



Innovation Meets Digitization

Handheld 3D System



Intelligent and Wireless

KSCAN - E

Flagship All-in-one 3D Scanner

03



Smart Handheld 3D Scanner

SIMSCAN

Series

Confidence in Every Critical Surface

07



Intelligent and Wireless
Large-area 3D Scanner

KSCAN - X

Boundless Vision, Unmatched
Accuracy

05

Tracking 3D System

Optical 3D Measurement System



TRACKSCAN SHARP

Series

Large-volume and Precise
Measurement Beyond Limits



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Portable Optical 3D Scanning System



TRACKSCAN GO

One System. More Possibilities.



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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 Measurement
for Versatile Uses



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Automated 3D System

Automated Optical
3D Inspection System

AM-CELL

C Series

Pro-Level Inspection.
Simple. Reliable.



27

Portable Coordinate Measuring Machine

Portable CMM

ACCLJARM

Reach Deeper
Measure Smarter

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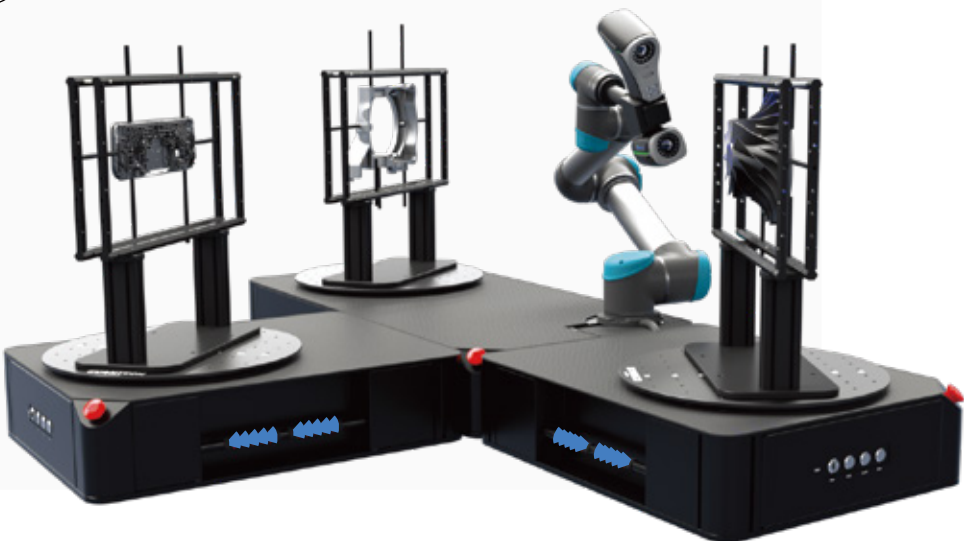


Automated 3D
Measurement Station

AM-DESK

Series

Versatility and
Efficiency
Beyond Imagination



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3D Software

3D Software

DefinSight

Ultimate 3D Scanning and
Inspection in Every Aspect



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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



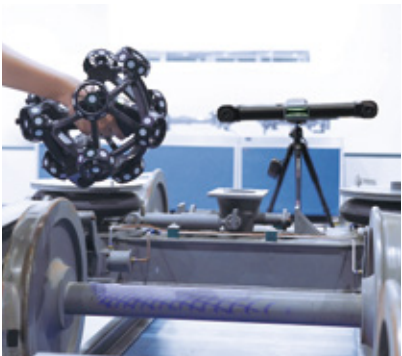
Mold



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

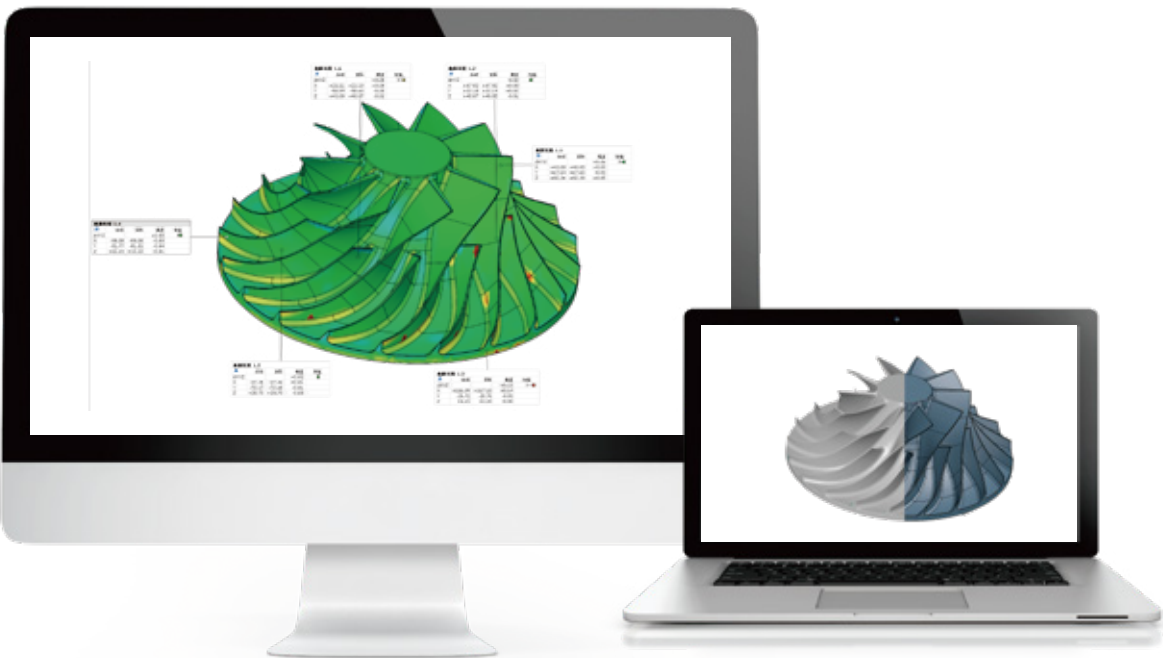
Finish 3D modeling in a short time for the VR/AR showcase online.

