



Innovation Meets Digitization

SCANTECH DIGITAL Inc.

Handheld 3D System



03

Flagship All-in-one 3D Scanner *NEW*

KSCAN Series

Versatile, Precise, Powerful



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Smart Handheld 3D Scanner

SIMSCAN Series

Precision in Your Palm

Tracking 3D System



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Optical 3D Measurement System

TRACKSCAN SHARP Series

Large-volume and Precise
Measurement Beyond Limits



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Wireless 3D Scanning System

NIMBLETRACK Series

Nimble and Wireless, Easier Than Ever



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3D Probing System

TRACKPROBE

Wide-area Measure-
ment for Versatile Uses

Automated 3D System

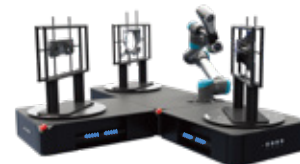


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Optical Automated 3D Measurement System

AM-CELL Series

Simple but Versatile



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Automated 3D Measurement Station

AM-DESK Series

Versatility and Efficiency
Beyond Imagination

3D Software



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3D Software

DefinSight

Ultimate 3D Scanning and
Inspection in Every Aspect

3D Scanning Application

Our 3D scanning solutions are widely used across industries such as aerospace, automotive, construction, transportation, electronics, and green energy as well as in 3D digitization applications such as education, research, 3D printing, cultural preservation, healthcare, law enforcement, and virtual world.



Aerospace



Automotive



Manufacturing



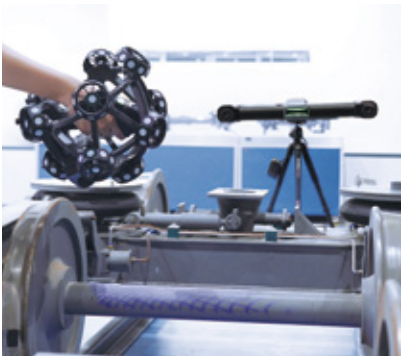
Mold



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.

3D Inspection

Quickly capture complete 3D data of parts for detailed analysis, identify the deviation from CAD data precisely and efficiently.

Product Development

Offer precise 3D data for new product development and design optimization, streamlining the process and boosting market competitiveness.

Reverse Engineering

Capture geometry and dimensions of existing products for product redesign, improvement, and optimization.

3D Printing

Create precise 3D models for 3D printing, speeding up the phase from design to production.

3D Visualization

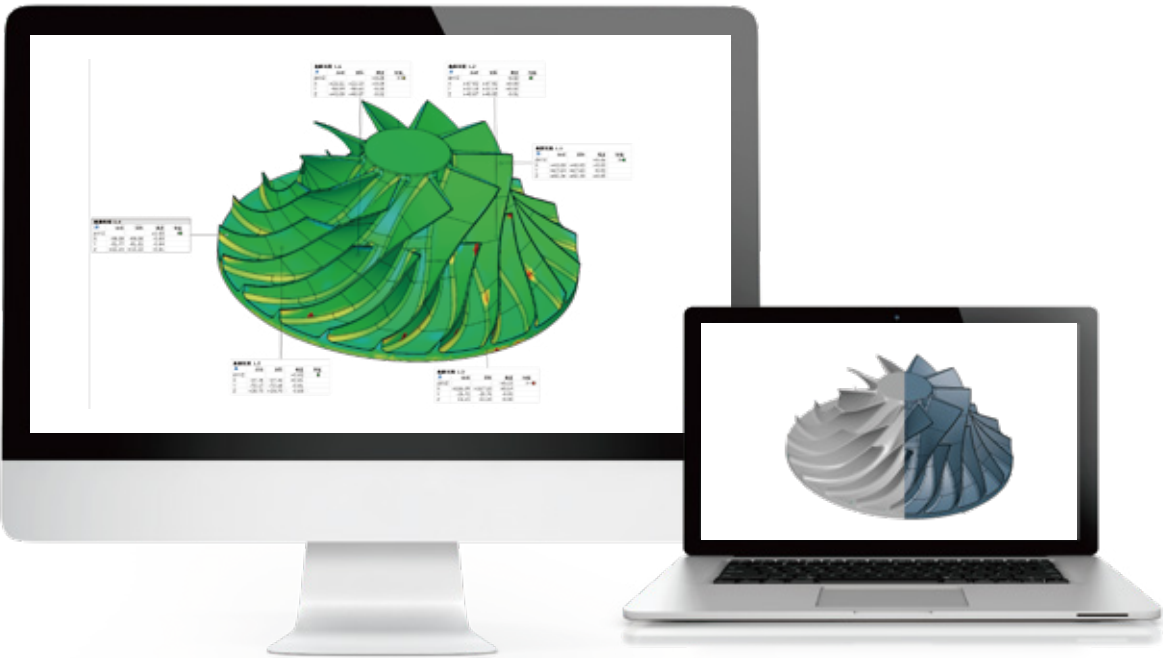
Finish 3D modeling in a short time for the VR/AR showcase online.

Automated 3D Inspection

Real-time, automated batch inspection with accurate trend analysis to predict defective products, reducing waste and improving manufacturing efficiency.

Finite Element Analysis (FEA)

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



KSCAN – E

The flagship KSCAN-E is a wireless, all-in-one 3D scanner that redefines industrial measurement with exceptional precision and flexibility. Its 6 operating modes capture high-quality data from both large surfaces and fine details. With accuracy up to 0.020 mm and innovative quad-laser scanning, KSCAN-E meets the toughest industry demands—from aerospace and automotive to energy and heavy industry.

Powerful Scan at Your Fingertips

Exceptional Accuracy

The KSCAN-E delivers high-precision, non-destructive 3D scanning with 0.020 mm accuracy. Paired with photogrammetry system, it achieves volumetric accuracy of up to 0.015 mm + 0.012 mm/m, ensuring reliable results for demanding industrial applications.

