

# Robust 3D Scanning Solutions

**3D Infotech** provides full high accuracy 3D measuring solutions according to the specific requirements of different industries. Our solutions are adapted to all kind of industries such as Aerospace, Automotive, Consumer Products, Healthcare, Energy and Castings & Forgings.



## **KSCAN**

Versatile, All-In-One Metrology-Grade Measurement Device With Probing And Photogrammetry



## **SIMSCAN**

High-Fidelity 3d Scanner That Fits Into Small Spaces While Providing Accurate And Fast Measurements



## **NIMBLETRACK**

Highly Compact, Lightweight, And Wireless Optical 3D Scanning System



## **TRACKSCAN-P**

Intelligent Tracking Without Targets



## **TRACKSCAN-SHARP**

Extended Tracking With Accurate Measurements

# Applications For Industry

- **Automated 3D inspection**

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

- **Quality control**

Identify the deviation from CAD data quickly

- **Reverse engineering**

Create full concept CAD models or substitute part

- **Finite element analysis**

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

- **3D visualization**

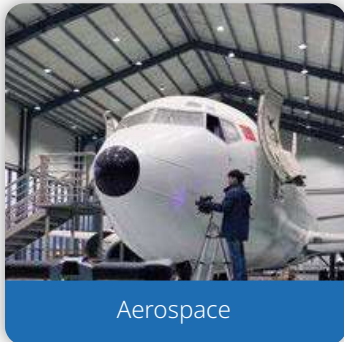
Complete 3D modeling quickly for online VR/AR showcase

- **Product development**

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

- **3D printing**

Simplify the 3D rebuilding process for 3D printing



Aerospace



Automotive



Consumer Products



Healthcare



Energy



Castings & Forgings



# SIMSCAN

The Market's Only Palm-Sized  
Smart 3D Scanner

Designed for tight spaces, **SIMSCAN** excels in high-quality 3D scanning with its compact size, simplicity, and stellar performance. Ideal for both **narrow and large-scale parts**, it swiftly captures intricate details and constructs 3D models in a very short amount of time.

- **Single handed control:** Scan effortlessly with just 570 g of weight.
- **Narrow-space measuring booster:** Captures accurate data in hard-to-reach areas with a short 130 mm camera distance.
- **Smooth 3D experience:** Efficient digitizing up to 2.8 million measurements.
- **Remarkable portability:** Conduct 3D measurements anywhere and anytime with its compact size and excellent portability.
- **Detail everywhere:** HD cameras and three scanning modes ensure accuracy up to 0.020 mm.
- **Automated metrology:** Paired with 3D Infotech's UMA Smart Desktop or Smart Station for batch processing of many parts that need to be inspected.

## Technical Specifications



Type		SIMSCAN42	SIMSCAN30	SIMSCAN22
Scan mode	Ultra-fast scanning	17 blue laser crosses	11 blue laser crosses	7 blue laser crosses
	Hyperfine scanning	7 blue parallel laser lines		
	Deep-hole scanning	1 extra blue laser line		
Accuracy <sup>(1)</sup>		Up to 0.020 mm		
Scanning rate		Up to 2,800,000 measurements/s	Up to 2,020,000 measurements/s	Up to 1,250,000 measurements/s
Scanning area		Up to 700 mm x 600 mm		Up to 650 mm x 550 mm
Laser class		Class II (eye-safe)		
Resolution		0.020 mm		
Volume accuracy <sup>(2)</sup>	Work alone	0.015 mm + 0.035 mm/m		
	Work 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.		
Operating temperature range		-10 °C - 40 °C		
Interface mode		USB 3.0		
Dimensions		203 mm × 80 mm × 44 mm		
Weight		570 g		

(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





# KSCAN

Versatile, All-In-One Metrology-Grade Measurement Device

The **KSCAN-Magic** upgrade series is an advanced 3D scanner with infrared and blue lasers, five operating modes, and efficient multi-spectrum scanning. It optimizes workflows with fast scanning, high accuracy, and accelerates product time-to-market.

- **Detail everywhere:** Conduct 3D measurements anywhere and anytime regardless of vibrations, temperature, and humidity.
- **Versatile 3D scanning:** Scan various surfaces, including reflective and black surface, to capture precise 3D data.
- **Infrared scanning:** Allows scanning large parts quickly and accurately to achieve MAXimum measurement volume.
- **Built-in photogrammetry:** Create reference frames to enable bundle adjustment for measuring large parts, increasing global accuracy.
- **Intelligent edge inspection:** Inspect closed features precisely and obtain repeatable results.
- **Contact probing:** Probe inaccessible areas and complex parts with a portable CMM K-Probe.
- **Pipe measurement:** Capable of 3D Scanning pipes of different sizes and materials for reverse engineering and inspection.
- **Automated metrology:** Paired with 3D Infotech's UMA Smart Desktop or Smart Station for batch processing of many parts that need to be inspected.