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/ax
	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.

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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/ax
	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.

SIMSCAN – E/S Gen2

The SIMSCAN-S Gen2 is a palm-sized 3D scanner with high accuracy. It offers wireless freedom, ultra-fast scanning, and flexible operating modes.

It enhances accuracy by robust algorithm and advanced craftsmanship, while incorporating sphericity and flatness into its accuracy control—keeping precision as the foundation and further ensuring geometric fidelity and detailed measurements.

Ideal for high-precision machined and complex parts, the SIMSCAN-S Gen2 is designed to make precision scanning faster, more detailed, and more reliable than ever.

From Accurate Measurement to Assured Geometry

- Combines advanced optics and algorithms -Sphericity and flatness control
- Capture precise dimensions, surface deviations, and details
- For aerospace, precision machining, and mold.

Go lighter. Go wireless

- Magnesium-alloy housing
- Weighs just 560 g
- Wireless freedom
- Stable data transfer and fast processing

Scan Where Others Can’t

- A steep viewing angle
- Get reliable results even in the most hard-to-reach areas
- Easily captures gaps, deep holes, slots, and channels
- Complete and accurate 3D data you can trust
- For inspection, design, and reverse engineering.

Work Smarter with DefinSight

- Powered by DefinSight all-in-one 3D digitization software
- From scanning to analysis
- Simple, fast, and intuitive workflows
- Less time processing data and more time making decisions

Compact and Easy to Use

- Ergonomic design and new detachable charging base
- Compact and easy to use
- Intuitive display

One Scanner. Any Job.

- Ultra-fast scanning, hyperfine scanning, and deep hole scanning
- Capture the overall geometry in seconds
- One device adapts to your task

Capture More. Scan Faster

- Handle complex parts with ease
- Capture massive amounts of 3D data instantly
- Enjoy smooth, lag-free scanning, and stay productive

Total Blue Laser Lines
126 lines

Max Measurement Rate
8,100,000 measurements/s

Max Frame Rate
180 FPS



Technical Specifications

Type		SIMSCAN-S Gen2	SIMSCAN-E Gen2
Scan mode	Ultra-fast scanning	108 blue laser lines (Quad Cross Technology)	
	Hyperfine scanning	17 blue parallel laser lines	
	Deep hole scanning	1 extra blue laser line	
Accuracy ⁽¹⁾		0.015 mm	Up to 0.020 mm
Scanning rate up to		8,100,000 measurements/s	
Scanning area up to		700 mm × 600 mm	
Laser class		Class II (eye-safe)	
Resolution up to		0.020 mm	
Volume accuracy ⁽¹⁾	Standard	0.015 mm + 0.030 mm/m	0.015 mm + 0.035 mm/m
	Adaptive Photogrammetry ⁽²⁾	0.015 mm + 0.012 mm/m	0.015 mm + 0.015 mm/m
Sphericity		0.025 mm	-
Flatness		0.035 mm	-
Stand-off distance		300 mm	
Depth of field		550 mm	
Output formats		.stl, .obj, .ply, .asc, .igs, .txt, .mk2	
Interface mode		USB 3.0	
Dimensions		203 mm × 80 mm × 44 mm	
Weight		560 g	
Operating temperature range		-10–40°C	
Operating humidity (non-condensing)		10 ~ 90% RH	
Wireless standard		Wi-Fi 6, 802.11a/b/g/n/ac/ax	
Patent		US10309770B2, US11060853B2, KR102096806B1, EP3392831B1, EP3907702B1, 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, CN113593015B, CN119919604B, CN223472293U, CN119359964B, CN223527609U, CN116045843B, CN223596816U, CN223829356U, CN309777650S, CN309793071S	

(1) ISO 17025 accredited: Performance is evaluated based on ISO 10360-13 standard, VDI/VDE 2634 Part 3 and JJF1951 specification.
(2) Paired with high-precision scale bar.



