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**Innovation Meets Digitization** 





# **Company Introduction**

SCANTECH (HANGZHOU) CO., LTD. is a global provider of comprehensive 3D solutions. We specialize in R&D, production, and sales of 3D scanners and 3D systems and boast a long history of developing hardware and software. We offer two main product categories: industrial high-precision 3D scanners and professional cost-effective 3D scanners, including portable 3D scanners, tracking 3D scanners, industrial automated 3D systems, and professional color 3D scanners.

Our products are widely used in industrial sectors such as aerospace, automotive, engineering machinery, transportation, 3C electronics, and green energy, as well as in digital application industries including education and research, 3D printing, art and museum, medical and health, public security and justice, virtual world, etc. We are dedicated to providing high-precision, portable, and intelligent 3D scanners to customers and striving to become a globally leading brand of 3D visual measurement.

### **Composite 3D Scanner**



### KSCAN **Experience Diverse Ultimate** from Metrology Measurement



### **Smart 3D Scanner**



SIMSCAN Small Is the Brand-New Big

05

### **Global 3D Scanner**



ΔXΞ Measuring An Ultra-wide 3D world

07



**3D Probing System** 



TZACKPZQBE Wide-area Measurement for Versatile Uses

### **Wireless 3D Scanning System**



NIMBLETRACK NEW Nimble and Wireless, Easier Than Ever



### **Optical 3D Measurement System**



T ZACKSCAN - SHAZE





TRACKSCAN-P

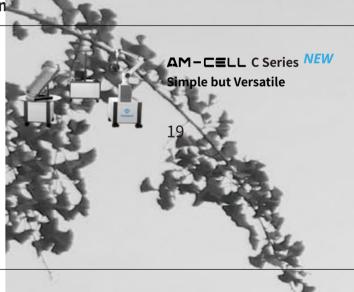
**Intelligent Tracking without Targets** 

### **Optical Automated 3D Measurement System**



AM-DESK **Automated 3D Measurement** Station

17



### **Photogrammetry System**



MSCAN-LIS **Accuracy Trigger at** Large-scale Metrology



# **3D Scanning Application**

SCANTECH provides full high accuracy 3D measuring solutions according to the specific requirements of different industries. Our solutions are adapted to all kinds of areas such as aerospace, auto, transport, 3D printing, 3D visualization, home decoration, etc.







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.

### **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

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

### **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.

### **Automated 3D Inspection**

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



### 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  $\times$  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.

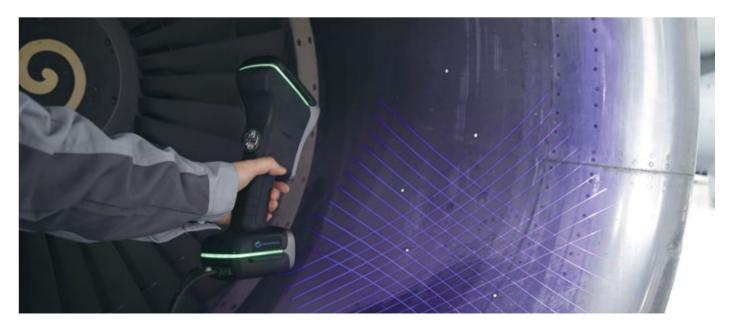
**Pipe measurement:** It is capable of 3D scanning pipes of different sizes and materials for reverse engineering and inspection.

**Automated 3D system:** It can be paired with Scantech's automated 3D inspection system to conduct automated batch inspections.

### **Technical Parameter**

Туре		KSCAN-Magic	KSCAN-Magic II		
	Ultra-fast scanning	11 blue laser crosses	17 blue laser crosses		
Scan mode	Hyperfine scanning	7 blue parallel laser lines			
Scan mode -	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)			
S	Scanning rate up to	2,700,000 measurements/s	4,150,000 measurements/s		
S	canning area up to	1440 mm × 860 mm	n (57.0 in × 33.9 in)		
	Laser class	CLASS II	(eye-safe)		
	Resolution up to	0.010 mm	(0.0004 in)		
Photogrammetry	Scanning area	3760 mm × 3150 mm (148.0 in × 124.0 in)			
system	Depth of field	2500 mm (98.4 in)			
	Work alone	0.015 mm + 0.030 mm/m (0.0006 in + 0.00036 in/ft)			
Volume <sup>(2)</sup> accuracy	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.			
Opera	ating 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, US10914576			

(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

SIMSCAN, the only palm-sized Smart 3D scanner in the market so far, is specially designed for 3D scanning narrow and hard-to-reach areas. Featuring a full-metal housing, it is incredibly sturdy and reliable. SIMSCAN has become a disruptive innovation among professional 3D scanners due to its compact size, simplicity, and robust performance.