## Technical Specifications



**For inquiries please contact us at:**

(800) 276-1372 | [3di-sales@3dinfotech.com](mailto:3di-sales@3dinfotech.com)

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 <sup>(1)</sup>		Up to 0.020 mm	
Scanning rate		Up to 2,700,000 measurements/s	Up to 4,150,000 measurements/s
Scanning area		Up to 1440 mm × 860 mm	
Laser class		Class II (eye-safe)	
Resolution		Up to 0.010 mm	
Photogrammetry system	Scanning area	3760 mm × 3150 mm	
	Depth of field	2500 mm	
Volume accuracy <sup>(2)</sup>	Work alone	0.015 mm + 0.030 mm/m	
	Work with 1m reference bar	0.015 mm + 0.020 mm/m	
	Work with MSCAN-L15	0.015 mm + 0.012 mm/m	
Stand-off distance		300 mm	
Depth of field		925 mm	
Output formats		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Operating temperature range		-10 °C - 40 °C	
Interface mode		USB 3.0	

(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

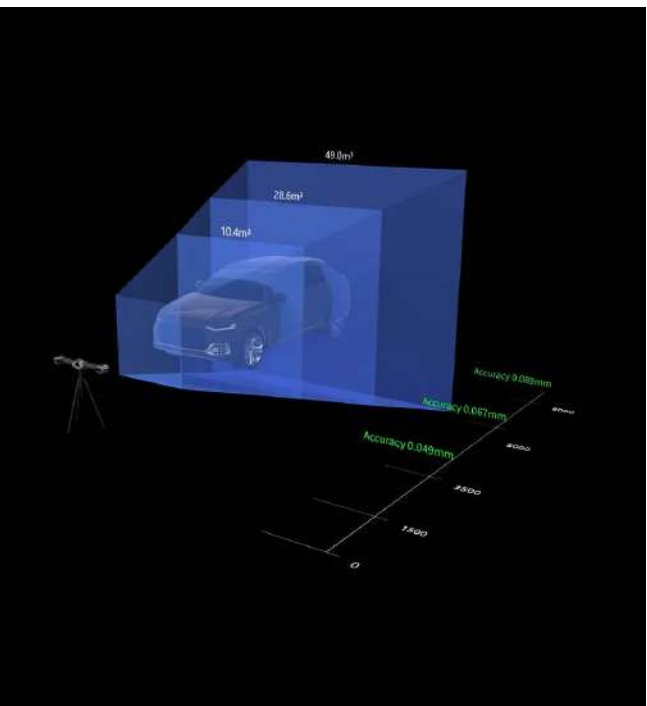


## TRACKSCAN-P

Intelligent Tracking Without Targets

Crafted with intelligent optical tracking and high-resolution cameras, **TrackScan-P** excels in precision measurement without the need for reference targets. Its versatility spans large-scale objects, showcasing excellence in quality control, product development, and reverse engineering.

- **Optical tracking for instant 3D scanning:** TrackScan-P's optical tracking enables instant scanning without the need for targets, significantly enhancing efficiency and reducing costs.
- **Precise edge detection:** Efficiently detecting circles, grooves, and machined holes in stamping parts with gray value measurement and optional auxiliary light.
- **Unrivaled-fast & detail-maker:** Fits different scanning situations with an accuracy of up to 0.025 mm and an ultra-fast measurement rate of up to 2,600,000 measurements/s.
- **Strong adaptability:** Aerospace-grade, sturdy, reliable, and robust 3D data capture on reflective and dark surfaces.



## TRACKSCAN-SHARP

Extended Tracking With Accurate Measurements

TrackScan-Sharp, with i-Scanner and i-Tracker, is Scantech's advanced optical 3D measurement system for large parts. Offering a 6-meter tracking distance, 49 m<sup>3</sup> volumetric range, and 0.049 mm precision, it streamlines measurement without frequent tracker movement. Bringing optical measurement to a whole new level.

- **Ultra-high precision:** 25-MP industrial camera, DLA technology, and a 6-meter range for clear images.
- **Edge computing & impressive performance:** i-Tracker's processor streamlines image processing, providing real-time coordinates to conserve computing power.
- **Fast 3D scanning:** Measure multiple parts without reference targets.
- **Large-volume measurement:** One-stop scanning without frequent tracker movements with wide range and robust edge algorithm.
- **Wireless data transmission:** Current available.
- **Remarkable accuracy:** Metrology level and high precision measurement.