Efficient Measurement

Designed for speed, the KSCAN-E uses quad-cross laser technology with 4×27 blue lines, a 180-fps frame rate, and 8.29 million measurements/s to deliver fast, accurate scanning—ideal for high-efficiency industrial workflows.

Excellent Detail Capture

The KSCAN-E features 17 parallel blue laser lines and resolution of up to 0.010 mm, combined with DefinSight real-time meshing for precise capture of fine features like gaps, edges, and slots.

Fully Wireless

KSCAN-E's lightweight design and one-handed operation make it easy to use, even in complex measurement scenarios. Fully wireless and highly versatile, it’s perfect for locations with limited or no access to power.

Get the Most of 3D Scanning

DefinSight powers the KSCAN-E 3D scanner with its all-in-one metrology platform, enabling advanced 3D scanning and inspection. Its intuitive interface, high compatibility, and efficient data processing work seamlessly with the scanner.

Scan Anything, Anytime

KSCAN-E is robust, flexible and versatile, ideal for scanning small to large objects wherever you are. It allows for rapid data capture without compromising accuracy.

Large Parts: Adaptive photogrammetry system and infrared large-area scanning to enhance efficiency for measuring large parts.

Fine Details: Hyper-fine scanning with parallel blue lasers and resolution up to 0.010 mm, perfect for capturing intricate details of part.

Hole & Edge Inspection: Supports both laser and grayscale measurements. Ideal for measuring edges of stamping parts and irregular parts.

Complex Grooves:

Deep-hole scanning mode with a single laser line easily scans hard-to-measure areas.

Automated 3D Measurement

It can be paired with SCANOLGY's automated 3D inspection system, enabling effortless deployment and intelligent control to conduct automated batch inspections.

Technical Specifications

Type		KSCAN-E
Scan mode	Ultra-fast scanning	108 blue laser lines (Quad Cross Technology)
	Hyperfine scanning	17 blue parallel laser lines
	Large area scanning	38 infrared laser lines
	Deep hole scanning	1 extra blue laser line
	Hole & edge inspection	Smart edge inspection
	Photogrammetry	Adaptive photogrammetry
Accuracy ⁽¹⁾		0.020 mm
Volumetric accuracy ⁽¹⁾	Standard	0.015 mm + 0.030 mm/m
	Adaptive photogrammetry ⁽²⁾	0.015 mm + 0.015 mm/m
	Paired with MSCAN-L15	0.015 mm + 0.012 mm/m
Shape Error ⁽¹⁾	Sphericity	0.030 mm
	Flatness	0.050 mm
Scanning rate up to		8,290,000 measurements/s
Scanning area up to		1440 mm × 1000 mm
Working distance	Large area scanning	600 mm – 1500 mm (Stand-off distance 900 mm)
	Ultra-fast scanning	200 mm – 700 mm (Stand-off distance 320 mm)
	Hyperfine scanning	150 mm – 300 mm (Stand-off distance 220 mm)
Object size		0.050 m – 8 m
Laser class		Class II (eye-safe)
Resolution up to		0.010 mm
Dimension		344 mm × 124 mm × 99 mm
Connection	Interface mode	USB3.0 Type-B
	Wireless standard	Wi-Fi 6, 802.11a/b/g/n/ac
	Wireless connection	Support Dual WNIC
	Intelligent and wireless mode	Support
	Uninterrupted Power Supply	Support
Environment Adaptability	Operating environment	Fanless, suitable for workshop environments
	Operating temperature range	-10°C ~ 40°C
	Operating humidity	10 - 90% RH
	Protection rating	IP50
Patent		CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN206905709U, CN107202554B, CN209310754U, CN209485295U, CN209485271U, CN305446920S, CN209991946U, US10309770B2, KR102096806B1, KR102209255B1, US10914576B2, CN113470180B, CN113218417B, CN113063370B, CN218411073U, CN113310427B, CN113074659B, CN218772495U, CN113473034B, CN115830249B, CN219829786U, CN116206069B

(1) ISO 17025 accredited: Performance is evaluated based on JJF1951 specification, VDI/VDE 2634 Part 3 and ISO 10360-13 standard.

(2) Paired with 800-mm high-precision scale bar.

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



KSCAN - X

Featuring wireless operation, ultra-wide scanning area, extended depth of field, and fast scanning, the KSCAN-X offers smooth and high-precision 3D measurements for ultra-large and large to medium-sized parts across industries such as aerospace, heavy industry, and rail transportation.

Wide-Area Scanning, Exceptional Precision

Ultra-large Scanning Area

KSCAN-X, powered by our in-house developed algorithms, offers extensive scanning area of up to 2.6m*1.8m.

Ultra-large Depth of field

With a large depth of field ranging from 0.3-2.5m, KSCAN-X ensures precise measurements for everything from medium to ultra-large parts with exceptional quality.

Deep Hole Measurement | No Blind Spots

1 single blue laser line, short camera-distance design of 235 mm, excellent for hard-to-reach areas

Ultra-large Parts | High Efficiency

Large FOV scanning:

It achieves exceptional accuracy of up to 0.075 mm, with volumetric accuracy reaching 0.075 mm + 0.010 mm/m.

Adaptive photogrammetry:

It eliminates cumulative errors and ensures consistent volumetric accuracy, delivering high-precision results for both large-scale and detailed measurements.

Medium to Large-sized Parts | Capture Fine Details

- Innovative medium-distance scanning mode for scanning parts ranging from 0.5 m to 2 m
- 27 blue laser crosses
- 0.030 mm accuracy

Truly Wireless Scanning

It operates completely wire-free, enabling seamless scanning even in power-limited environments, at heights, or in remote locations.

- Robust on-board processing module
- Dual-battery system
- Dual-WNIC design technology

Faster and Smoother

4*21 Quad-cross blue laser lines | Scanning rate up to 6,450,000 measurements/s | 180 FPS High frame rate | Fewer markers

Intuitive & Adaptive

Touchscreen Interface:

Built-in full-color touchscreen for real-time hardware and software status updates.

Smart Guidance:

User-friendly software with customizable prompts for quick on-board and lower training costs.