SIMSCAN performs high-quality 3D scanning regardless of any restrictions from the working environment. It is ideal for 3D scanning both narrow spaces and large-scale parts. Users can accurately capture every detail of objects and construct 3D models in a very short amount of time with the help of this metrology-grade 3D measurement instrument.

### **Single-handed Control**

- Full-metal housing.
- A weight of only 570 g and a size of 203  $\times$  80  $\times$  44 mm.
- Brings unparalleled simpleness for scanning anything with one hand.

### **Narrow-space Measuring Booster**

- A short camera distance around 130 mm.
- Capable of capturing accurate data in hard-to-reach areas.

### **Remarkable Portability**

- Compact size and excellent portability.
- Conduct 3D measurements anywhere and anytime.

### **Detail, Everywhere**

- Built-in HD cameras and three scanning modes.
- High-precision scanning with an accuracy up to 0.020 mm.

### **Smooth 3D Experience**

- Scanning rate up to 2.8 million measurement/s.
- Designed to offer users a smooth and efficient 3D digitizing experience

Reddot award 2021 winner

### **Automated 3D Measurement**

- Paired with Scantech's automated 3D measurement system.- Automated high-batch measurements supported.
- Improves efficiency for all stages of manufacturing.

### **Technical Parameter**

Туре		SIMSCAN42	SIMSCAN30	SIMSCAN22			
Ultra-fast scanning		17 blue laser crosses	7 blue laser crosses				
Scan mode	Hyperfine scanning	7 blue parallel laser lines					
	Deep hole scanning	1 extra blue laser line					
Д	Accuracy <sup>(1)</sup>		Up to 0.020 mm (0.0008 in)				
Scannin	g rate up to	2,800,000 measurements/s	2,020,000 measurements/s	1,250,000 measurements/s			
Scanning	g area up to	700 mm × 600 mm (27.6 in × 23.6 in)	650 mm × 550 mm	n (25.6 in × 21.7 in)			
La	aser class		Class II (eye-safe)				
Resolu	tion up to	0.020 mm (0.0008 in)					
Malana and an and	Work alone	0.015 mm + 0.035 mm/m (0.0006 in + 0.0004 in/ft)					
Volume accuracy <sup>(2)</sup>	Work with MSCAN-L15	0.015 mm + 0.012 mm/m (0.0006 in + 0.00014 in/ft)					
Stand	l-off distance	300 mm (11.8 in)					
Dep	oth of field	550 mm (21.7 in)					
Out	put formats	stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.					
Operating t	emperature range	-10°C - 40°C (14°F-104°F)					
Inte	rface mode	USB 3.0					
Dimensions		203 mm × 80 mm × 44 mm					
Weight		570 g					
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 Part3 standard and JJF 1951 specification, sphere spacing error (SD) performance is evaluated.





The AXE-B17 3D scanner utilizes optical measurement technology with a scanning speed of 2,000,000 measurements/s, quickly capturing the 3D data of an object to obtain precise deviations information off the geometry of a surface.

With built-in photogrammetry, the AXE-B17 outputs data from a ultra-large scanning area with metrology-grade measurement accuracy. Regardless of limitations in size, shape, material and complexity of the object, the AXE-B17 can flexibly choose working modes with efficient, unrivaled-speed scanning and accurate deep hole scanning. It generates high precision 3D inspection of medium to large-sized projects without the aid of extra devices.

### **Extremely fast Response**

- With its 17 cross-blue laser lines, the AXE-B17 enables extremely fast and precise response with 2,000,000 measurements/s, offering an extraordinary work efficiency.

### **Unprecedented Patent**

- Our global initiative, built-in photogrammetry system is tailored for measuring medium to large-sized objects, with 0.030 mm/m of volumetric accuracy.

### Flexible Switching between Scanning Modes

 Offers flexibility of switching between scanning modes adjusted to your scanning needs: Efficient and unrivaled scanning speed, Accurate scanning in deep holes, suitable to work on intricate positions, such as deep holes and dead

### **Ultra-wide Vision**

- Ultra-wide scanning area of 860 mm  $\times$  600 mm which allows an optimal and smoother 3D scanning experience.



