



TOLERANS YAZILIM VE MÜH.HİZ.LTD.ŞTİ

0541 840 65 39

info@zerotolerans.com



www.zerotolerans.com

Neva Home Ofis vedik OSB 1455. sokak No:22/110 Yenimahalle/Ankara
Üçevle Mah. 36. sokak No:72 Nilüfer/Bursa



Intelligent and Wireless

KSCAN-E

Flagship All-in-one 3D Scanner



Versatile



Precise

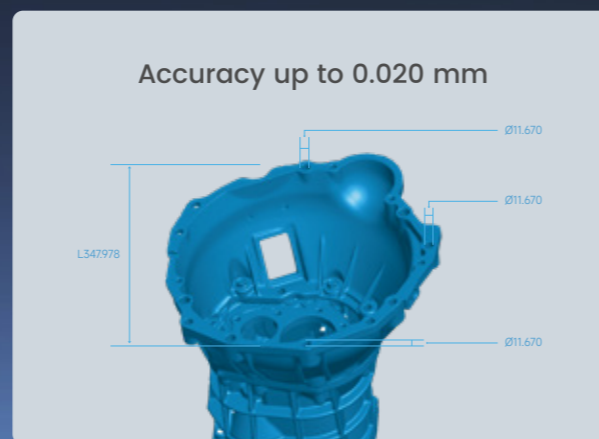
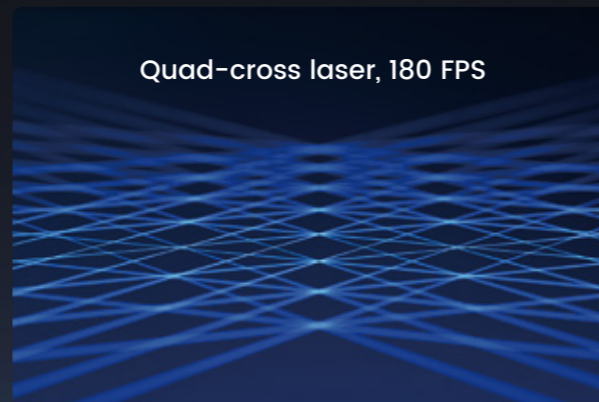


Powerful



The flagship KSCAN-E is an intelligent, wireless, and all-in-one 3D scanner designed to redefine industrial measurement with unmatched precision and efficiency. Whether scanning large surfaces or fine details, its 6 operating modes ensure full-field and high-quality data capture. With a built-in computing module and dual power system, it delivers seamless, wireless operation for maximum flexibility in any environment.

With an accuracy up to 0.020 mm, the KSCAN-E meets the demands of even the most challenging applications. From aerospace and automotive to heavy industry and energy, KSCAN-E delivers a precise, flexible, and intelligent 3D solution, making everything from design verification to quality control smarter and more efficient.



Ultra-fast scanning



Large-area scanning



Hole and edge inspection



Hyperfine scanning



Deep-hole scanning



Adaptive photogrammetry

Powerful Scan at Your Fingertips

Exceptional Accuracy

With exceptional precision and reliability, KSCAN-E sets a new standard for non-destructive inspection solutions across various industrial applications.

0.020 mm

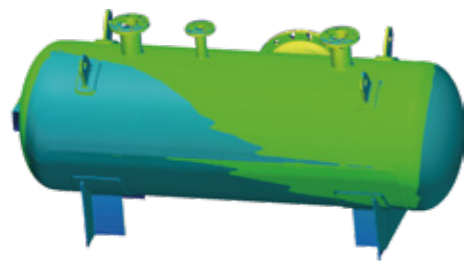
Accuracy

0.015 mm + 0.015 mm/m

Volumetric accuracy when paired with 800-mm precise scale bar

0.015 mm + 0.012 mm/m

Volumetric accuracy when paired with the MSCAN-L15 photogrammetry system



Efficient Measurement

Its innovative quad-cross technology accelerates point cloud generation. Combined with a high frame rate and measurement rate, it greatly enhances efficiency.

