WIRELESS METROLOGY-GRADE HANDHELD LASER SCANNER

FreeScan UE Pro2

Wireless Multi-Functional Laser Handheld 3D Scanner

INSPECT ON THE MOVE

A 950 g handheld laser scanner with a built-in wireless module, so there is no cable back to the PC. It scans up to 3,460,000 points per second, nearly double the previous generation, and built-in photogrammetry holds volumetric accuracy on large parts. An integrated inspection module does quality checks on site.



0.02 mm	3.46 M	950 g
ACCURACY	POINTS / SEC	WIRELESS, HANDHELD

- Wireless Scanning
- Up to 3,460,000 Points / Sec
- Video Photogrammetry
- Quick On-Site Inspection
- VDI/VDE 2634 & ISO 10360 Verified



Scanning inside a ship's propeller nozzle in the yard. With no cable to manage, the operator climbs in and works around the blades.

Wireless and Portable

A built-in wireless module sends data while you scan, so there is no cable to the PC. At 950 g it suits fieldwork, the shop floor and harsh environments.

Built-in wireless module. Wireless data transfer during the scan.

Runs on a power bank. Compatible with all power banks, for work away from an outlet.



Fifty laser lines sweep a large cylinder. The UE Pro2's green status light and red indicator are visible on the back of the scanner.

Double the Speed, Double the Productivity

Up to 3,460,000 points per second, nearly double the previous generation. Scans finish sooner, so more time goes to inspection.

Embedded computing module. On-board processing keeps wireless scanning at the same frame rate as a cable.

50 laser lines. Faster, more complete coverage.

High frame rate. Up to 180 fps.

Certified Accuracy: ISO/IEC 17025 Laboratory

Volumetric accuracy reaches 0.02 mm + 0.015 mm/m with photogrammetry. The SHINING 3D Accuracy Laboratory is accredited to ISO/IEC 17025 by CNAS, and the UE Pro2 is acceptance-tested there to VDI/VDE 2634 Part 3 and ISO 10360, with traceable measurement and calibration results. That record fits straight into your ISO quality process.



Large-volume hall: reference scale bars set the traceable length standard for volumetric accuracy tests.



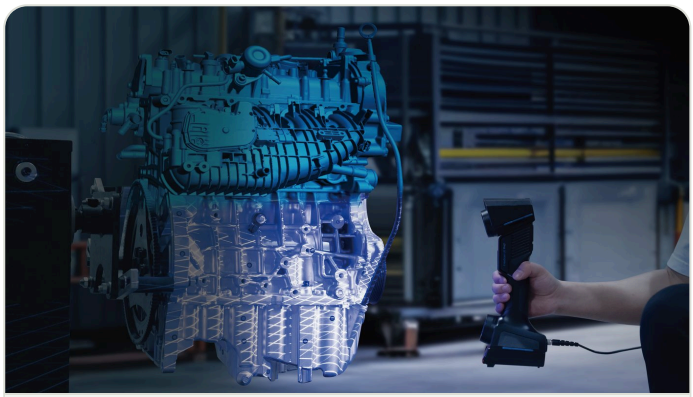
Long-range rail: working distance and depth performance checked along a calibrated track.



Calibration benches: scanners are verified to VDI/VDE 2634 and ISO 10360 before a certificate is issued.



Placing a scale bar on a propeller blade covered in markers. The bar gives the built-in photogrammetry its length reference.



An engine block shown half as the real part and half as scan data beside the UE Pro2. The mesh builds in the software as you scan.

Video Photogrammetry for Large Parts

SHINING 3D's patented photogrammetry is built into the scanner. It quickly optimizes the position of global markers on large objects, so accuracy stays consistent. No coded targets are needed, which cuts preparation time by at least half with the same volumetric accuracy.

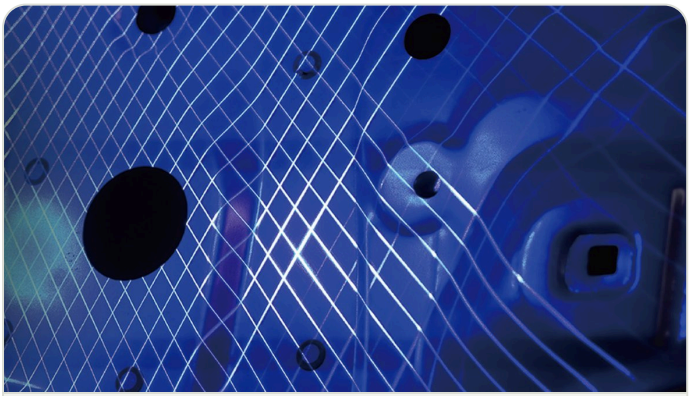
FreeScan Software

Real-time mesh display. No separate meshing step later.