### **Technical Parameter**

Ту	/pe	AXE-B17	AXE-B11			
	Ultra-fast scanning	17 blue laser crosses 11 blue laser crosses				
Scan mode Deep hole scanning		1 extra bu	le laser line			
Accı	uracy (1)	Up to 0.020 mm (0.0008 in)				
Measureme	ent rate up to	2,000,000 measurements/s 1,300,000 measurements/s				
Scanning	area up to	860 mm × 600 mm (33.9 in × 23.6 in)	550 mm × 600 mm (21.7 in × 23.6 in)			
Scanning area	Scanning area	3760 mm x 3150 mm (148.0 in × 124.0 in)	2500 mm x 3000 mm (98.4 in × 118.1 in)			
(photogrammetry)	Depth of field	2500 mr	n (98.4 in)			
Laser	class	CLASS II (eye-safe)				
Resolution up to		0.025 mm (0.0009 in)				
Work alone		0.020 m m+ 0.030 mm/m (0.0008 in + 0.00036 in/ft)	0.020 m m+ 0.035 mm/m (0.0008 in + 0.0004 in/ft)			
Volume accuracy (2)	Work with 1m reference bar	0.020 mm + 0.020 mm/m (0.0008 in + 0.00024 in/ft)				
	Work with MSCAN-L15	0.020 mm + 0.012 mm/m (0.0008 in + 0.00014 in/ft)				
Stand-of	f distance	300mm (11.8 in)				
Depth	of field	500mm (19.7 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, CN2049444431U, CN204902788U CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U, CN106403845E CN209197685U, CN209263911U, CN206905709U, CN107202554B, US10309770B2, KR102096806B1, KR102209255U US10914576B2CN204329903U, CN104501740B, CN104165600B, CN204988183U, CN204854633U, CN2049444431U, CN204902788U, CN105068384B, CN105049664B, CN204902784U, CN204963812U, CN204902785U, CN204902790U CN106403845B, CN209197685U, CN2049023911U, CN206905709U, CN107202554B, US10309770B2, KR1022096806B KR102209255B1, US10914576B2				

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

(2) ISO 17025 accredited: Based on VDI/VDE 2634 Part3 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

### **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**



Туре		TrackProbe		
	10.4 m³ (Tracking distance 3.5 m)	0.049 mm (0.0019 in)		
Volumetric accuracy (1)	28.6 m³ (Tracking distance 5.0 m)	0.067 mm (0.0026 in)		
	49.0 m <sup>3</sup> (Tracking distance 6.0 m)	0.089 mm (0.0035 in)		
Measuren	nent distance (per tracker)	Max 10 m (393.7 in)		
Part size	e 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.







# NIMBLETQACK NEW

The NimbleTrack 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 ushers in the third generation of Scantech's 3D scanning technology featured by intelligent and wireless 3D scanning. With its wireless, target-free, precise 3D scanning and portability, NimbleTrack 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 enables users to capture 3D data with meticulous details and industrial-grade precision.

- Both NimbleTrack's 3D scanner and tracker have powerful edge computing modules.

### **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.

### **Get the Most From Your NimbleTrack**

### Intelligent Edge Detection

-Precise edge detection to inspect closed features.

- 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.



- Enables fast scanning at a high frame rate of 120 FPS.

- Saves the need for a power supply and targets sticking.



### **Technical Parameter**

Ту	/pe	NimbleTrack-C	
	Ultra-fast scanning	17 blue laser crosses	
Scan mode	Hyperfine scanning	7 blue parallel laser lines	
	Deep hole scanning	1 blue laser line	
Accuracy for sca	anner-only mode (1)	Up to 0.020 mm (0.0008 in)	
Accuracy	for system (1)	Up to 0.025 mm (0.0009 in)	
Tracking distan	nce per i-Tracker	3200 mm (126.0 in)	
Volumetric accuracy (2)	Tracking distance 3.2 m)	0.064 mm (0.0025 in)	
Volumetri (With MSCAN photo	c accuracy grammetry system )	0.044 mm + 0.012 mm/m (0.0017 in + 0.00014 in/ft)	
Hole positi	on accuracy	0.050 mm (0.0020 in)	
Laser	r class	Class II (eye-safe)	
Resoluti	ion up to	0.020 mm (0.0008 in)	
Stand-of	f 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	
Measureme	nt rate up to	4,900,000 measurements/s	
Dimension	of i-Scanner	238 mm $\times$ 203 mm $\times$ 230 mm (9.4 in $\times$ 8.0 in $\times$ 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	fi-Tracker	2.2 kg (Net weight) (4.85 lb),2.6 kg (Battery and wireless module included) (5.73 lb)	
Size of prot	tection case	1000 mm × 425 mm × 280 mm (39.4 in × 16.7 in × 11.0 in)	
Output	t format	.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.	
Operating tem	perature 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	
Interfac	ce mode	USB 3.0, Network Interface	
Pat	ents	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,CN109000582B	