4×27

Quad-cross blue laser lines

8.29 million

Measurements/s

180 FPS

Frame rate



Excellent Detail Capture

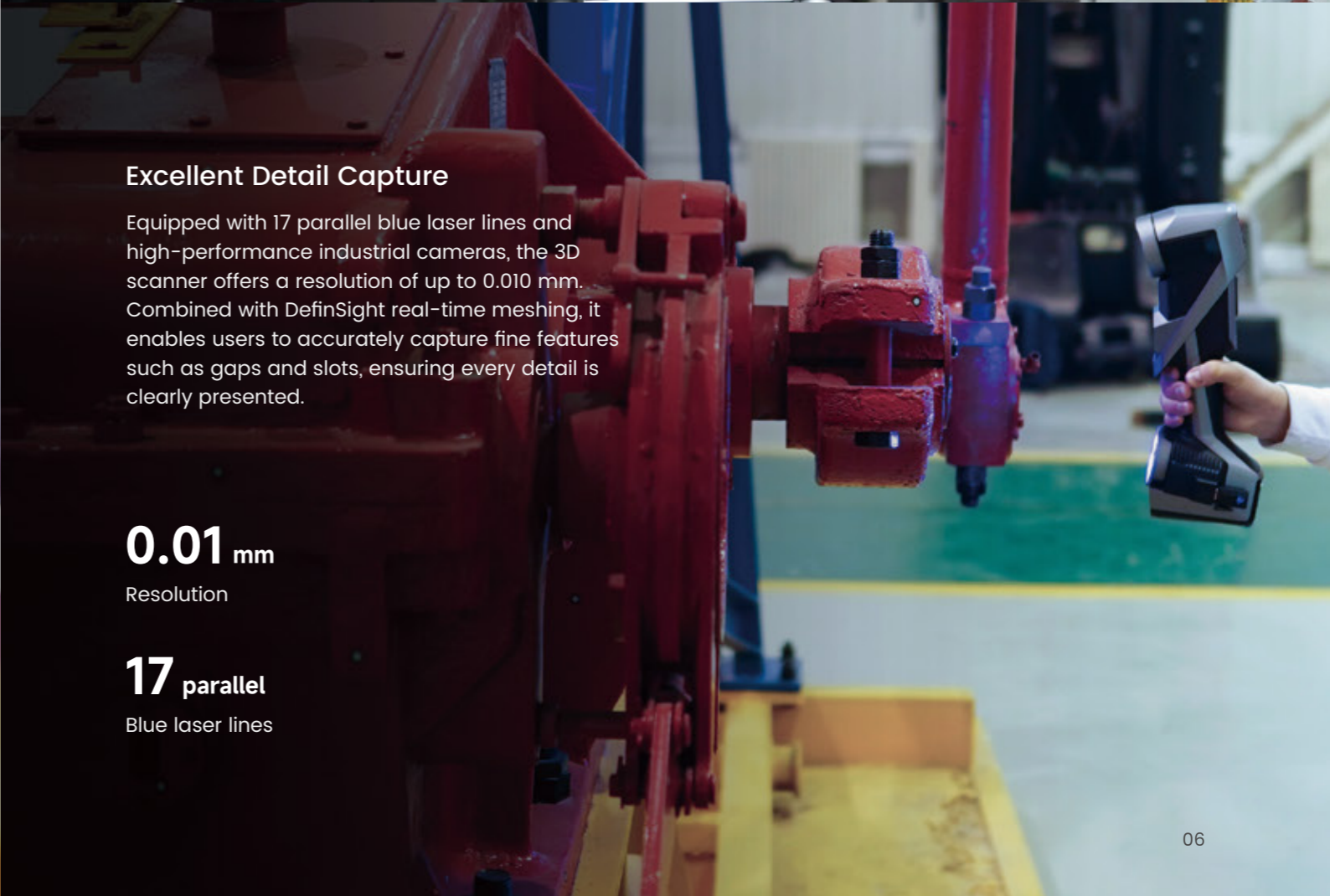
Equipped with 17 parallel blue laser lines and high-performance industrial cameras, the 3D scanner offers a resolution of up to 0.010 mm. Combined with DefinSight real-time meshing, it enables users to accurately capture fine features such as gaps and slots, ensuring every detail is clearly presented.

