

Technical Parameter

Type		KSCAN-Magic	KSCAN-Magic II
Scan mode	Ultra-fast scanning	11 blue laser crosses	13 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	
Laser lines in total		41	45
Accuracy ⁽¹⁾		0.020 mm	
Scanning rate		Up to 1,350,000 measurements/s	Up to 1,650,000 measurements/s
Scanning area		Up to 1440 mm × 860 mm	
Photogrammetry system	Standard configuration	Built-in	
	Scanning area	3760 mm × 3150mm	
	Depth of field	2500 mm	
Laser class		CLASS II (eye-safe)	
Resolution		0.010 mm	
Volume accuracy ⁽²⁾	Work alone	Up to 0.015 mm + 0.030 mm/m	
	Work with 1m reference bar	Up to 0.015 mm + 0.020 mm/m	
	Work with MSCAN-L15	Up to 0.015 mm + 0.015 mm/m	
Stand-off distance		300 mm	
Depth of field		925 mm	
Portable CMM K-Probe	Optional	Support	
	Single point repeatability	0.030 mm	
	Tracking frequency	60 hz	
Intelligent edge inspection module	Optional	Support	
	Edge accuracy	0.030 mm	
Pipe inspection module	Optional	Support	
	Output formats	YBC / LRA / compensation value	
Output formats		.stl, .ply, .obj, .igs, .stp, .wrl, .xyz, .dae, .fbx, .ma, .asc or customized	
Operating temperature range		-10°C~40°C	
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	

Massive Functions

Built-in photogrammetry system, intelligent edge detection, contact probing and pipe measurement fulfill diverse application needs.



SCANTECH™

KSCAN-MAGIC Composite 3D Scanner

Experience Diverse Ultimate
From Metrology Measurement



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⁽¹⁾ ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JIF 181 specification, probing error (R36) (PS) performance is evaluated.
⁽²⁾ ISO 17025 accredited: Based on VDI/VDE 2634 Part 3 standard and JIF 1901 specification, sphere spacing error (SD) performance is evaluated.

KSCAN-MAGIC

KSCAN-Magic composite 3D scanner opens up the first introduction of infrared laser + blue laser technology with five standard working modes: global initiative parallel infrared laser large area scanning, blue laser crosses fast scanning, blue parallel laser fine scanning, single blue laser deep hole scanning, built-in photogrammetry system.

KSCAN-Magic series have a revolutionary breakthrough in performance. Its unparalleled scanning speed, accuracy, detail, scanning area, and depth of field greatly optimize the 3D measurement workflows and accelerate the product time-to-market. To obtain data on hard-to-reach or complex surfaces, KSCAN-Magic series can be equipped with portable CMM K-Probe, providing a comprehensive 3D digital solution for precision measurement.

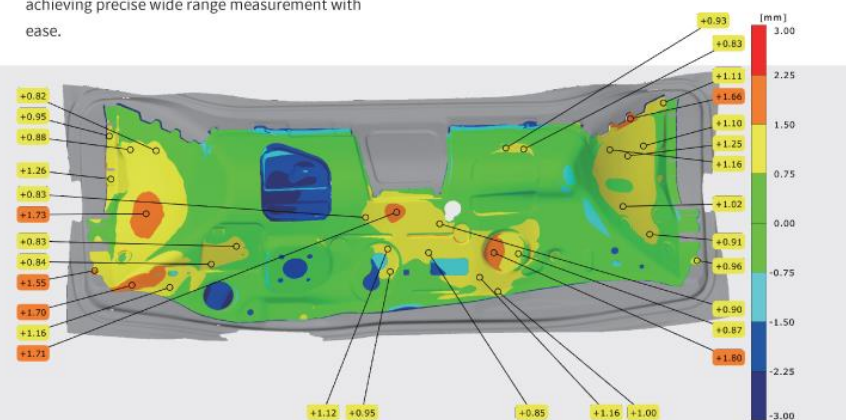


Innovative Infrared Laser

KSCAN-Magic innovatively adopts infrared laser scanning technology in worldwide. Its ultimate scanning area reaches 1440 mm × 860 mm, achieving precise wide range measurement with ease.

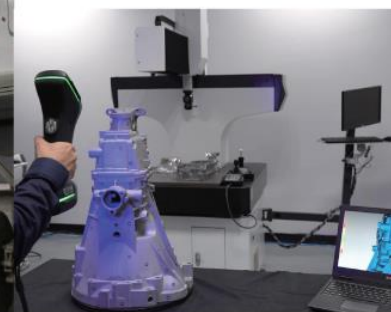
Metrology-grade NDT Measuring

0.020 mm of scanning accuracy and 0.03 mm/m of volume accuracy; deliver ultra-high precision NDT for the aerospace industry.