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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.





### TRACKSCAN-SHARP

TrackScan-Sharp, consisting of a portable 3D scanner i-Scanner and an optical i-Tracker, is a new generation of Scantech's optical 3D measurement system for measuring large-scale parts. It brings optical measurement to a whole new level by offering a tracking distance of up to 6 meters, a volumetric range of 49 m<sup>3</sup>, and volumetric accuracy of up to 0.049 mm (10.4 m<sup>3</sup>).

Engineered with i-Tracker's on-board processor for edge computing, 25-megapixel industrial cameras, and cutting-edge technologies, the TrackScan-Sharp is ideal for measuring large-sized parts or multiple parts at the same time without the hassle of moving trackers frequently.

### **Ultra-high Pixels for Intricate Details**

- Equipped with a brand-new 25-MP industrial camera.
- DLA technology, long-distance depth of field, and strong anti-interference ability.
- Acquire clear images in a range as long as 6 meters.

### **Edge Computing & Impressive Performance**

- i-Tracker's onboard processor for efficient image processing and data computation.
- i-Tracker delivers coordinates in real time to save the computer's computing power.

### **Fast 3D Scanning**

- Measure parts without having to stick reference targets.
- Measure multiple parts at the same time.

### **Vast Applications**

13

- Shadow-less-light edge detection.
- Obtain the 3D data of objects with different surfaces.

### Large-volume Measurement

- Wide measurement volume and robust edge measurement algorithm.
- One-stop scanning of large-scale parts.
- No need of frequent movements of tracker.

### **New Era of Data Transmission**

- Transfer data both with and without wires.
- Wired mode in line with industrial measurement standards.
- Optional and convenient wireless mode supports different applications.

### **Remarkable Accuracy**

- Metrology-level and high-precision measurement.
- Large tracking volume, increased by around 200%.

### **Diverse Uses**

- Paired with a handheld probe i-Probe to measure reference holes, hidden points or hard-to-reach areas with ease and high accuracy.
- Tracker can be used to form M-Track, an intelligent robotic path planning and guiding system.

### **Technical Parameter**

	Туре	TrackScan-Sharp 49		
	Ultra-fast scanning	21 blue laser crosses		
Scan mode	Hyperfine scanning	7 blue parallel laser lines		
	Deep-hole scanning	1 blue laser line		
	Accuracy (1)	Up to 0.025 mm (0.0009 in)		
Measur	rement rate up to	2,600,000 measurements/s		
Scan	ning area up to	500 mm × 600 mm (19.7 in × 23.6 in)		
	Laser class	Class II (eye-safe)		
Res	solution up to	0.020 mm (0.0008 in)		
	10.4 m³ (Tracking distance 3.5 m)	0.049 mm (0.0019 in)		
Volumetric accuracy (2)	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)		
Tracking	Distance per i-Tracker	6000 mm (236.2 in)		
Volui (with MSCAN p	metric accuracy photogrammetry system)	0.044 mm + 0.012 mm/m (>6m) (0.0017 in + 0.00014 in/ft)		
	osition accuracy	0.050 mm (0.0020 in)		
Camera	a pixels of i-Tracker	25 MP		
Star	nd-off distance	300 mm (11.8 in)		
D	epth of field	400 mm (15.7 in)		
Part size r	ange (recommended)	0.1 m-12 m (3.9 in-472.4 in)		
Operating	g temperature range	0 °C-45 °C (32°F-113°F)		
Operating humid	lity range (non-condensing)	10-90% RH		
Interface mode		USB 3.0, Network Interface		
Certification		CE, ROHS, WEEE		
Patents		CN106500627B, CN106500628B, CN206132003U, CN204854633U, CN2049444431U, CN204902788U, CN204963812U, CN204902785U, CN106403845B, US10309770B2, CN204854633U, CN105068384B, CN105049664B, CN106403845B, CN214375417U, CN214379242U, CN214379241U, CN214149174U, CN109000582B, CN112802002B, CN210567185U, CN211121096U, CN114001671B, CN114001696B, CN114554025B, CN114205483B, US10309770B2, US11060853B2, KR102096806B1, EP3392831B1, CN218411072U, CN115325959B, CN218103238U, CN218103220U, CN114627249B, US11493326B2, CN115695763B, CN307756797S, CN218584004U		