0.01 mm

Resolution

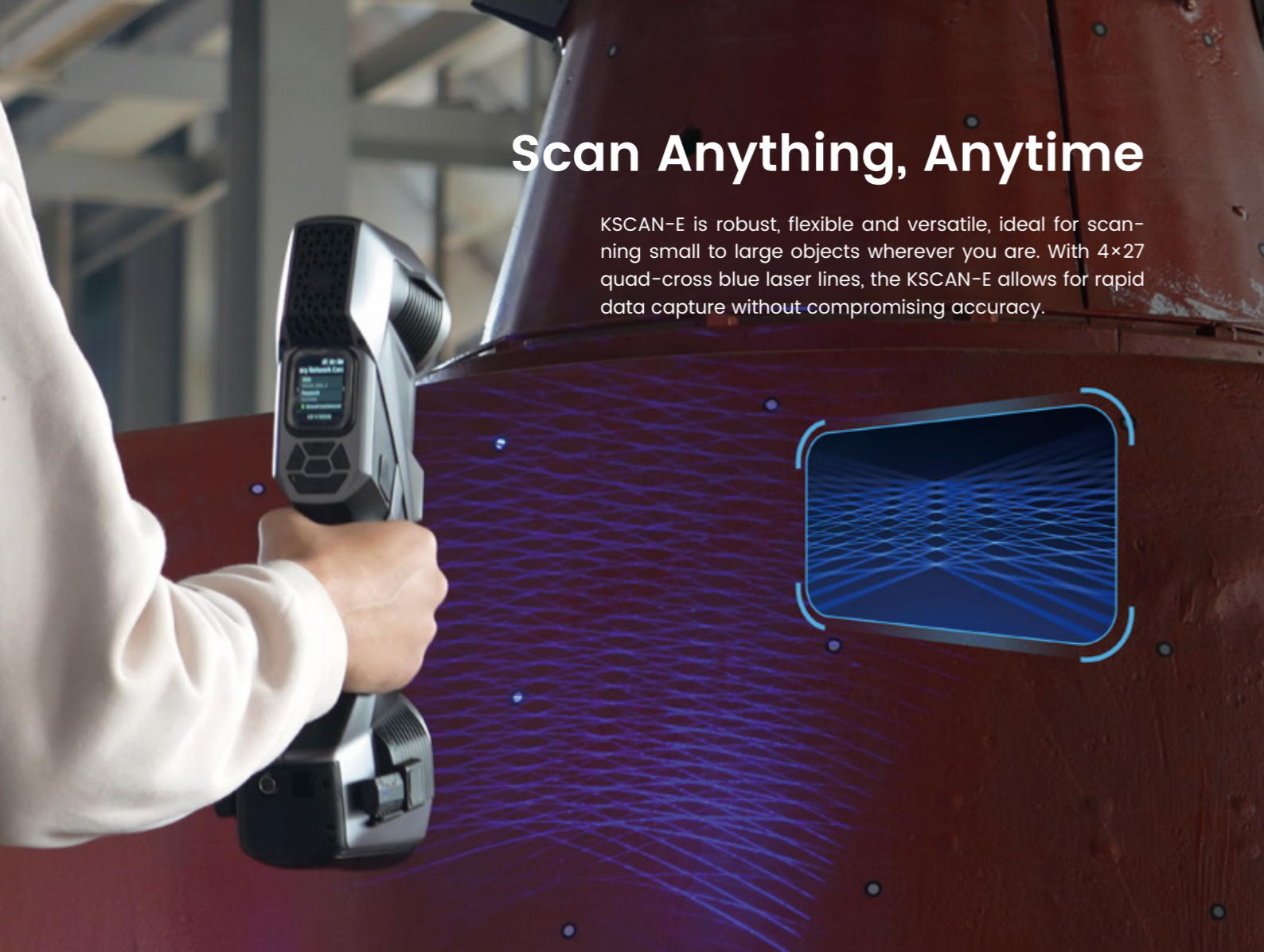
17 parallel

Blue laser lines



Scan Anything, Anytime

KSCAN-E is robust, flexible and versatile, ideal for scanning small to large objects wherever you are. With 4x27 quad-cross blue laser lines, the KSCAN-E allows for rapid data capture without compromising accuracy.



Fine Details

Hyper-fine scanning with parallel blue lasers, perfect for capturing intricate details of parts such as injection molds and gear teeth with exceptional precision.