Technical Specifications

Type		KSCAN-X
Scan mode	Large FOV scanning	84 blue laser lines
	Medium-distance scanning	54 blue laser lines
	Deep hole scanning	1 extra blue laser line
Accuracy ⁽¹⁾	Photogrammetry	Adaptive photogrammetry
	Medium-distance scanning	0.030 mm
	Large FOV scanning	0.075 mm
Volumetric accuracy ⁽¹⁾⁽²⁾		0.075 mm + 0.010 mm/m
Scanning rate up to		6,450,000 measurements/s
Scanning area up to		2600 mm × 1800 mm
Working distance		0.30 m ~ 2.50 m
Object size		0.5 m ~ 15 m
Laser class		Class II (eye-safe)
Resolution up to		0.1 mm
Dimension		344 mm × 124 mm × 99 mm
Inter-camera distance		235 mm
Connection	Interface mode	USB3.0 Type-B
	Wireless standard	Wi-Fi 6, 802.11a/b/g/n/ac
	Wireless connection	Support Dual WNIC
	Intelligent and wireless mode	Support
	Uninterrupted power supply	Support
Environment Adaptability	Operating environment	Fanless, suitable for workshop environments
	Operating temperature range	-10°C ~ 40°C
	Operating humidity	10% ~ 90% RH
	Protection rating	IP50
Patent		CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN206905709U, CN107202554B, CN209310754U, CN209485295U, CN209485271U, CN305446920S, CN209991946U, US10309770B2, KR102096806B1, KR102209255B1, US10914576B2, CN113470180B, CN113218417B, CN113063370B, CN218411073U, CN113310427B, CN113074659B, CN218772495U, CN113473034B, CN115830249B, CN219829786U, CN116206069B

(1) ISO 17025 accredited: Performance is evaluated based on JJF1951 specification, VDI/VDE 2634 Part 3 standard.

(2) Paired with 800-mm high-precision scale bar.

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 × 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 SCANOLGY's automated 3D inspection system to conduct automated batch inspections.

Technical Specifications

Type		KSCAN-Magic	KSCAN-Magic II
Scan mode	Ultra-fast scanning	11 blue laser crosses	17 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	
Accuracy ⁽¹⁾		up to 0.020 mm (0.0008 in)	
Scanning rate up to		2,700,000 measurements/s	4,150,000 measurements/s
Scanning area up to		1440 mm × 860 mm (57.0 in × 33.9 in)	
Laser class		CLASS II (eye-safe)	
Resolution up to		0.010 mm (0.0004 in)	
Photogrammetry system	Scanning area	3760 mm × 3150 mm (148.0 in × 124.0 in)	
	Depth of field	2500 mm (98.4 in)	
Volume ⁽²⁾ accuracy	Work alone	0.015 mm + 0.030 mm/m (0.0006 in + 0.00036 in/ft)	
	Work with 1m reference bar	0.015 mm + 0.020 mm/m (0.0006 in + 0.00024 in/ft)	
	Work with MSCAN-L15	0.015 mm + 0.012 mm/m (0.0006 in + 0.00014 in/ft)	
Stand-off distance		300 mm (11.8 in)	
Depth of field		925 mm (36.4 in)	
Output formats		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Operating temperature range		-10°C ~ 40°C (14°F ~ 104°F)	
Interface mode		USB 3.0	
Patents		CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845B, CN209197685U, CN209263911U, CN106500627B, CN106500628B, CN206132003U, CN206905709U, CN107202554B, CN209310754U, CN209485295U, CN209485271U, CN305446920S, CN209991946U, US10309770B2, KR102096806B1, KR102209255B1, US10914576B2	

(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 – E

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

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

Compact and Wireless

- Weighted only 600 g and sized 203 × 80 × 44 mm.
- Wireless 3D scanning.
- Sophisticated edge computing and wireless data transfer.
- Detachable charging base.

Exceptional Detail Capture

- Image enhancement and sub-pixel feature extraction algorithms.
- Measurement accuracy up to 0.020 mm.
- For industrial-grade high-precision 3D scanning and measurement.

Diverse Operating Modes

- **Ultra-fast scanning:** 63 blue laser lines for efficient scanning.
- **Hyperfine scanning:** 17 parallel blue laser lines for swift detail capturing.
- **Deep hole scanning:** 1 blue laser line for measuring deep holes.

Fast, Smooth, and Efficient

- Measurement rate of 6.3 million measurements/s.
- 81 blue laser lines.
- 180-FPS frame rate.
- Ensures efficient and smooth scanning experiences.

Excellent for Narrow Spaces

- Short-distance camera design, with a steep view angle.
- For hidden areas such as gaps, slots, deep holes, and channels.
- Improves data integrity.

Driven by Powerful and Efficient Software

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

Technical Specifications

Type		SIMSCAN-E
Scan mode	Ultra-fast scanning	63 blue laser lines (Triple Cross Technology)
	Hyperfine scanning	17 blue parallel laser lines
	Deep hole scanning	1 extra blue laser line
Accuracy ⁽¹⁾		0.020 mm
Scanning rate up to		6,300,000 measurements/s
Scanning area up to		700 mm × 600 mm
Laser class		Class II (eye-safe)
Resolution up to		0.020 mm
Volume accuracy ⁽²⁾	Standard	0.015 mm + 0.035 mm/m
	Paired with MSCAN-L15	0.015 mm + 0.012 mm/m
Stand-off distance		300 mm
Depth of field		550 mm
Output formats		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.
Dimensions		203 mm × 80 mm × 44 mm
Weight		600 g
Operating temperature range		-10°C ~ 40°C
Operating humidity range (non-condensing)		10-90% RH
Interface mode		USB3-B
Patents		CN204329903U, CN104501740B, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204902785U, CN106403845B, CN110030946B, CN212300269U, CN211904059U, CN211696268U, CN306053019S, CN212606697U, CN306321502S

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

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



SIMSCAN

SIMSCAN is a palm-sized industrial 3D laser scanner engineered for precise scanning for small to normal-sized part even in tight, hard-to-reach spaces. Its lightweight, ergonomic design ensures comfortable and long-term use.

