

## Technical Parameter

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

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

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# KSCAN - MAGIC Composite 3D Scanner

## Fast and Smooth, Precise and Diverse



SCANTECH (HANGZHOU) CO., LTD.



# KSCAN - MAGIC

KSCAN-Magic Upgrade Series, the cutting-edging composite 3D scanner that integrates infrared and blue lasers in one versatile instrument, caters to diverse applications. This composite 3D scanner boasts five standard operating modes: large-area scanning with parallel infrared lasers, ultra-fast scanning with blue laser crosses, hyperfine scanning with blue parallel lasers, deep-hole scanning with a single blue laser, and a built-in large-area photogrammetry system.

Our 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 Operating Modes**



**Built-in Large-area Photogrammetry**



**Multi-spectrum 3D Scanning**



**Scanning Rate up to  
4,150,000 Measurements/s**



**Accuracy up to 0.020 mm**



**Depth of Field of 925 mm**







### Large-area Scanning

KSCAN-Magic innovatively adopts large-area scanning powered by 11 infrared parallel laser lines. Its ultimate scanning area reaches 1440 mm × 860 mm, achieving wide-range measurement with ease.



### 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. It is especially suitable for scanning large-sized objects, and measuring efficiently without compromising on accuracy.

### 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.



### Deep Hole Scanning

This mode can accurately capture 3D data of deep holes and hard-to-reach areas.



### 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.



## 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

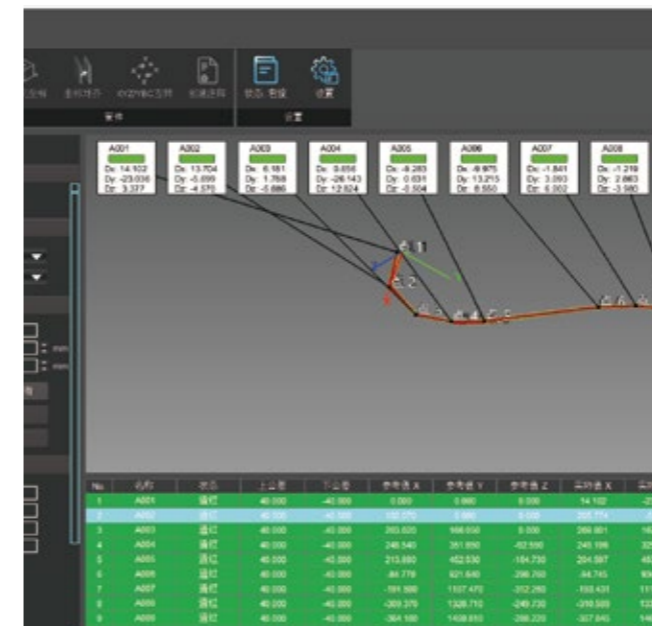
KSCAN-Magic is lightweight and portable and can conduct 3D measurements anywhere and anytime regardless of vibrations, temperature, and humidity. Moreover, KSCAN-Magic is capable of 3D scanning various surfaces to capture precise 3D data, and it performs well even in 3D scanning reflective and black surfaces.



## Massive Functions



**Intelligent edge inspection:** It boasts an optional module for intelligent edge inspection. With high-precision gray value measurement, users can inspect closed features precisely and obtain repeatable measurement results.



**Pipe measurement:** Thanks to KSCAN-Magic's various operating modes, it is capable of 3D scanning pipes of different sizes and materials. When combined with optional software, it can conduct reverse engineering and inspection for pipes.



**Contact probing:** It can be paired with a portable CMM K-Probe to probe inaccessible areas and complex parts, offering comprehensive and precise 3D solutions.



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