracy	Up to 0.030 mm	
Deep hole scanning	Support	
Measurement rate	480,000 measurements/s	
Resolution	0.050 mm	0.020 mm
Volumetric accuracy 1 — 9.1 m³	0.064 mm	
Volumetric accuracy 1 — 16.6 m³	0.078 mm	
Volumetric accuracy 2 (with MSCAN)	0.044 mm+0.025 mm/m	
T-Probe portable CMM	Optional	
Single point repeatability	0.030 mm	
Laser class	CLASS II (eye-safe)	
Part size range (recommended)	200~6000 mm	
Stand-off distance	300 mm	
Depth of field	200 mm	
Scanning area	Up to 275 x 250 mm	
Output formats	.stl, .ply, .obj, .igs, .stp, .wrl, .xyz, .dae, .fbx, .ma, .asc	
Operating temperature range	5~40℃	
Patents	CN106500627, CN106500628, CN206132003U, CN204854633U, CN204944431U, CN204902788U, CN105068384, CN105049664, CN204963812U, CN204902785U, CN106403845, US10309770B2	

MSCAN-PLUS

Experience Measuring without Cables or PC

- High volumetric accuracy
- Support data export
- Long battery life
- Deformation inspection

MSCAN-Plus overturns traditional photogrammetry measurement solutions, realizing the whole process of 3D measurement only by one machine.

MSCAN-Plus integrates calculation and display to greatly simplify data acquisition process. Its biggest significance is to prohibit missing and wrong shooting benefiting from real-time guidance. MSCAN-plus wireless working mode gets free from PC to efficiently perform wide range measurement.

High-precision Data

- Directly calculate high precision 3D data by shooting
- Apply to fit plane, inspect deformation, measure axial distance, etc.

Real-time Calculation & Feedback

- Equip with arithmetic unit for real-time calculation
- Real-time data quality feedback by voice reminding to prohibit missing and wrong shooting

Wireless Measurement

- Get free from PC and unlimited measurement distance
- Truely deliver free and wide range measurement

Data Transmission Protection

- Only record 3D data and calculate timely
- Avoid the risk of image information leakage for confidential R&D

MSCAN-Plus Technical Parameter	
Type	MSCAN-Plus
Volumetric accuracy	0.025 mm/m
Camera	Industrial camera and lens（not DSLR）
Weight	1kg
Obtain marker points position	Real-time calculate and display individually
Screen	Touchable

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MSCAN

Accuracy Booster for Large Volume

MSCAN photogrammetry system with industrial high resolution camera uses algorithm to iterate shooting images, calculate 3D coordinate values and obtain 3D data.

MSCAN is usually used for measuring and positioning large volumes. It can work with handheld 3D scanners to decrease the accumulative errors, and also can be used individually to measure dimension and geometric deformation for large volumes.

Accurate & Stable

- Top precision volumetric accuracy up to 0.025 mm/m
- Efficiently transmit speed up to 1Gbps

Flexible Solution

- Work individually
- Work with 3D scanner

Auxiliary Light

- Turn on the auxiliary light to capture 2D image smoothly in dark environment

Easy-carrying

- Small size with less than 0.5kg weight

MSCAN Technical Parameter	
Type	MSCAN
Volume accuracy	0.025 mm/m
Camera type	Industrial cameras (not SLR camera)
Weight	≤0.5kg
Scan mode	Real-time calculate and display
Interface mode	Gigabit Lan

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AIRGO

Get Free from PC, Deliver Intelligent 3D Measurement

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 screen	5.5 "	
Battery	19400 mAh	
Battery life	Standby 6 hours/ scan 2 hours (support two batteries)	
Support series	HSCAN Series；PRINCE series；AXE series	

SCANVIEWER

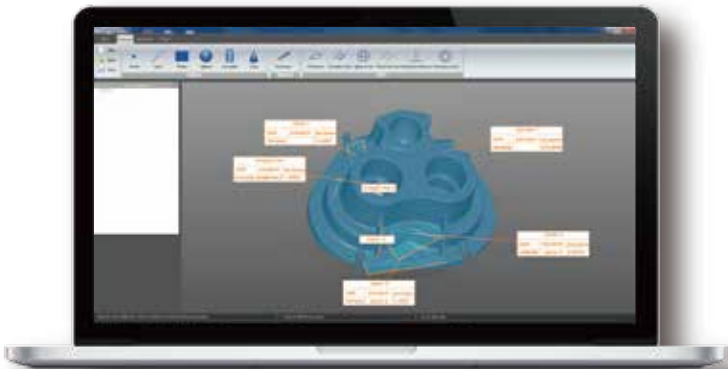**Integrated Scan & Inspection 3D Software**

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.