(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.

Туре		i-Probe 500		
	10.4 m³ (Tracking distance 3.5 m)	0.049 mm (0.0019 in)		
Volumetric accuracy (1)	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)		
Measuren	nent distance (per tracker)	Max 10 m (393.7 in)		
Part siz	e range (recommended)	0.1 m - 12 m (3.9 in × 472.4 in)		
Cam	era 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)		
Opera	ting temperature range	0-45°C (32°F-113°F)		
Operating hur	midity 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.



## TRACKSCAN-P

Engineered with intelligent optical tracking measurement and high-resolution cameras, TrackScan-P can precisely measure parts without having to stick reference targets.

This optical 3D measurement system, consisting of a portable 3D scanner and an optical tracker E-Track, suits well for 3D scanning large-scale objects. It can be widely applied for quality control, product development, reverse engineering, and more in industries such as aerospace, automotive, rail transport, and mold.

### **Optical Tracking for Instant 3D Scanning**

- TrackScan-P 3D system's optical tracking allows users to start scanning instantly without having to stick targets, significantly improving efficiency and decreasing costs.

### **Precise Edge Detection**

- Users can inspect circles, grooves, and machined holes of stamping parts in various finishes on the site. The efficient edge detection is enabled thanks to its gray value measurement and optional auxiliary light module.

### **Extendable Applications**

- Measurement range can be dynamically extended by adding more F-Tracks
- Paired with a portable CMM T-Probe to probe inaccessible areas with high single-point repeatability of 0.030 mm.
- Integrated with Scantech's wireless communication link AirGo Pro to enable free and mobile 3D scanning.

### Unrivaled-fast & Detail-maker

 TrackScan 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**

Made from aerospace-grade materials, it is sturdy and reliable.
 It also boasts a strong anti-interference capability to operate smoothly. Due to its advanced algorithm, TrackScan is robust in capturing 3D data of reflective and dark surfaces.

### **Extendable Applications**

- Be mounted on a robotic arm to form an automated 3D measurement system AutoScan-T
- Combined with path planning software for intelligent robotic path planning and guiding.

### **Technical Parameter**

Ту	pe	TrackScan-P550 TrackScan-P542				
	Ultra-fast scanning	21 blue laser crosses	17 blue laser crosses			
Casa assada	Hyperfine mode B	7 blue parali	lel laser lines			
Scan mode	Deep hole scanning	1 extra blu	e laser line			
Accı	uracy <sup>(1)</sup>	Up to 0.025 mm (0.0009 in)				
Measureme	nt rate up to	2,600,000 measurements/s 2,200,000 measurements/s				
Scanning	area up to	500 mm × 600 mm	n (19.7 in × 23.6 in)			
Laser	r class	Class II(	eye-safe)			
Resoluti	ion up to	0.020 mm	(0.0008 in)			
Volumetric (2)	10.4 m <sup>3</sup>	0.060 mm	(0.0024 in)			
accuracy	18.0 m <sup>3</sup>	0.075 mm (0.0030 in)				
Volumetrio (With MSCAN photo		0.044 mm + 0.012 mm/m (0.0017 in + 0.00014 in/ft)				
Single-point portable	repeatability of CMM T-Probe	0.030 mm (0.0012 in)				
Hole posit	ion accuracy	0.050 mm (0.0020 in)				
Object Size (	(Recommend)	100 - 8000 mm (3.9 in - 315.0 in)				
Stand-of	f distance	300 mm (11.8 in)				
Depth	of field	400 mm (15.7 in)				
Output	formats	.stl, .obj, .ply, .asc, .igs, .txt, .mk2, .umk and etc.				
Operating tem	perature range	-10°C - 40°C (14°F-104°F)				
Operating humidity (Non-condensation)		10%-90% RH				
Interface mode		USB 3.0				
Certification		CE, UL				
Patents		CN106500627, CN106500628, CN206132003U, CN204854633U, CN204944431U, CN204902788U, CN204963812U, CN204902785U, CN106403845, US10309770B2, CN204854633U, CN105068384B, CN105049664B, CN106403845B, CN111694665A, CN214375417U, CN214379242U, CN214379241U, CN109000582B, CN112802002B, CN210567185U, CN211121096U, CN214149174U, CN114001671B, CN114001696B, CN114554025B, CN114205483B, CN113514008A, US10309770B2, US11060853B2, KR102096806B1, EP3392831B1				