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 22 Gen2	SIMSCAN 30 Gen2	SIMSCAN 42 Gen2
Scan mode	Ultra-fast scanning	11 blue laser crosses	17 blue laser crosses	27 blue laser crosses
	Hyperfine scanning	7 blue parallel laser lines	17 blue parallel laser lines	
	Deep hole scanning	1 extra blue laser line		
Accuracy ⁽¹⁾		Up to 0.020 mm		
Scanning rate up to		2,020,000 measurements/s	4,580,000 measurements/s	5,800,000 measurements/s
Scanning area up to		650 mm × 550 mm	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		
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-Z

TrackScan Sharp-Z, the Zenith Optical 3D Scanning System, integrates quad-cross blue laser, ultra-long tracking, and fully self-tracking technology for precise 3D measurement in large-scale inspection.

Dual-screen interaction simplifies operation, while fully wireless scanning and dual-battery power eliminate cable constraints for faster, more accurate, stable, and reliable large-scale 3D measurement.

Ultra-Long Tracking for Large-Scale Measurement

With up to 12m tracking distance, TrackScan Sharp-Z easily covers large workpieces, reducing tracker repositioning for seamless, one-stop measurement.

Dual Screens, Intuitive Interaction

Built-in displays on both the scanner and tracker provide real-time visibility of device status, the calibration interface, and probe measurements, making operation more intuitive and efficient.

Customizable Buttons, One-Touch Access

3 programmable buttons provide one-touch access to frequently used functions for smoother, more efficient on-site measurement.

Fully Self Tracking, Less Repositioning

The tracker’s dynamic rotary platform automatically follows the scanner in real time, delivering a 12m-radius, 360° measurement range with high accuracy and efficiency.

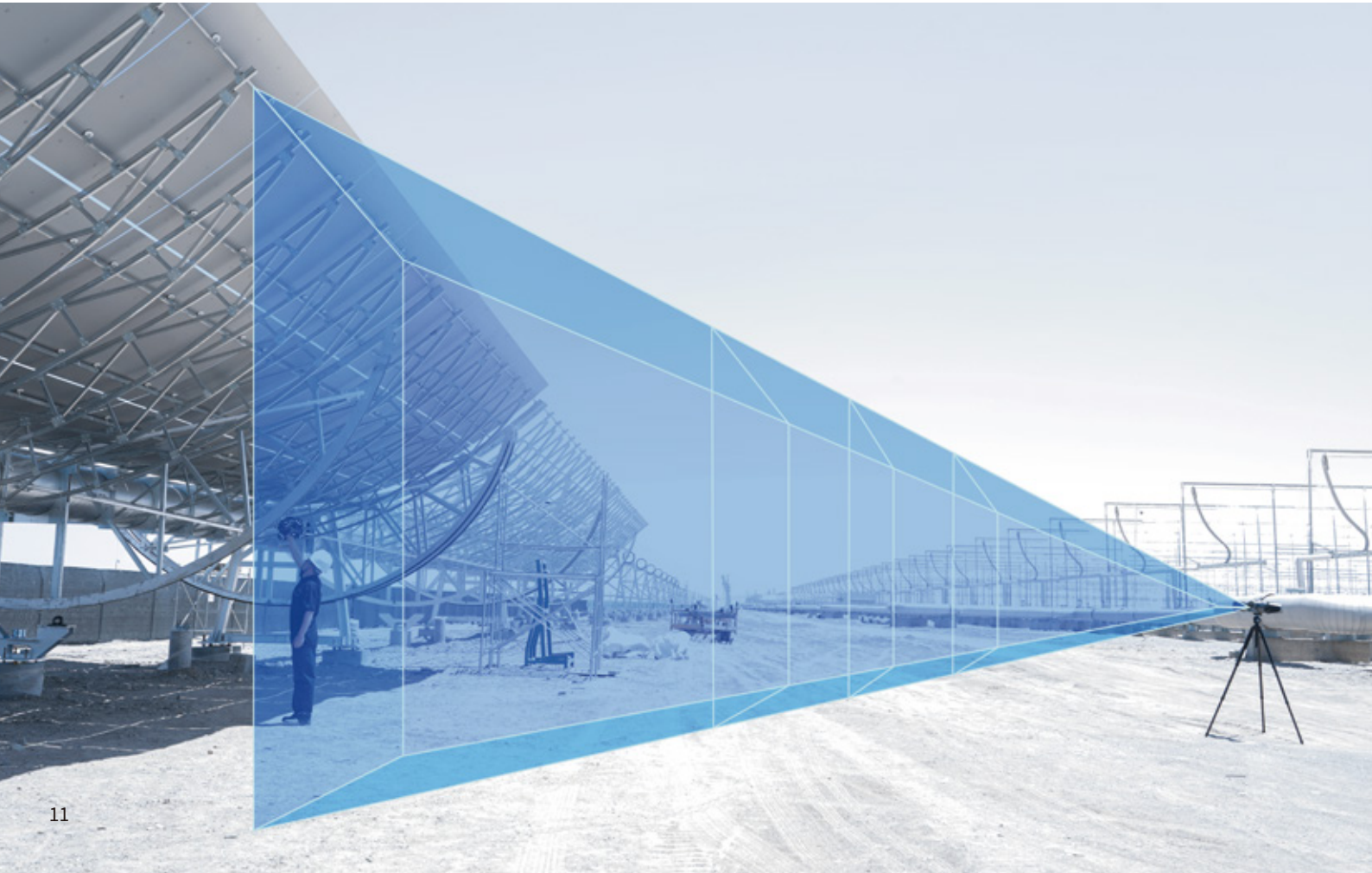
Measurement Volume (Single-Station, Fixed View): 600 m³
Tracker Rotation: 360°