Type		TrackScan-P550	TrackScan-P542
Scan mode	Ultra-fast scanning	21 blue laser crosses	17 blue laser crosses
	Hyperfine mode B	7 blue parallel laser lines	
	Deep-hole scanning	1 extra blue laser line	
Accuracy <sup>(1)</sup>		Up to 0.025 mm	
Measurement rate		Up to 2,600,000 measurements/s	Up to 2,200,000 measurements/s
Scanning area		Up to 500 mm × 600 mm	
Laser class		Class II (eye-safe)	
Resolution		Up to 0.020 mm	
Volumetric accuracy <sup>(2)</sup>	10.4 m <sup>3</sup>	0.060 mm	
	18.0 m <sup>3</sup>	0.075 mm	
Volumetric accuracy (With MSCAN photogrammetry system )		0.044 mm + 0.012 mm/m	
Single-point repeatability of portable CMM T-Probe		0.030 mm	
Hole position accuracy		0.050 mm	
Object Size (recommend)		100-8000 mm	
Stand-off distance		300 mm	
Depth of field		400 mm	
Output formats		.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Operating temperature range		-10° C- 40°C	
Operating humidity (Non-condensation)		10%-90% RH	
Interface mode		USB 3.0	
Certification		CE, UL	

(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.



**For inquiries please contact us at:**

(800) 276-1372 | [3di-sales@3dinfotech.com](mailto:3di-sales@3dinfotech.com)



Type		TrackScan-Sharp 49
Scan mode	Ultra-fast scanning	21 blue laser crosses
	Hyperfine scanning	7 blue parallel laser lines
	Deep-hole scanning	1 blue laser line
Accuracy <sup>(1)</sup>		Up to 0.025 mm
Measurement rate		Up to 2,600,000 measurements/s
Scanning area		Up to 500 mm × 600 mm
Laser class		Class II (eye-safe)
Resolution		Up to 0.020 mm
Volume accuracy <sup>(2)</sup>	10.4 m <sup>3</sup> (Tracking distance 3.5 m)	0.049 mm
	28.6 m <sup>3</sup> (Tracking distance 5.0 m)	0.067 mm
	49.0 m <sup>3</sup> (Tracking distance 6.0 m)	0.089 mm
Tracking Distance per i-Tracker		6000 mm
Volumetric accuracy (with MSCAN photogrammetry system)		0.044 mm + 0.012 mm/m (>6m)
Hole position accuracy		0.050 mm
Camera pixels of i-Tracker		25 megapixels
Stand-off distance		300 mm
Depth of field		400 mm
Part size range (recommended)		0.1 m-12 m
Operating temperature range		0 °C-45 °C
Operating humidity range (non-condensing)		10-90% RH
Interface mode		USB 3.0, Network Interface
Certification		CE, RoHS, WEEE

Type		T-PROBE
Accuracy		0.025 mm
Volumetric accuracy	10.4 m <sup>3</sup>	0.049 mm
	28.6 m <sup>3</sup>	0.067 mm
Measurement rate		60 measurements/s
Part size range (recommended)		0.2 m-6 m
Weight		450 g
Dimension		345 × 55 × 121 mm
Operating temperature range		0 °C-40 °C
Operating humidity range		10-90 % RH

(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.







# NIMBLETRACK | Highly Compact, Lightweight, And Wireless Optical 3D Scanning System

NimbleTrack provides **unmatched wireless 3D scanning** for small to medium-sized parts without reference targets. Its sturdy, lightweight design allows effortless scanning. With powerful onboard chips and a built-in battery, it **can operate completely wirelessly**. The durable, portable case ensures seamless global transportation.

- **Intelligent edge detection:** Inspect closed features like holes, slots, and edges accurately to determine positions and diameters.
- **Compact & plug-and-play:** Measure parts effortlessly for extended periods of time with its lightweight, compact design.
- **CFFIM technology:** Uses Carbon Fiber Frame Integrated Molding (CFFIM) technology, combining lightweight design with exceptional strength.
- **Dual edge computing:** Delivers fast, smooth scanning at 120 FPS.
- **Wireless freedom:** The 3D scanner's built-in battery and the tracker's standard plug-in batteries ensure continuous, long-term operation.
- **Multi-tracker measurement:** Expand measurement range with additional i-Trackers for precise large-scale measurements.

## 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 i-Scanner <sup>(1)</sup>		Up to 0.020 mm (0.0008 in)
Accuracy for i-Tracker <sup>(1)</sup>		Up to 0.025 mm (0.0009 in)
Tracking distance per i-Tracker		3200 mm (126.0 in)
Volumetric accuracy <sup>(2)</sup> (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 × 9.0 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 × 3.4 in × 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.



Type	NimbleTrack-C
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

(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.

**i** For inquiries please contact us at:  
 (800) 276-1372 | [3di-sales@3dinfotech.com](mailto:3di-sales@3dinfotech.com)



Founded in 2005 based in Irvine, California, **3D Infotech** is a **3D software solution provider** for **quality control automation** and adaptive manufacturing applications in a wide variety of industry verticals.

- 7 Hubble, Irvine, CA 92618, USA
- [usa@3dinfotech.com](mailto:usa@3dinfotech.com)
- [www.3dinfotech.com](http://www.3dinfotech.com)
- (800) 276-1372

- Latin America**  
[latam@3dinfotech.com](mailto:latam@3dinfotech.com)
- Europe & Middle East**  
[emea@3dinfotech.com](mailto:emea@3dinfotech.com)
- Asia Pacific**  
[apac@3dinfotech.com](mailto:apac@3dinfotech.com)