- $(1) \ \mathsf{ISO}\ \mathsf{17025}\ \mathsf{accredited} \\ \mathsf{:Based}\ \mathsf{on}\ \mathsf{VDI/VDE}\ \mathsf{2634}\ \mathsf{Part}\ \mathsf{3}\ \mathsf{standard}\ \mathsf{and}\ \mathsf{JJF}\ \mathsf{1951}\ \mathsf{specification}, \mathsf{probing}\ \mathsf{error}\ (\mathsf{size})\ (\mathsf{PS})\ \mathsf{performance}\ \mathsf{is}\ \mathsf{evaluated}.$
- (2) ISO 17025 accredited: Based on VDI/VDE 2634 Part3 standard and JJF 1951 specification, sphere spacing error (SD) performance is evaluated.





## 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 Scantech'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
- -Work with different cobots and Scantech's entire fleet of 3D scanners.
- \* AM-DESK Lite does not support the connection to multiple positioners.

### **Technical Specifications**

AM-DESK 60120	AM-DESK Lite	
1200*600*177 mm (47.2 × 23.6 × 7.0 in)	1200*600*180 mm (47.2 × 23.6 × 7.1 in)	
5 KG (165.3 lb)	70 KG (154.3 lb)	
≤ 140 KG (308.6 lb)	≤ 75 KG (165.3 lb)	
50°/S	40°/S	
TCP/IP	CPVIP	
UR/UR5, AUBO/i5; i7	ELITE EC66, UR5, AUBO i5, JAKA ZU5, Han's E05-L, FAIR FR5	
110V-220 V/50-60 Hz	220 VAC/50-60 Hz	
900 W	00W	
	1200*600*177 mm (47.2 × 23.6 × 7.0 in)  5 KG (165.3 lb)  ≤ 140 KG (308.6 lb)  50°/S  TCP/IP  UR/UR5, AUBO/i5; i7  110V-220 V/50-60 Hz	

### 3D Software - FlexScan

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









Data Capturing and Pre-processing



Data Optimization and Output

# AM-CELL C Series NEW

The AM-CELL C 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-mechanists 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 2,600,000 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**

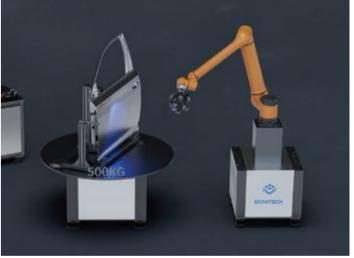
- In-house developed automated measurement software.
- Boasts advanced data capturing and highly intelligent robot control.
- Enables direct connection with a robot and reduces the skill level needed for robot operation.
- Supports both engineer mode and operator mode.



### **Technical Parameter**

Туре	AM-CELL C13X		AM-CELL C15X			AM-CELL C18X	
Space Size	$4\mathrm{m} \times 3\mathrm{m}$		4.5	5 m × 4 m		5 m × 4 m	
Robot Type	Cobot, reaching 1300 mm		Cobot, read	ching 1500 mm	Cobot, reaching 1800 mm		
3D Scanner Supported		Full s	series of Scantech's Optical 3D Measurement System				
Communication Protocol			TCP/IP, U	SB 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	0.75 KW		1 KW 1.5 KW		2 KW	
Motor Type	Absolute Servo Motor				1		











# MSCAN-L15

The Scantech MSCAN-L15 photogrammetry system is designed to deliver high-precision geometric measurements of large-scale parts or components. With a large working or shooting area, and wide depth of field, the MSCAN-L15 reaches a volumetric accuracy of 0.015 mm/m on large-scale projects, and parts from 2 m to 10 m in size.