Powered by advanced algorithms and 27 laser crosses, SIMSCAN delivers fast data capture with a measurement rate of up to 5.8 million measurements/s. It stands out as a sleek, efficient, and user-friendly tool—ideal for professionals and newcomers to high-precision 3D scanning.

Sleek and Compact

- Sleek and ergonomic design
- Full-metal and aerospace-grade housing
- Weighted 570g and sized 203 mm*80 mm*44 mm

High-Speed Scanning

- Measurement rate of up to 5.8 million measurements/s
- 27 blue laser crosses and fast data capturing
- Ensure smooth and efficient 3D digitizing

Excellent for Details

- 17 parallel laser lines for efficient, high-precision data capture
- An extra blue laser line for holes and slots
- Excel at capturing complex structures

Flexible Modes for Diverse Needs

- Three scanning modes, including ultra-fast scanning, deep hole scanning, hyperfine scanning
- Handles GD&T measurements, assembly analysis, maintenance, modifications and more.

Industrial-grade Accuracy

- Accuracy of up to 0.020 mm
- Consistent and accurate results and high repeatability

Automated 3D Measurement

- Can be integrated with SCANOLGY's automated 3D measurement systems
- To enable continuous, high-volume inspections



Reddot winner 2021



Technical Specifications

Type		SIMSCAN 30	SIMSCAN 42
Scan mode	Ultra-fast scanning	17 blue laser crosses	27 blue laser crosses
	Hyperfine scanning	17 blue parallel laser lines	
	Deep hole scanning	1 extra blue laser line	
Accuracy ⁽¹⁾		Up to 0.020 mm	
Scanning rate up to		4,580,000 measurements/s	5,800,000 measurements/s
Scanning area up to		700 mm × 600 mm	
Laser class		Class II (eye-safe)	
Resolution up to		0.020 mm	
Volume accuracy ⁽²⁾	Standard	0.015 mm + 0.035 mm/m	
	Paired with MSCAN-L15	0.015 mm + 0.012 mm/m	
Stand-off distance		300 mm	
Depth of field		550 mm	
Output formats		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Interface mode		USB 3.0	
Dimensions		203 mm × 80 mm × 44 mm	
Weight		570 g	
Operating temperature range		-10°C ~ 40°C	
Operating humidity (non-condensing)		10 - 90% RH	
Patents		CN204329903U, CN104501740B, CN204854633U, CN204944431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204902785U, CN106403845B, CN110030946B, CN212300269U, CN211904059U, CN211696268U, CN306053019S, CN212606697U, CN306321502S, CN214149177U, CN214747767U, CN216115893U, CN114001671B, CN113470180B, CN113218417B, CN111833392B, CN115682981B	

(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-S

TrackScan Sharp-S Optical 3D Scanning System, engineered with 25-megapixel industrial cameras and robust onboard processors for edge computing, is specially designed for measuring large-scale parts over a long distance with high speed. It brings optical measurements to new heights by offering a tracking distance of up to 8.5 meters, a high-precision measurement range of 135 m³, enabling powerful measurement experiences.

Long-distance and Large-volume Tracking

- Tracking distance as long as 8.5 meters.
- 135-m³ industrial high-precision measurement range.
- Saves the hassle of moving trackers frequently.
- Measure large components efficiently in just one position.

Excellent and Stable Performance

- A maximum volumetric accuracy of 0.048 mm (10.4 m³).
- Lightweight and stable structure with CFFIM technology.
- Unaffected by thermal variations to ensure high-precision measurements.
- Hand it over and position it freely.

Precise Detail Capture

- 17 parallel laser lines.
- Scan over a large area.
- Provides exceptional detail-capturing efficiency.
- Capture intricate details such as slots and angles with high precision and speed.

Wireless and Easy 3D Scanning

- Powerful onboard processors for edge computing.
- With batteries, and external network cards.
- Measure objects wirelessly.
- Plug-and-play.
- User-friendly operation.

Fast 3D Scanning

- Scans up to an impressive 6 million measurements/s.
- 81 blue laser lines.
- Ideal to capture 3D data and identify deviations of parts rapidly.
- Facilitates more efficient and intelligent measurements for manufacturers.

Versatile Compatibility

- Intelligent edge detection.
- i-Probe500.
- Multi-tracker measurement.
- Automated measurement.

Technical Specifications

Type		TrackScan Sharp-S
Scan mode	Ultra-fast scanning	81 blue laser lines (Triple Cross Technology)
	Hyperfine scanning	17 blue parallel laser lines
	Deep-hole scanning	Extra 1 blue laser line
Accuracy ⁽¹⁾		up to 0.025 mm
Measurement rate up to		6,000,000 measurements/s
Scanning area up to		800 mm × 700 mm
Laser class		Class II (eye-safe)
Resolution up to		0.020 mm
Volumetric accuracy ⁽²⁾	10.4 m³ (3.5 m)	0.048 mm
	35 m³ (5.2 m)	0.069 mm
	90 m³ (7.2 m)	0.128 mm
	135 m³ (8.5 m) ⁽³⁾	0.159 mm
Volumetric accuracy (with MSCAN photogrammetry system)		0.044 mm + 0.012 mm/m
Stand-off distance		300 mm
Depth of field		400 mm, 800 mm (Large depth of field)
Hole position accuracy		0.050 mm
Output format		.stl, .pj3, .igs, .asc and etc., customized
Operating temperature range		-10 ~ 40 °C
Operating humidity range (non-condensing)		10-90 % RH
Interface mode		USB 3.0, Network Interface
Certification		CE, Rohs, WEEE, FCC
Patents		CN109000582B, CN110992393B, CN111678459B, CN111694665B, CN112802002B, CN112867136B, CN112964196B, CN113188476B, CN113340234B, CN113432561B, CN113473034B, CN113514008B, CN113766083B, CN114001696B, CN114205483B, CN114554025B, CN114627249B, CN115289974B, CN115325959B, CN115493512B, CN115511688B, CN115661369B, CN115690333B, CN115695763B, CN116136396B, CN116206069B, CN116244730B, CN209263911U, CN210567185U, CN211121096U, CN214149174U, CN218103220U, CN218103238U, CN218411072U, CN218584004U, CN218734448U, CN219829788U, CN219834226U, CN307756797S, EP3392831B1, EP3907702B1, KR102096806B1, US10309770B2, US11060853B2, US11493326B2

(1) ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1951 specification, probing error (size) (PS) performance is evaluated.
(2) ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JJF 1951 specification, sphere spacing error (SD) performance is evaluated.
(3)The industrial-grade high-precision measurement range of TrackScan Sharp-S is up to 135 m³, and its scanning range is up to 233 m³.