High-Speed Scanning, Efficiency Meets Detail

Innovative quad-cross blue laser technology, 162 laser lines, up to 200 FPS, and up to 10 million measurements per second deliver fast scanning without compromising detail.

Industrial-Grade Accuracy, Reliable Stability

ISO 10360-13 compliant, with four-metric accuracy control covering Accuracy, Volumetric Accuracy, Sphericity, and Flatness, and a rigid carbon-fiber icosahedral frame for lasting, reliable accuracy.



Technical Specifications

Type		TrackScan Sharp-Z
Scan mode	Ultra-fast scanning	140 blue laser lines (Quad-Cross Technology)
	Hyperfine scanning	21 blue parallel laser lines
	Deep-hole scanning	Extra 1 blue laser line
Accuracy ⁽¹⁾		up to 0.025mm
Scanning frame rate up to		200 FPS
Measurement rate up to		10,000,000 measurements/s
Scanning area up to		800 mm × 700 mm
Laser class		Class II (eye-safe)
Resolution up to		0.020 mm
Volumetric ⁽¹⁾ accuracy	13m³ (3.5m)	0.039mm
	46m³ (5.2m)	0.062mm
	80m³ (6.2m)	0.089mm
	120m³ (7.2m)	0.118mm
	200m³ (8.5m)	0.149mm
	600m³ (12m)	0.198mm
Volumetric accuracy (with MSCAN photogrammetry system)		0.039mm+0.012mm/m
Form error (Sphere) ⁽¹⁾		0.030mm
Form error (Flat) ⁽¹⁾		0.040mm
Stand-off distance		300 mm
Depth of field		400mm, 800mm (Large depth of field)
Output format		.stl, .obj, .ply, .asc, .igs, .txt, .mk2 and etc.
Interface mode		USB3.0, Network Interface
Operating temperature range		-10~40°C
Operating humidity range (non-condensing)		10 ~ 90% RH
Wireless operating mode		i-Scanner, i-Tracker, i-Scanner + i-Tracker, i-Tracker + i-Probe, Wireless multi-tracker tracking, Edge Inspection
Certification		CE,Rohs, WEEE, FCC
Patents		CN219834226U, CN219829788U, CN117036493B, CN222015590U, CN222027649U, CN222938454U, CN118857100B, CN223470614U, CN223194755U, CN223364169U, CN223564970U, CN223470623U, CN119845179B, CN223740420U, CN309683365S, CN224163159U, CN224265023U, CN121956025B, US12725299B2, DE202025004261
Hole position accuracy		0.05mm

(1) Performance is evaluated in accordance with JJF 1951, VDI/VDE 2634 Part 3, and ISO 10360-13 at Scanology’s ISO/IEC 17025-accredited calibration laboratory.
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TRACKSCAN SHARP

TrackScan Sharp 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	TrackScan Sharp-E
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 m ³ (3.5 m)	0.048 mm	0.049 mm
	35 m ³ (5.2 m)	0.069 mm	0.070 mm
	90 m ³ (7.2 m)	0.128 mm	0.130 mm
	135 m ³ (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, .obj, .ply, .asc, .igs, .txt, .mk2	
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

NimbleTrack is Scanology’s all-new wireless optical 3D scanning system that brings wireless freedom, non-target scanning, precise measurements and portability together. It delivers high efficiency and adaptability for parts of all sizes.

Track Further, Scan Bigger

- 4.2 m tracking distance, ideal for small to mid-sized objects.
- Easy to scan large and extra-large parts with accuracy.

Flexible Dual Modes

- Combines optical 3D scanning with handheld wide-area scanning.
- Tracker can be used as a handheld 3D scanner to capture point clouds.
- Incorporates adaptive photogrammetry technology, ensuring exceptional accuracy for both long and short measurement distances.

Fully Wireless and Mobile

- Support wireless measurements and stable high-speed data transmission anytime, anywhere.
- Whether scanning outdoors, in power-restricted areas, on oversized parts, or in confined spaces, it ensures seamless, precise and efficient 3D measurements.

Accuracy You Can Trust

- Delivers up to 0.025-mm system accuracy and 0.059-mm volumetric accuracy.
- Marker-free and ideal for dynamic scanning of small to mid-sized parts.

Lightning-fast Scanning

- Fast and smooth scanning experiences at a high frame rate of 120 FPS.
- A scan rate of up to 6.63 million measurements/s with 54 blue laser lines.