Compatible with different 3D inspection devices, the MSCAN-L15 can meet stricter measurement accuracy requirements. A unique HDR mode offers strong environment adaptability. Due to its ergonomic design, it is greatly portable and can be held on the hand for an extended period.

The MSCAN-L15 ensures precise, efficient and easy-to-use 3D solutions for large-scale projects in 3D inspection, product development, quality control, etc.

### **Metrology-grade Accuracy**

- Volumetric accuracy of up to 0.012 mm/m, boosting the accuracy by 40%.

### **Deformation Detection**

- Obtain precise 3D data of the deformed workpieces and generate intuitive deviation values.

### **HDR Mode**

- Support HDR mode, blue LED light yields higher accuracy inspection values.

### Multiple add-ons

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

### **Technical Parameter**

Туре		MSCAN-L15	
Volumetric accuracy		0.012 mm/m (0.00014 in/ft)	
	KSCAN	0.015 mm + 0.012 mm/m (0.0006 in + 0.00014 in/ft)	
Volumetric accuracy (work with 3D scanners)	SIMSCAN	0.015 mm + 0.012 mm/m (0.0006 in + 0.00014 in/ft)	
(work with 3D scanners)	AXE	0.020 mm + 0.012 mm/m (0.0008 in + 0.00014 in/ft)	
	TrackScan-P	0.044 mm + 0.012 mm/m (0.0017 in + 0.00014 in/ft)	
Device type		Industrial camera and lens (not DSLR)	
Weight		≤0.58 KG (≤1.28 lb)	
Obtain mark point position		Real-time calculate & display	
Interface mode		Gigabit Lan	
Depth of fie	eld	6.5 m (255.9 in)	
Shooting area up to		9.4 m x 6.9 m (370.1 in × 271.7 in)	
Operating temperature range		-10°C - 40°C (14°F-104°F)	
Patents		CN306051753S	

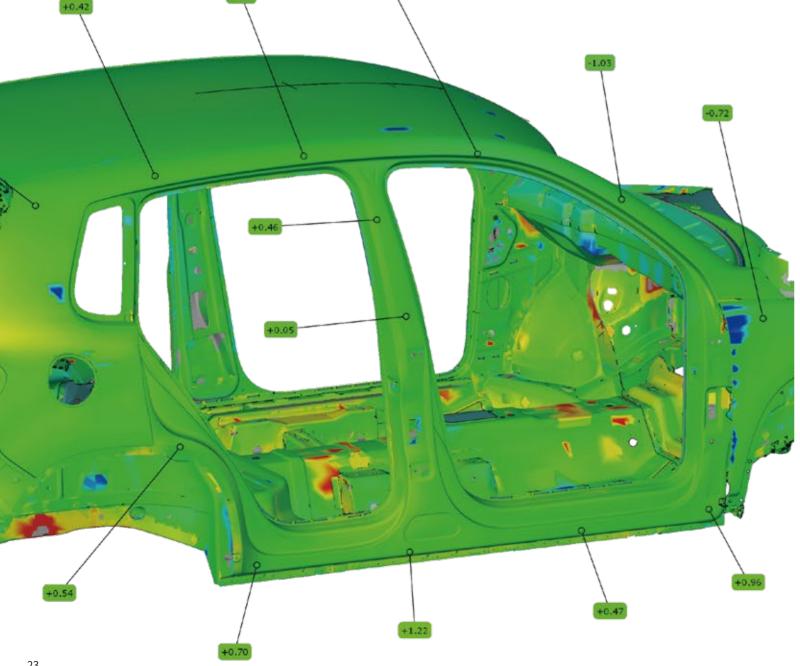


# **SCANVIEWER**

# **Integrated Scan & Inspection 3D Software**

ScanViewer is a free & powerful 3D software that includes inspection and scanning functions such as feature relationships, distance, GD&T and color mapping.

Scanned data can be used for rapid prototyping, reverse engineering, inspection comparison, 3D display, etc.



## **Characteristics**

ScanViewer penetrates all aspects of product R&D, design and production



### GD&T

Users can directly create features, feature analysis, distance measurement, dimension analysis and geometric tolerance according of scan data.



### **Color Map**

Multiple alignment function is available to merge scan data & CAD files for off-line inspection, quick generation of reports for easy analysis and adjustment.



### **Pipe Inspection**

ScanViewer includes professional pipe inspection function that can directly export YBC/LRA data to eliminate deviations of pipe bender.