NIMBLETRACK - C

The NimbleTrack-C wireless 3D scanning system is highly compact and agile, which is designed to redefine the precise and dynamic measurements of small-to-medium-sized parts.

NimbleTrack-C ushers in the third generation of SCANOLOGY's 3D scanning technology featured by intelligent and wireless 3D scanning. With its wireless, target-free, precise 3D scanning and portability, NimbleTrack-C revolutionizes the 3D scanning.

Wireless Freedom

- The 3D scanner has a built-in powerful battery.
- The tracker comes with standard plug-in batteries
- Wireless data transfer and no-cable power supply.
- For measurements without access to electricity.

Incredible Compact & Plug-and-Play

- 57-cm and 2.2-kg i-Tracker.
- The 3D scanner weighing only 1.3 kg.
- A small standard protection case to accommodate all.

Unleash Precision, Unleash Excellence

- The system achieves an accuracy of up to 0.025 mm.
- Maximum volumetric accuracy of 0.064 mm.
- NimbleTrack-C enables users to capture 3D data with meticulous details and industrial-grade precision.

Get the Most From Your NimbleTrack

Intelligent Edge Detection

- Precise edge detection to inspect closed features.

i-Probe500

- Paired with a tracking i-Probe to probe inaccessible areas.

Multi-tracker Measurement

- Measurement range can be extended by adding more i-Trackers.

Automated Measurement

- Customized for automated measurement.

Dual Edge Computing and Robust Performance

- Both NimbleTrack's 3D scanner and tracker have powerful edge computing modules.
- Enables fast scanning at a high frame rate of 120 FPS.
- Saves the need for a power supply and targets sticking.

Stable Structure With CFFIM Technology

- Ensure lightweight design and high strength.
- More stable than traditionally assembled structures.
- Highly stable and unaffected by thermal fluctuations.
- Ensure precise and reliable measurement result.

Next Level 3D Scanning

- 3D scanner used independently for scanning narrow areas.
- Allowing for instant scanning and one-handed control.
- High-precision scanning of up to 0.020 mm.

Technical Specifications

Type		NimbleTrack-C
Scan mode	Ultra-fast scanning	17 blue laser crosses
	Hyperfine scanning	7 blue parallel laser lines
	Deep hole scanning	1 blue laser line
Accuracy for scanner-only mode ⁽¹⁾		Up to 0.020 mm (0.0008 in)
Accuracy for system ⁽²⁾		Up to 0.025 mm (0.0009 in)
Tracking distance per i-Tracker		3200 mm (126.0 in)
Volumetric accuracy ⁽²⁾ (Tracking distance 3.2 m)		0.064 mm (0.0025 in)
Volumetric accuracy (With MSCAN photogrammetry system)		0.044 mm + 0.012 mm/m (0.0017 in + 0.00014 in/ft)
Hole position accuracy		0.050 mm (0.0020 in)
Laser class		Class II (eye-safe)
Resolution up to		0.020 mm (0.0008 in)
Stand-off distance		300 mm (11.8 in)
Depth of field		400 mm (15.7 in)
Scanning area up to		500 mm × 600 mm (19.7 in × 23.6 in)
Scanning frame rate		120 fps
Measurement rate up to		4,900,000 measurements/s
Dimension of i-Scanner		238 mm × 203 mm × 230 mm (9.4 in × 8.0 in × 9.1 in)
Weight of i-Scanner		1.3 kg (Net weight) (2.87 lb), 1.4 kg (Battery and wireless module included) (3.09 lb)
Dimension of i-Tracker		570 mm × 87 mm × 94 mm (22.4 in x 3.4 in x 3.7 in)
Weight of i-Tracker		2.2 kg (Net weight) (4.85 lb), 2.6 kg (Battery and wireless module included) (5.73 lb)
Size of protection case		1000 mm × 425 mm × 280 mm (39.4 in × 16.7 in × 11.0 in)
Output format		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.
Operating temperature range		-10°C ~ 40°C (14 °F ~ 104°F)
Operating humidity (Non-condensation)		10-90% RH
Wireless operating mode		i-Scanner, i-Tracker, i-Scanner + i-Tracker, i-Tracker + i-Probe, Wireless multi-tracker tacking, Edge Inspection
Wireless standard		802.11a/n/ac
Interface mode		USB 3.0, Network Interface
Patents		CN109000582B, CN211121096U, CN210567185U, CN111678459B, CN114001696B, CN114554025B, CN114205483B, CN113514008B, CN114627249B, CN112867136B, CN218103220U, CN218103238U, CN307756797S, CN113340234B, CN112964196B, CN115289974B, CN113188476B, CN218411072U, CN115325959B, CN218584004U, CN115661369B, CN218734448U, CN115493512B, CN110992393B, CN116136396B, CN113432561B, CN219834226U, CN219829788U, CN116244730B, CN116206069B, US10309770B2, US10309770B2, US11060853B2, KR102096806B1, EP3392831B1, US11493326B2

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



NIMBLETRACK – CR

NimbleTrack-CR, an intelligent and wireless 3D scanning system, is especially designed for ultimate detail capture. With wireless freedom, lightweight and portable design, and high accuracy, this next-generation solution pushes the boundaries of 3D digitization.