Versatile Applications

Custom Adapter
Paired with custom adapters to capture 6D pose of target objects in real time, ideal for crash testing, aerospace equipment assembly, robot calibration, and more.

Optical Probe
Paired with a tracking i-Probe to probe inaccessible areas such as reference holes and hidden points.

Intelligent Edge Inspection
Inspect closed features such as holes, slots, edges precisely and obtain information such as positions and diameters.

Technical Specifications

Type		NimbleTrack-C Gen2	NimbleTrack-E Gen2
Scan mode	Ultra-fast scanning	54 blue laser lines	
	Hyperfine scanning	17 blue parallel laser lines	
	Deep hole scanning	1 extra blue laser line	
	Large area scanning	54 blue laser lines	
	Photogrammetry	Adaptive photogrammetry	
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		3500 mm	4200 mm
Volumetric accuracy ⁽¹⁾	Tracking distance 3.5 m	0.060 mm	0.059 mm
	Tracking distance 4.2 m	/	0.072 mm
	With photogrammetry system ⁽²⁾	0.044 mm + 0.012 mm/m	
	Tracker-only scanning ⁽²⁾	0.072 mm + 0.012 mm/m	
Hole position accuracy		0.050 mm	
Laser class		Class II (eye-safe)	
Resolution up to		0.020 mm	
Stand-off distance		300 mm	
Depth of field		400 mm	
Scanning area up to		500 mm × 600 mm	
Scanning frame rate		120 fps	
Measurement rate up to		6,630,000 measurements/s	
Dimension of i-Scanner		252 mm × 195 mm × 260 mm	
Weight of i-Scanner		1.3kg (Net weight)	
		1.4 kg (Battery and wireless module included)	
Dimension of i-Tracker		570 mm × 87 mm × 94 mm	
Weight of i-Tracker		2.2 kg (Net weight)	
		2.6 kg (Battery and wireless module included)	
Size of protection case		1000 mm × 425 mm × 280 mm	
Output format		.stl, .obj, .ply, .asc, .igs, .txt, .mk2	
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 tracking, Edge Inspection	
Wireless standard		Wi-Fi 6, 802.11a/b/g/n/ac/ax	
Interface mode		USB3-B, Gigabit Ethernet port	
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, CN222865846U, US10309770B2, US10309770B2, US11060853B2, KR102096806B1, EP3392831B1, US11493326B2	

(1) ISO 17025 accredited: Performance is evaluated based on JJF1951 specification and VDI/VDE 2634 Part 3.
(2) Paired with high-precision scale bar.



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
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 tracking, Edge Inspection
Wireless standard		Wi-Fi 6, 802.11a/b/g/n/ac/ax
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

(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.

TRACKSCAN GO

TrackScan GO series portable optical 3D scanning system features a lightweight, compact design and a streamlined setup with fewer components, all packed in one carrying case. Fully wireless scanning makes on-site measurement more flexible and efficient.

Three measurement configurations seamlessly cover large, medium, and small workpieces. Compliant with ISO 10360-13, it delivers traceable accuracy. Easy to use, it lowers the barrier to tracking 3D measurement and brings professional measurement to more industrial sites.

Lightweight and Portable, One Case to Go

Compact and portable, with no router or repeater box required. Everything fits into a single case. Wireless scanning with AirGO Pad brings tracking 3D measurement to even the most complex environments.

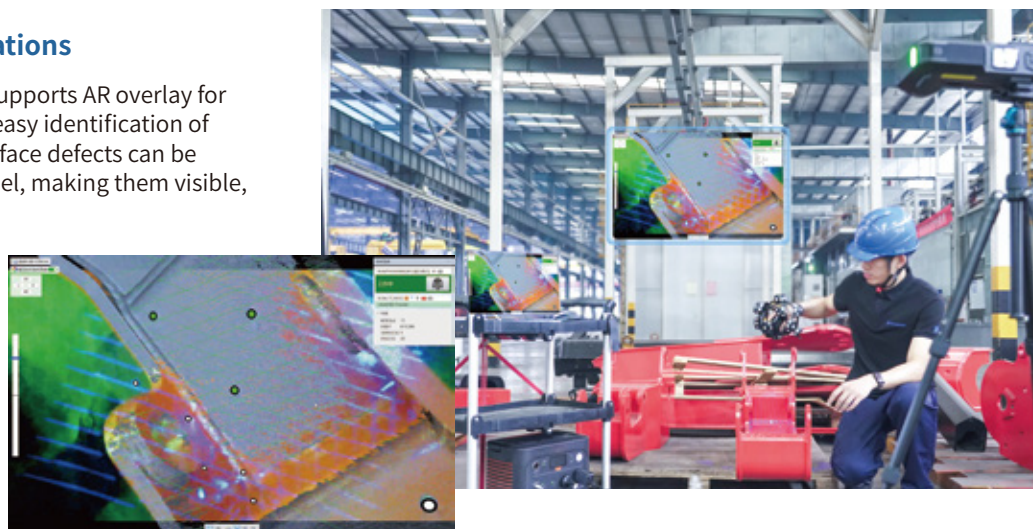
Scan Straight Out of the Case, Easy to Learn and Use

It powers on and connects automatically, so you can start scanning straight out of the case. Intelligent guidance and automated inspection sequences simplify workflows, helping new users get started quickly and generate standardized reports with ease.