Large Parts

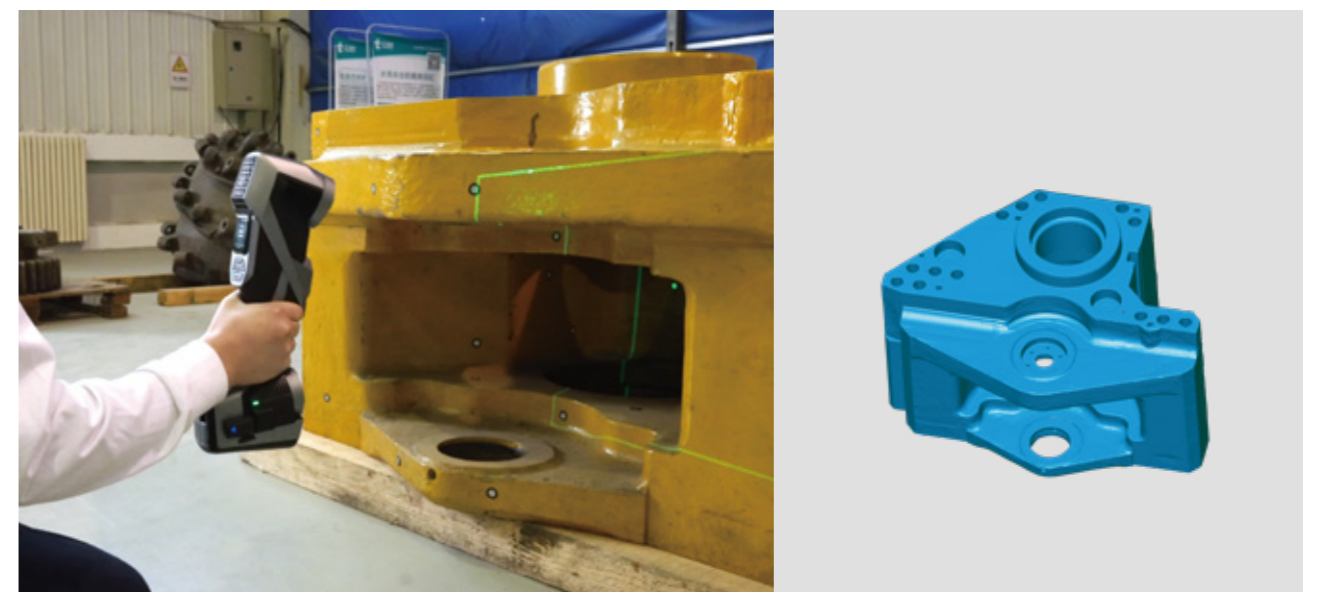
Adaptive photogrammetry system to eliminate cumulative errors, excellent for measuring large parts such as car body and heavy equipment.

- Ensure high volumetric accuracy even in complex, large-scale environments
- Support target optimization through scale bar



Infrared large-area scanning to reduce the number of targets and enhance efficiency.

- 38 infrared laser lines
- Max working distance of up to 1.5 m
- Large scan area of up to 1440 mm * 1000 mm



Hole & Edge

High-precision grayscale recognition for various holes and slots.
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 such as engine cylinders and internal grooves of cast parts.



Various Applications



Aerospace



Automotive



Railway and Ships



Mold



Energy & Heavy Industry



Non-industry

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. Whether you are in the lab, at the workshop, or working in the field, you can enjoy true freedom to capture precise 3D data with incredible ease.



Built-in computing module for on-board data processing



Built-in battery supports dual power supply cycles



Dual WNIC design for high-speed data transmission

Exceptional User Experience

Step 1

Transport to the site

Compact, carry-on-sized protective case for easy transport. Optional versatile case for storing 3D scanner, scale, and accessories securely.



Step 2

Wireless Connection

No cables are needed—just power on the device and router to start using.



Step 3

Quick Calibration

Only 20 seconds needed to calibrate.



Step 4

One-Click Scanning

Smart button control—no need to operate a computer.



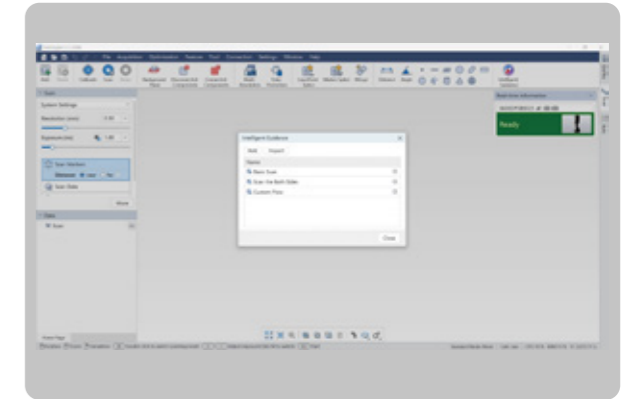
Built-In Touchscreen

Check status of 3D scanners and view software prompt on full-color touchscreen with an intuitive user interface.