# What Is Geomagic Control X for Scantech?

Geomagic Control X for Scantech(CXS) is a professional metrology software that lets you capture and process the data from Scantech's 3D scanners to measure, understand, and communicate inspection results to ensure quality everywhere. With CXS, more people in your organization can:

## What Can You Do with Geomagic Control X for Scantech?



# **Professional Inspection Capabilities**



# Use Scantech's handheld 3D Scanners with Confidence

CXS was born to work with data from Scantech's handheld 3D scanners, including composite 3D scanner KSCAN and optical tracking 3D scanner Track-Scan.



### **Automate the Entire Process**

Every aspect of your inspection project is recorded in CXS's model manager.

Additional parts can be inspected with a few clicks – or no clicks at all.



# Combine 3D Scans with T-Probe

Get the best of both worlds – noncontact scanning and contact probes – in one integrated software interface.



# Inspect Surface Damage or Wear

CXS can automatically interpolate what a scanned object's ideal shape is and measure deviation to quantify even minor surface imperfections.



### 2D and 3D GD&T

With extensive Geometric Dimensioning & Tolerancing tools, you can analyze size, form, orientation, and location of features.



### **CXS** measure

- Linear, angular, radial, elliptical, bore depth, counterbore, countersink, and thicknes.
- Straightness, flatness, circularity, cylindricity, parallelism, perpendicularity and more.



### Align the Way You Want

- Automatic feature-based alignment
- Best fit alignment with constraint options
- RPS, datum, and 3-2-1 alignments



### **Compare Scans to CAD**

Beautiful, intuitive color maps show you what is in and out of tolerance and by how much.CXS supports myriad comparison techniques,



# Clear, Interactive 3D Reports for Everyone

Build reports the way you want with templates. And don't worry if you decide to change or add something later – reports update automatically.



### **Worldwide Customers**

SCANTECH products are sold to more than 60 countries and regions, serving over 5000 enterprises such as COMAC, BMW, Volkswagen, GM, Apple, Siemens, JCB and Sany.





















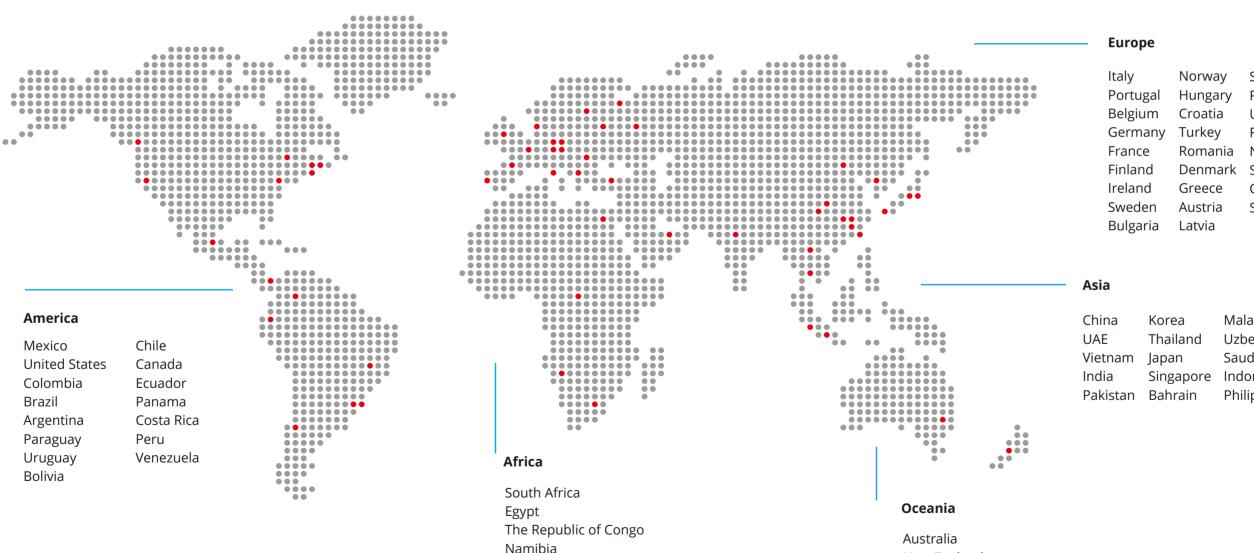












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28