Color Camera, More Applications

Equipped with a color camera, it supports AR overlay for quick CAD-to-part alignment and easy identification of missing or incorrect assembly. Surface defects can be recorded directly onto the 3D model, making them visible, recordable, and traceable.



Three Measurement Configurations, No Compromises

One system handles diverse measurement scenarios and needs:

Tracked Scanning

Efficient markerless scanning for a wide range of parts



Tracker-Only Scanning

Long-range, large-area handheld scanning for large parts



Scanner-Only Scanning

Lightweight, flexible handheld scanning for tight spaces and internal cavities



Industrial-Grade Accuracy, Stable and Reliable

Compliant with ISO 10360-13, it employs four-metric accuracy control covering accuracy, volumetric accuracy, sphericity, and flatness to meet industrial-grade measurement requirements.

One-Touch Access, Dual-Screen Collaboration

Customizable buttons provide one-touch access. Built-in displays on both the scanner and tracker make operation more intuitive and efficient.

Technical Specifications

Type		TrackScan GO-C	TrackScan GO-E
Scan mode	Ultra-fast scanning	34 blue laser lines	
	Hyperfine scanning	7 blue parallel laser lines	
	Deep hole scanning	Extra 1 blue laser line	
	Tracker Large-Area Scanning	34 blue laser lines	
	Photogrammetry	Adaptive photogrammetry	
Tracking distance per i-Tracker		2800 mm	3500 mm
Accuracy ⁽¹⁾	Tracked Scanning	Up to 0.030 mm	Up to 0.030 mm
	Scanner-only scanning	Up to 0.020 mm	Up to 0.020 mm
	Tracker-only scanning	Up to 0.075 mm	Up to 0.075 mm
Volumetric accuracy ⁽¹⁾	Tracked Scanning	0.064 mm	0.060 mm
	Scanner-only scanning	0.015 mm + 0.035 mm/m	0.015 mm + 0.035 mm/m
	Tracker-only scanning ⁽²⁾	0.072 mm + 0.012 mm/m	0.072 mm + 0.012 mm/m
Sphericity ⁽¹⁾		0.040 mm	0.035 mm
Flatness ⁽¹⁾		0.060 mm	0.050 mm
Working distance	Scanner	150 mm ~ 450 mm, extendable up to 650 mm Hyperfine scanning: 120 mm ~ 300 mm	
	Tracker	500 mm ~ 1500 mm, extendable up to 2500 mm	
Scanning area up to	Scanner	500 mm × 600 mm	
	Tracker	2500 mm × 2000 mm	
Laser class		Class II (eye-safe)	
Resolution up to		0.020 mm	
Measurement rate up to		6,500,000 measurements/s	
Dimension of i-Scanner		197.6 mm × 191.3 mm × 234.2 mm	
Weight of i-Scanner		860 g (Excl. Battery)	
Dimension of i-Tracker		418.6 mm × 122.1 mm × 83.9 mm	
Weight of i-Tracker		1580 g (Excl. Battery)	
Size of protection case		660 mm × 499 mm × 329 mm	
Output format		.stl, .obj, .ply, .asc, .igs, .txt, .mk2 and etc.	
Operating temperature range		-10°C–40°C	
Operating humidity range (non-condensing)		10-90% RH	
Wireless standard		Wi-Fi 6, 802.11a/b/g/n/ac/ax	
Interface mode		USB3.0 Type-C	
Patents		US10309770B2, US11060853B2, KR102096806B1, EP3392831B1, US11493326B2 EP3907702B1, US12293530B2, US12518402B2, CN109000582B, CN111694665B CN111678459B, CN214149174U, CN214379242U, CN214379241U, CN112802002B CN214755707U, CN114554025B, CN113514008B, CN114627249B, CN218103238U CN115289974B, CN115325959B, CN218584004U, CN115511688B, CN115661369B CN113074659B, CN115695763B, CN115690333B, CN113473034B, CN113432561B CN219834226U, CN219829788U, CN116244730B, CN116206069B, CN113079269B CN113079270B, CN113670202B, CN111932465B, CN222013042U, CN222027649U CN222279677U, CN222317979U, CN222317980U, CN222353116U, CN222560923U CN113593010B, CN222865846U, CN119919604B, CN119359964B, CN223461002U CN223527609U, CN119845179B, CN116045843B, CN118857100B, CN223596816U US12725299B2, DE202025004261	

(1) Performance is evaluated in accordance with JJF 1951, VDI/VDE 2634 Part 3, and ISO 10360-13 at Scanology’ s ISO/IEC 17025-accredited calibration laboratory.
(2) Paired with 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.