Unmatched Detail Capture

NimbleTrack-CR is equipped with a state-of-the-art optical imaging system and intelligent algorithms for exceptional precision.

- Industrial Measurement: ISO 17025 certified | 0.025 mm accuracy for system | 0.020-mm accuracy for scanner-only mode.
- Art and Cultural Heritage: 0.010 mm max resolution | Class I laser safety for cultural heritage preservation mode | Non-contact and damage-free.

Wireless Measurement

The NimbleTrack-CR ensures continuous scanning without external power sources, offering greater flexibility and efficiency in the scanning process.

Lightweight and Portable Design

The 3D scanner is compact, measuring just 230 mm in diameter and weighing only 1.3 kg, and fits in a single case for easy transport and storage.

Flexible and All-in-One

- Multiple Scanning Modes: Supports ultra-fast scanning, hyper-fine scanning and deep hole scanning.
- Adapt to Different Environments: Handles various part sizes and types across indoor and outdoor settings.
- Multi-Material Compatibility: Scans textiles, ceramics, bronze, sheet metal, and more.

Excellent for Cultural Heritage Protection

Leveraging high-precision 3D scanning and intelligent texture mapping, it faithfully reproduces colors, textures, and geometry for stunning, lifelike detail.

Software-Powered Measurement

Smart Resolution | Color Indicators | Real-time Multi-Resolution



Technical Specifications

Type		NimbleTrack-CR
Scan mode	Ultra-fast scanning	17 blue laser crosses
	Hyperfine scanning	7 blue parallel laser lines
	Deep hole scanning	1 blue laser line
Accuracy for scanner-only mode ⁽¹⁾		Up to 0.020 mm
Accuracy for system ⁽¹⁾		Up to 0.025 mm
Tracking distance per i-Tracker		3200 mm
Volumetric accuracy (Tracking distance 3.2 m)		0.064 mm
Volumetric accuracy (With MSCAN-L15 photogrammetry system)		0.044 mm + 0.012 mm/m
Hole position accuracy		0.050 mm
Laser class		Class II (eye-safe)
Resolution up to		0.010 mm
Stand-off distance		250 mm
Depth of field		300 mm
Scanning area up to		150 mm × 190 mm
Scanning frame rate		120 fps
Measurement rate up to		4,900,000 measurements/s
Dimension of i-Scanner		238mm × 203mm × 230mm
Weight of i-Scanner		1.3 kg (Net weight)
		1.4 kg (Battery and wireless module included)
Dimension of i-Tracker		570mm × 87mm × 94mm
Weight of i-Tracker		2.2 kg (Net weight)
		2.6 kg (Battery and wireless module included)
Size of protection case		1000mm × 425mm × 280mm
Output format		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.
Operating temperature range		-10°C ~ 40°C
Operating humidity (Non-condensation)		10% ~ 90% RH
Wireless operating mode		i-Scanner, i-Tracker, i-Scanner + i-Tracker, i-Tracker + i-Probe, Wireless multi-tracker tacking, Edge Inspection
Wireless standard		Wi-Fi 6, 802.11a/b/g/n/ac
Interface mode		USB 3.0, Gigabit Ethernet
Patents		CN109000582B, CN211121096U, CN210567185U, CN111678459B, CN114001696B, CN114554025B, CN114205483B, CN113514008B, CN114627249B, CN112867136B, CN218103220U, CN218103238U, CN307756797S, CN113340234B, CN112964196B, CN115289974B, CN113188476B, CN218411072U, CN115325959B, CN218584004U, CN115661369B, CN218734448U, CN115493512B, CN110992393B, CN116136396B, CN113432561B, CN219834226U, CN219829788U, CN116244730B, CN116206069B, CN113766083B, CN222015590U, CN222027649U, CN308982243S, CN308982242S, CN222104664U, CN222279677U, CN222279678U, CN222321625U, CN222317979U, CN222317980U, CN222356423U, CN222353116U, CN222560923U, US10309770B2, US10309770B2, US11060853B2, KR102096806B1, EP3392831B1, US11493326B2

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

TRACKPROBE

The TrackProbe 3D probing system, consisting of tracking i-Probe and the latest optical tracker i-Tracker, is designed for metrology-level measurements. It is highly precise, portable, and easy-to-use, which ensures high-quality measurements for parts in large measurement volumes, at long distances, and in harsh conditions.

You can use it for various tasks on the shop floor, such as fixture adjustment, benchmark marking, and geometric and dimensional inspection of engineering machinery. TrackProbe can handle both small and large parts, and has no constraints on the measurement situation.

Extensive Measurement

- Measure parts in a distance of up to 6 meters.
- The tracking distance can be extended and reach 10 meters.
- Measure large-sized parts with high accuracy and excellent performance.

Excellent for Deep Hidden Points

- Measure hidden points or hard-to-reach areas with high accuracy.
- Especially suitable for measuring automotive parts, aviation components, pipelines, holes, and irregular parts.

Flexible and Portable for Free Measurement

- TrackProbe is a handheld probing system.
- Provide both wired and wireless data transfer.
- Automatically unify the coordinate systems of scan data and probing data with 3D software TViewer.

Precise Metrology-grade Results

- Measure the shapes and GD&T of different parts with high accuracy.
- The volume accuracy is 0.089 mm for 49.0 m³, 0.067 mm for 28.6 m³, and 0.049 mm for 10.4m³

Non-stop Measurement and Easy Movement

- i-Probe can measure continuously without the need for i-Tracker to reposition it.
- Only a few markers are needed for i-Tracker to move and continue tracking the i-Probe.

Diverse Uses

- Can be operated in various settings regardless of vibrations, temperature changes, humidity, and lighting.
- Calculate and correct position deviations to achieve high-precision measurements on shop floors or outdoors.
- Deal with complex surfaces, high-precision parts, or large-scale parts without any problem.