Extreme-clear Details

Under hyperfine scanning mode, KSCAN-Magic 3D scanner can accurately obtain complete data on the surface of complex objects, easily capturing every detail with resolution of 0.010 mm.



Single Laser Line Scanning

Single laser line scanning mode accurately and quickly captures 3D data of deep holes and dead angle positions.



Effortless Efficiency

With 41 laser lines, KSCAN-Magic 3D scanner delivers ultra-fast scanning rate of 1,350,000 measurements/s. By flexibly switching the scanning modes, it satisfies different application needs, dramatically improving working efficiency.



No Fear of Harshness

KSCAN-Magic supports super-high work adaptability in harsh environment; realistically restores the precise 3D data of reflective and black surface.

Technical Parameter

Type	KSCAN20	
Scan mode	Standard mode R	Hyperfine mode B
Laser source	7 red laser crosses(+ 1 extra red line)	5 blue parallel laser lines
Accuracy ⁽¹⁾	0.020 mm	
Built-in photogrammetry	Support	
Hyperfine scan	Support	
Volumetric accuracy ⁽²⁾ (based on part size)	0.020 mm + 0.035 mm/m	0.010 mm + 0.035 mm/m
Volumetric accuracy with ⁽²⁾ high-precision reference bar	0.020 mm/m	
Resolution	0.050 mm	0.010 mm
Measurement rate	650,000 measurements/s	
Laser class	CLASS II (eye-safe)	
Scanning area	550 mm X 600 mm	
Scanning area (photogrammetry)	2500 mm X 3000 mm	
Stand-off distance	500 mm	180 mm
Depth of field	620 mm	200 mm
Depth of field (photogrammetry)	2500 mm	
Single point repeatability	0.030 mm	
Tracking frequency (portable CMM)	60 hz	
Edge accuracy	0.030 mm	
Pipe inspection in software	Support YBC/LRA data	
Output formats	.stl, .ply, .obj, .igs, .stp, .wrl, .xyz, .dae, .fbx, .ma, .asc or customized	
Interface mode	USB 3.0	
Operating temperature range	-10~40 °C	
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	

(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.

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KSCAN
3D SCANNER

Dual Laser mode

Photogrammetry

Probing

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KSCAN

KSCAN 3D Scanner integrates photogrammetry function and dual laser scan mode which are global initiative technologies. The built-in photogrammetry function greatly expands the scan area and improves volumetric accuracy. KSCAN combines high efficiency and ultra-detail benefitting from dual laser scan mode. Moreover, KSCAN offers practical solutions targeting at objects range from 0.02m to 10m.

KSCAN supports probing that can correctly acquire the 3D data of hole, plane, edge, etc. KSCAN can fulfill different measurements and analysis functions such as pipe measurement, deformation detection and 3D inspection with 3D software---ScanViewer, which conducts effective, reliable and full-scale 3D measurement technologies for product design and inspection professionals.



High volumetric accuracy



Probing



Resolution Up to 10μm



Edge inspection

Unlimited Measuring Range

KSCAN has built-in photogrammetry system. The accuracy reaches 0.02mm and the volumetric accuracy is up to 0.035mm/m. It can individually achieve high accurate 3D measurement range from 0.02m to 10m.

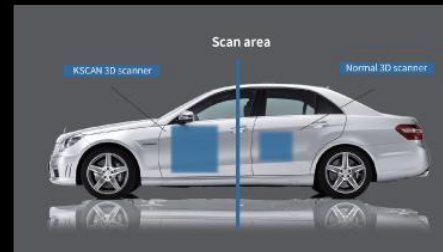
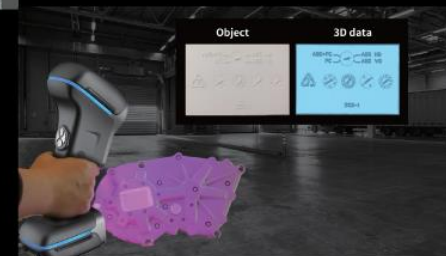


Probing

KSCAN can quickly obtain accurate 3D data with probing and satisfy strict measuring requirements.

Incomparable Resolution

Dual laser scan mode are freely switched. Ultra-high resolution easily captures the texture data of a coin. The resolution is up to 10μm.



Higher Efficiency

KSCAN upgrades in speed and scan area, which greatly reduces cost of device, time and labor.

Multi-functional 3D Software

KSCAN can work with ScanViewer to fulfill different inspection functions such as pipe measurement, deformation detection and GD&T.



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