Smart Guidance

Get started quickly with DefinSight software and customized guidance, cutting down on training time and making adoption smoother.



Phone Holder



C1 Custom Button



Get the Most of 3D Scanning

DefinSight powers 3D scanners 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, delivering faster, more precise, and highly detailed 3D data capture and analysis.

01

Quick Start

DefinSight connects effortlessly to the 3D scanner, enabling fast setup and immediate use.

02

Easy to Use

Automatically adjusts exposure settings to suit different surfaces, eliminating manual tweaks.

03

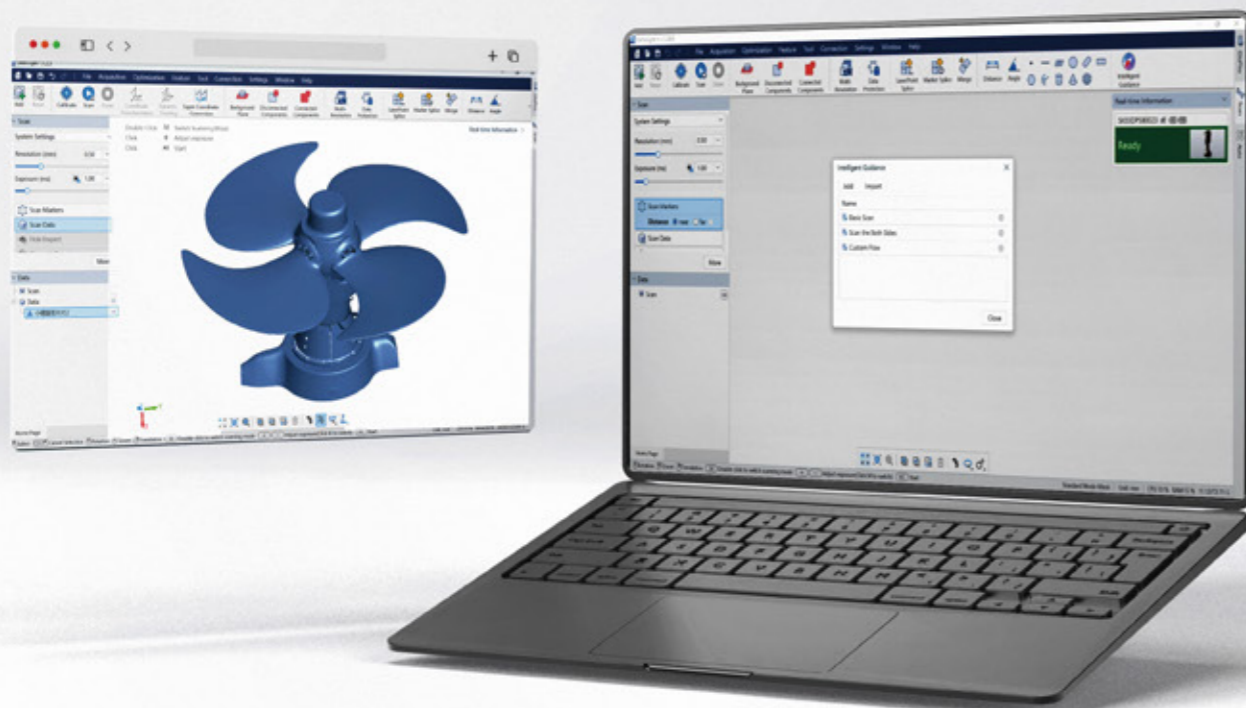
Smooth Scanning

Real-time scanning and encapsulation of 3D data ensure a smooth, uninterrupted workflow.

04

High-Resolution Detail

Supports real-time mesh visualization for faster data capture and finer data quality.



KSCAN-E Technical Specifications

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-LI5	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
	Wireless connection	Support Dual WNIC
	Intelligent and wireless mode	Support
	Uninterrupted Power Supply	Support
	Environment Adaptability	Operating environment
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.

*Our company reserves the right to interpret and modify the parameters and images in this manual within the scope of law.

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.