Technical Specification

Type		TrackProbe
Volumetric accuracy ⁽¹⁾	10.4 m³ (Tracking distance 3.5 m)	0.049 mm (0.0019 in)
	28.6 m³ (Tracking distance 5.0 m)	0.067 mm (0.0026 in)
	49.0 m³ (Tracking distance 6.0 m)	0.089 mm (0.0035 in)
Measurement distance (per tracker)		Max 10 m (393.7 in)
Part size range (recommended)		0.1 m - 12 m (3.9 in - 472.4 in)
Camera pixel of i-Tracker		25 MP
Dimensions of i-Probe 500		510 × 145 × 89 mm (20.1 × 5.7 × 3.5 in)
Weight of i-Probe 500		700 g (1.54 lb)
Operating temperature range		0 ~ 45°C (32°F ~ 113°F)
Operating humidity range (non-condensing)		10 ~ 90% RH
Connection		Wired and wireless
Number of targets		16
Patents		ZL201520680513.1, ZL202210065778.5, ZL202221475584.4, ZL202221766958.8, ZL202320545878.8

(1) Comply with ISO 10360-2 standard.



AM-CELL Series

The AM-CELL series optical automated 3D measurement system is developed for efficient and automated inspection of medium-to-large-sized parts such as stamping, injection-molded, machined sheet metal, and cast parts. Designed with innovative modular units, it enables various layouts, flexible deployment, and multiple-positioner operations.

Modular Unit Design, Inspection at Fingertips

- Been designed with an innovative modular unit concept.
- Features flexible layouts to meet different needs.
- Can be assembled and tested easily within 2 days.
- It supports manual robot teaching for quick path planning.

Flexible Deployment for High Throughputs

- Different solutions with multiple positioners designed for various measurement requirements.
- Achieves efficient measurement with zero downtime.

Safe and Stable

- Equipped with advanced servo-mechanisms with precise force feedback to ensure safe operation.
- Opts for various protective measures such as safety fences, safety light curtains, and safety door locks.

Metrology-grade 3D Measurement

- Ultra-high measurement rate of up to 4,860,000 MPS.
- Metrology-grade accuracy of 0.025 mm.
- Enables automatic edge inspections to obtain accurate 3D data of closed features such as holes, slots, and rectangles.

Diverse Choices

- Compatible with different Long-reach cobots.
- Work with turntables of various dimensions and payloads ranging from 200 to 1000KG.

Automated Software DefinSight-AM

- In-house developed automated measurement software.
- Boasts advanced data capturing and highly intelligent robot control.
- Enables direct connection with a robot and reduces the skill level needed for robot operation.
- Supports both engineer mode and operator mode.

Vast Applications Deliver New Experiences

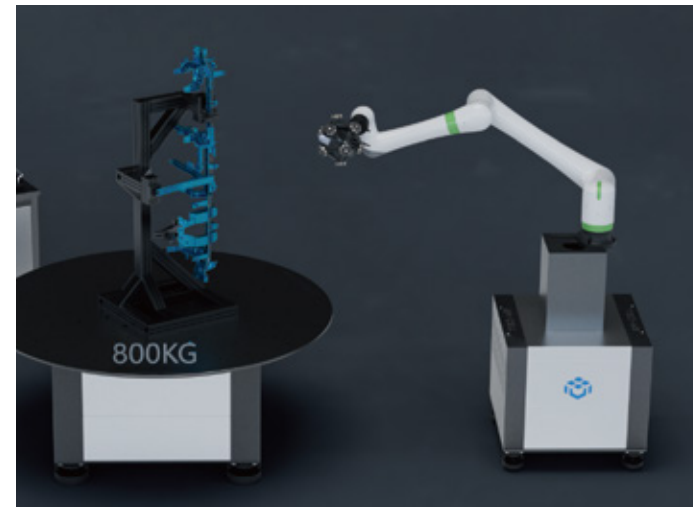
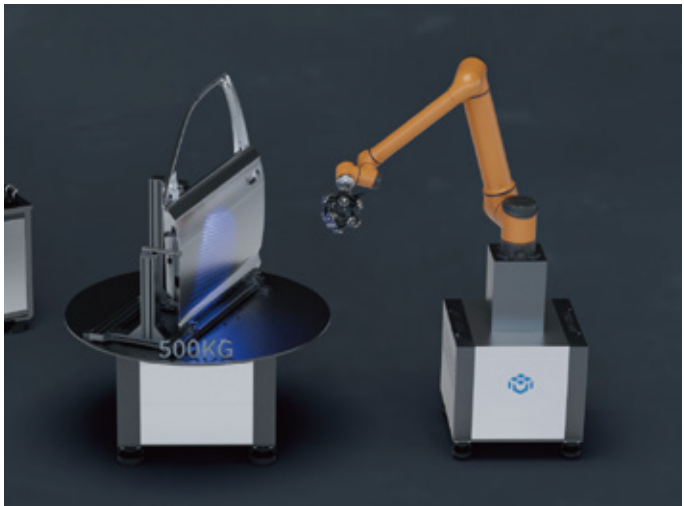
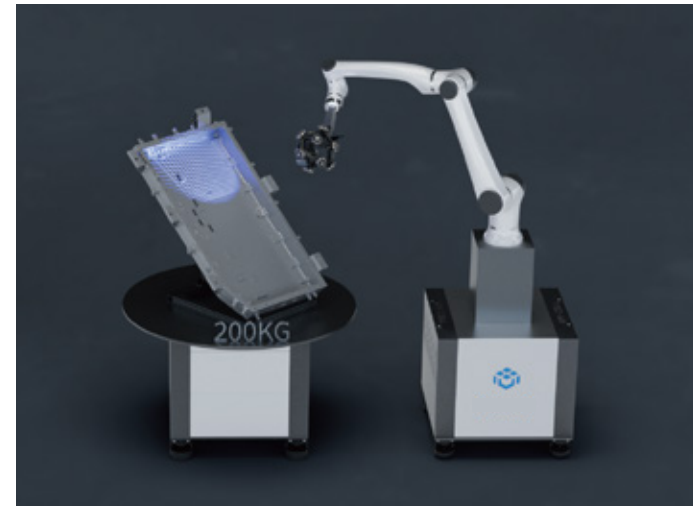
Shop Floor: Allows for on-site measurement on the shop floor.