NIMPROBE

The NimProbe system combines the handheld i-Probe with the next-generation i-Tracker in a fully wireless, lightweight design. Built for high-precision measurement of small-to-medium parts, it brings together the best of both probing and scanning modes in one innovative solution.

All in One & Easy to Use

- Lightweight and portable.
- Packed into a single case for easy transport and setup.
- Ready in just one minute.
- Weighs only 700 g

Extensive and Precise Measurement

- i-Probe measure parts in a distance of up to 4.2 meters in a single position.
- Volumetric accuracy up to 0.072 mm (3.5m)
- Precisely captures geometric features and GD&T.

Stay Mobile, Stay Precise

- Within the tracker's view, the probe moves freely while its position and orientation are tracked in real time.
- With only a few markers, you can switch positions effortlessly.

Flexible Connectivity

Switch freely between wireless and wired modes.

Wireless mode
eliminates mechanical or cable restrictions for maximum flexibility on the shop floor.

Wired mode
ensures stable performance and meets strict requirements for data security.



Seamless Probing to Scanning

- Combines high-precision probing with handheld laser scanning.
- Its tracker doubles as a handheld 3D scanner, capturing point clouds with speed and precision.

Probing Without Limits

- Easily accesses reference holes, hidden points, and other hard-to-reach areas.
- Ensures accurate results even when some of its markers are blocked.

Versatile & Reliable

- Comes with stylus and corner extension rods of different types.
- Unaffected by vibration, temperature, humidity, or lighting conditions.

Technical Specification

Type		NimProbe
Volumetric accuracy ⁽¹⁾	3.5m	0.059 mm
	4.2m	0.072 mm
Measurement distance (per tracker)		4.2 m
Part size range (recommended)		0.1 m ~ 6 m
Dimensions of i-Probe		510*145*89 mm
Weight of i-Probe		700 g
Operating temperature range		0 ~ 45°C
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.



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 C Series

The AM-CELL C Series is an automated optical 3D inspection system combining a 3D scanner, robot, 3D digitization software, and central control platform, designed for complex parts and medium-to-large structural components. It automates the entire workflow—from path planning and measurement to analysis—freeing you from complex tasks.

Its modular units enable flexible layouts and multi-positioner operations. Supporting loads from 200–1000 kg and various fixtures, it effortlessly handles metal sheets, die-cast parts, welded assemblies, battery packs, and more.

Powered by DefinSight 3D software, it delivers smart path planning, high-precision measurement, and automated reporting with direct MES/QMS integration. Together, these features let manufacturers build fast, precise, and interconnected inspection systems that improve efficiency and reduce costs.

Pro-Level Automated Measurement

Automates inspection from path planning to measurement and reporting.

Simulation: Virtual path planning & collision simulation—no programming skills needed.

Automated Measurement: Non-contact scanning detects holes, slots, edges.

Error-Proofing: Vision verification prevents mis-scans and misplacement.

Smart Data for Efficient Monitoring

Accurate Analysis: Compare measurement results with CAD model in one click

Data in Sync: Import inspection results directly to MES, PLC, or QMS systems

Process Monitoring: Integrated SPC and trend analysis modules track production fluctuations

Engineered for Any Environment

- Delivers consistent measurements in harsh conditions.
- High-precision optical 3D scanning—up to 0.020 mm accuracy at 6.63 million measurements/s.
- Multi-dimensional environmental sensors, supporting self-calibration.

Not Just a Turnkey Solution

- With modular units and standardized workflows, AM-CELL C breaks the limits of fixed layouts, offering flexible deployment and expansion.



Technical Specifications

Type	AM-CELL C13X		AM-CELL C18X	
Space Size	4 m × 3 m		5 m × 4 m	
Robot Type	Cobot, reaching 1300 mm		Cobot, reaching 1800 mm	
3D Scanner Supported	Full series of SCANOLGY's Optical 3D Measurement System			
Communication Protocol	TCP/IP, USB 3.0, OPCUA			
Expanded Communication	Socket, Modbus-TCP			
Safety Mode	Active Emergency Stop + Safety with Force Feedback			
Input Voltage	AC ~ 220 V / 50 - 60 Hz			
Equipment Power	1.5 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

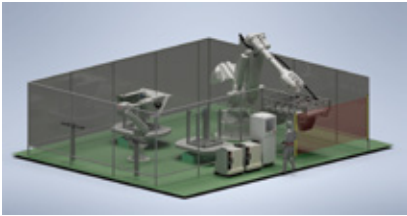
Quick Installation & High Flexibility

- 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.

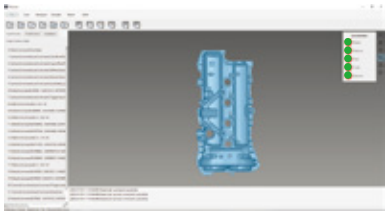
* AM-DESK Lite does not support the connection to multiple positioners.