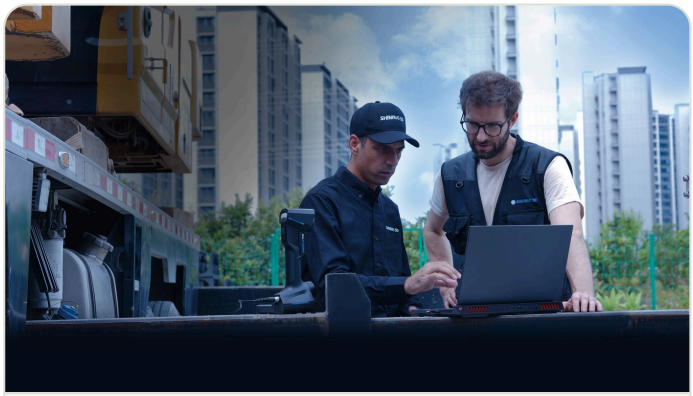
Custom scanning templates. Saved settings keep scans consistent.

AI feature recognition. Round holes, rectangular holes and slots measured fast.

Data quality visualization. Laser color, the scanner LED and a live mesh indicator show what still needs data.



Crossed blue laser lines on a machined part in high-speed mode. Detail and deep-hole modes switch in for fine features.



Two engineers review results on a laptop outdoors, with the UE Pro2 on its stand. The check happens where the part is.

3 Functions for Versatile Applications

High-speed scanning. 50 laser lines.

Detail scanning. 7 parallel laser lines.

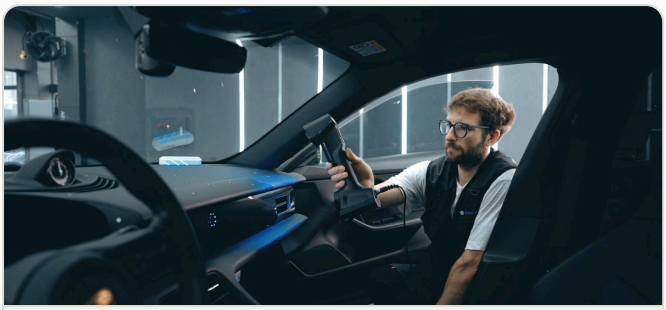
Deep hole scanning. 1 laser line.

Quick On-Site Inspection

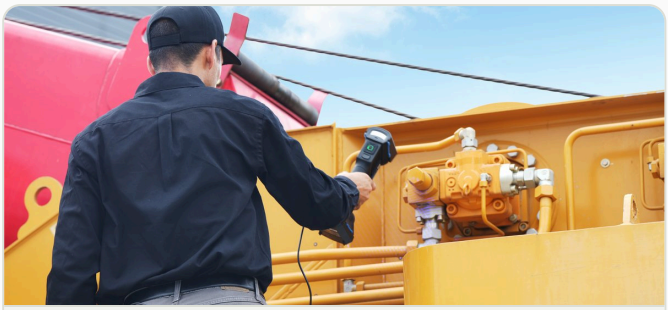
The integrated inspection module brings quality control to the job. Operation stays simple and checks on site are fast.

Proven Across Industries

Where the UE Pro2 is already working: inside vehicles, on heavy equipment and out in the yard.



Automotive interior: a dashboard scanned in place from the front seat of the car.



Engineering machinery: hydraulic components on a truck crane scanned outdoors for inspection and maintenance.



Lifting equipment: a crane hook block scanned outdoors for wear and deformation checks.



Marine: a ship propeller blade with reference markers scanned in the yard.

Specifications

Specification	Multiple lines scan	Fine scan	Single line scan
Light source	50 laser lines	7 parallel laser lines	1 laser line
Working distance	300 mm (11.8 in)	200 mm (7.9 in)	300 mm (11.8 in)
Scan accuracy	0.02 mm (0.0008 in)		
Volumetric accuracy*	0.02 + 0.03 mm/m (0.0008 in + 0.00036 in/ft) With photogrammetry: 0.02 + 0.015 mm/m (0.0008 in + 0.00018 in/ft)		
Scan speed	Up to 3,460,000 points/s		
Scan depth	360 mm (14.2 in)		
Max. FOV	600 × 550 mm (23.6 × 21.7 in)		
Point distance	0.01 – 10 mm (0.0004 – 0.4 in)		
Laser class	Class II (eye safe)		
Connection standard	USB 3.0 (plus built-in wireless module)		
Dimensions	305.8 × 118.9 × 100.8 mm (12.0 × 4.7 × 4.0 in)		
Weight	0.95 kg		
Power input	24 V, 3.75 A		
Working temperature	-20 – 40 °C (-4 – 104 °F)		
Working humidity	10% – 90%		
Certifications	CE, FCC, RoHS, WEEE, KC, FDA, UKCA, IP50, TELEC, TiSAX		
Accuracy certification	VDI/VDE 2634 Part 3, ISO 10360 (certified in an ISO/IEC 17025 accredited accuracy lab)		
Recommended PC	Windows 11 Professional 22H2 (64-bit) · 13th Gen Intel Core i7-13700H or above · NVIDIA GeForce RTX 4060 Laptop GPU or above · 8 GB video memory · 64 GB DDR5 dual-channel RAM · USB 3.0		

*Based on VDI/VDE 2634 Part 3. Sphere-spacing error is assessed with traceable length artifacts and markers at different locations and orientations in the working volume, in the accuracy lab at 20 ± 0.5 °C and 40 to 60% RH.

VDI/VDE 2634 PART 3 · ISO 10360 · ISO/IEC 17025 ACCREDITED LAB · IP50

See it on your parts.

Book a live demo or a free sample scan. US-based metrology team, fast turnaround.

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