CMM Room: Safely and steadily run without special safety requirements.

Educational Settings: Teachers and even students without much expertise can learn how to operate the measurement system safely in a short timeframe.

Technical Specifications

Type	AM-CELL C13X		AM-CELL C15X		AM-CELL C18X	
Space Size	4 m × 3 m		4.5 m × 4 m		5 m × 4 m	
Robot Type	Cobot, reaching 1300 mm		Cobot, reaching 1500 mm		Cobot, reaching 1800 mm	
3D Scanner Supported	Full series of SCANOLOGY's Optical 3D Measurement System					
Communication Protocol	TCP/IP, USB 3.0, OPCUA					
Expanded Communication	Socket					
Safety Mode	Active Emergency Stop + Safety with Force Feedback					
Input Voltage	AC~220 V/50-60 Hz					
Equipment Power	1.5 KW		2.2 KW		3 KW	
Turntable Type	TT200	TT500	TT800		TT1000	
Payload	200 KG	500 KG	800 KG		1000 KG	
Maximum Object Size	D≤Ø1200 mm, H≤1000 mm	D≤Ø1500 mm, H≤1200 mm		D≤Ø1800 mm, H≤1500 mm		D≤Ø2200 mm, H≤1800 mm
Turntable Power	0.75 KW	1 KW		1.5 KW		2 KW
Motor Type	Absolute Servo Motor					





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 SCANOLGY's entire fleet of 3D scanners to measure small-sized 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 SCANOLGY's entire fleet of 3D scanners.

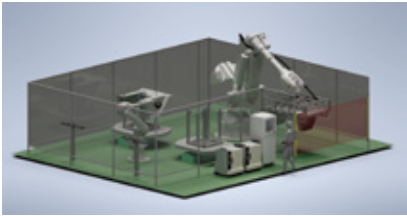
* AM-DESK Lite does not support the connection to multiple positioners.

Technical Specifications

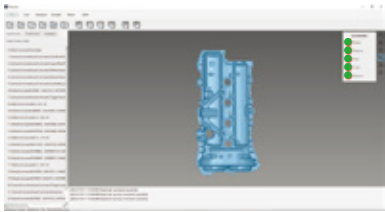
Type	AM-DESK 60120	AM-DESK Lite
Dimension	1200*600*177 mm (47.2 × 23.6 × 7.0 in)	1200*600*180 mm (47.2 × 23.6 × 7.1 in)
Weight	75 KG (165.3 lb)	70 KG (154.3 lb)
Turntable Payload	≤ 125 KG (275.6 lb)	≤ 75 KG (165.3 lb)
Max Rotational Speed of Turntable	50°/S	40°/S
Communication Interface	TCP/IP	TCP/IP
Robot Supported	UR5, AUBO i5, JAKA ZU5, Han's E05-L, ELITE CS66/EC66/EA66, EFORT ECR5, FAIR FR5	
Power Supply	110V-220 V/50-60 Hz	220 VAC/50-60 Hz
Peak Power	900 W	700 W

3D Software - DefinSight-Automation

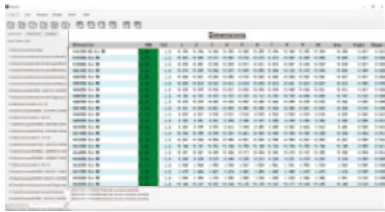
DefinSight-Automation is an in-house developed software of SCANOLGY designed for automated 3D measurement. It can support the functioning of robots such as KUKA, ABB, AUBO, FANUC, YASKAWA, and more.



Product and Solution Management



Data Capturing and Pre-processing



Data Optimization and Output

DefinSight All-in-One Metrology 3D Software Platform

DefinSight is an all-in-one metrology 3D software platform that aims to integrate the full capabilities of SCANOLGY's cutting-edge 3D software. With its intelligent data-optimizing algorithm and real-time computing, DefinSight delivers advanced 3D scanning and inspection like never before.

The newly designed interface, combined with high compatibility and efficient data processing, allows for faster, more precise, and highly detailed 3D data capture and analysis. Balancing powerful features with user-friendly design, DefinSight is the perfect solution for both beginners and professionals.



Everything You Need

- Designed to work with our full range of industrial 3D scanners.
- 3D scan, process, and analyze data in one integrated interface.
- Smooth flow, efficient processing, and storage of data.

Simple and Smooth

- Simple interface and intuitive icons.
- Quick-start guides.
- Large-font display for viewing from a distance.
- Immersive and engaging.

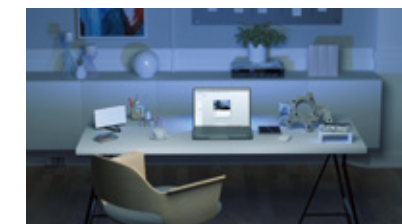


Designed for Easy Use

The user-oriented design of DefinSight makes it highly easy to use for beginners while also catering to the advanced needs of professionals. Whether you're a novice or an experienced user, you'll find the platform easy to use, efficient, and intelligent.

For beginners:

Users can simplify complex parameter settings into linear workflows to make it accessible for beginners.



For professionals:

Due to its simple user interface, easy workflows, and intuitive instructions, professionals can perform 3D measurements with ease.



Get the Most Out of 3D Scanning

Quick to Start:

Quick to get started and connect directly to a 3D scanner.



Easy to Use:

Intelligently adapts to different surfaces.



Smooth Scanning:

Supports real-time scanning and encapsulation of 3D data.



Fast Processing:

Instant analysis of large scan data sets.



Gain Deeper Insights in Real-time Meshing

DefinSight unlocks the potential of 3D scanning with advanced data processing and computing algorithms. It offers optimized real-time meshing by converting point cloud data into detailed 3D models during scanning. With faster meshing generation and higher data quality, you'll experience exceptional scanning precision and processing efficiency.