Technical Specifications

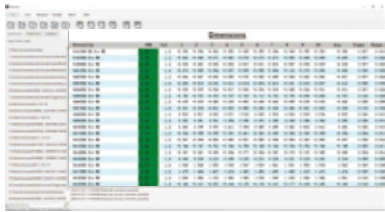
Type	AM-DESK 60120	AM-DESK Lite
Dimension	1200*600*177 mm (47.2 × 23.6 × 7.0 in)	1200*600*180 mm (47.2 × 23.6 × 7.1 in)
Weight	75 KG (165.3 lb)	70 KG (154.3 lb)
Turntable Payload	≤ 125 KG (275.6 lb)	≤ 75 KG (165.3 lb)
Max Rotational Speed of Turntable	50°/S	40°/S
Communication Interface	TCP/IP	TCP/IP
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



Product and Solution Management



Data Capturing and Pre-processing



Data Optimization and Output

Scanology’ s AccuArm is a Portable Coordinate Measuring Machine (PCMM) engineered for precise measurement and inspections in demanding conditions.

Thanks to its aerospace-grade carbon-fiber structure, high-precision encoders and intuitive operation, it delivers consistent results with the flexibility to measure anywhere — in the metrology lab or on the production floor.

Arm+ | The Expandable Measurement Solution

Pair the arm with SCANOLOGY’ s handheld 3D scanners, optical 3D scanning systems, or photogrammetry systems for a complete, unified measurement solution on DefinSight.

Seamlessly Integrate with Any System

Works with our in-house developed DefinSight 3D Software and mainstream inspection systems such as PolyWorks, Metrolog X4, Verisurf — no extra setup needed.

Smart Algorithms

Automated thermal compensation: Real-time thermal compensation for both measuring arm and part in on-site measurement.

Multi-frame optimization: Reduces random error and boosts point-measurement confidence.

Automated force compensation: Automatically adjusts for probe pressure and orientation changes.

ISO 10360-12 Certified

The AccuArm is certified for accuracy to the ISO 10360-12 standard. It delivers high accuracy with consistent performance in almost any environments, enabling confident decisions in inspection and assembly.

Built for High-demanding Measurements

Handle everything from complex geometries to precision components with ease. Count on stable, high-accuracy measurements that fulfill the stringent requirements of industrial manufacturing.

Move and Measure with Ease

Lightweight and portable, designed for single-person operation. Carry, set up, and work seamlessly from the lab to on-site.



AccuArm Accuracy - Contact Measurement

Type	Lengths	6-Axis					7-Axis				
		SPAT	EUNI	PFORM	PSIZE	LDIA	SPAT	EUNI	PFORM	PSIZE	LDIA
S	2m	0.016	0.022	0.015	0.008	0.029	0.018	0.023	0.019	0.010	0.041
	2.5m	0.018	0.024	0.018	0.009	0.031	0.020	0.026	0.022	0.011	0.045
	3m	0.026	0.037	0.025	0.012	0.044	0.032	0.046	0.032	0.016	0.070
	3.5m	0.036	0.051	0.033	0.016	0.059	0.043	0.056	0.038	0.020	0.090
	4m	0.045	0.062	0.037	0.020	0.075	0.054	0.072	0.043	0.026	0.112
	4.5m	0.055	0.078	0.050	0.028	0.101	0.065	0.093	0.065	0.036	0.132
E	2m	0.020	0.026	0.018	0.010	0.032	0.022	0.030	0.022	0.012	0.047
	2.5m	0.023	0.028	0.021	0.012	0.036	0.026	0.031	0.024	0.013	0.050
	3m	0.034	0.040	0.030	0.015	0.050	0.042	0.052	0.034	0.020	0.072
	3.5m	0.043	0.054	0.037	0.019	0.064	0.055	0.065	0.042	0.024	0.092
	4m	0.052	0.064	0.043	0.023	0.081	0.065	0.082	0.048	0.029	0.118
	4.5m	0.061	0.087	0.078	0.038	0.108	0.073	0.097	0.082	0.043	0.137
C	2m	0.030	0.040	0.035	0.018	0.041	0.035	0.045	0.040	0.025	0.052
	2.5m	0.035	0.044	0.038	0.020	0.050	0.040	0.049	0.045	0.030	0.058
	3m	0.055	0.064	0.047	0.028	0.078	0.060	0.069	0.049	0.035	0.089
	3.5m	0.075	0.079	0.057	0.035	0.096	0.080	0.084	0.064	0.040	0.113
	4m	0.090	0.098	0.067	0.044	0.114	0.095	0.103	0.074	0.050	0.138
	4.5m	0.112	0.118	0.086	0.048	0.128	0.115	0.123	0.095	0.055	0.158

1. Supports the Arm+ solution for seamless integration with multiple hardware systems.
2. All values represent MPE (Maximum Permissible Error).
3. AccuArm Contact Measurement : Compliant with ISO 10360-12; specified as E_{uni} - Point-to-point distance error when contrasting measured data against nominal data. Values are +/-.
4. Specifications are subject to change. Please refer to the official website for the latest updates.

