

FreeScan Omni

Wireless Standalone Metrology 3D Scanner



Onboard Metrology-Grade Scan-to-Inspection

Built-in PTB-certified software

Integrated with SHINING 3D Inspect, the standalone device delivers reliable, high-quality, full-field inspection results.

Effortless reporting & export

Run inspections automatically with just one click, and navigate the process effortlessly with a user-friendly interface and visualized results, making inspections both simple and efficient.

Automated & intuitive inspection

View detailed inspection reports directly on the device or easily export them to a USB drive or PC in multiple formats.



Power Without Limits

FreeScan Omni delivers a fully wireless experience, eliminating power cords and data cables.

Smart Dock

Quick power boost
Always ready to go.

Auto network setup
Just dock once to connect.



Multiple Scanning Modes for Industrial Usage

High-speed scan mode with

93 laser lines

Detailed scan mode with

25 parallel laser lines

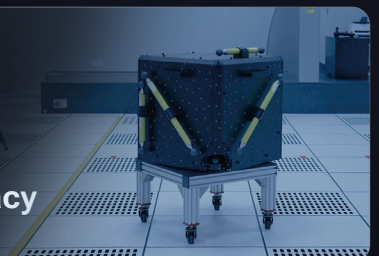
Deep pockets scan mode with

1 laser lines

IR rapid scan mode for quick scans without markers



Certified and Guaranteed Accuracy





Engineered for On-Site Quality Control

Certified metrology accuracy

Delivers reliable volumetric accuracy of $0.02 + 0.03 \text{ mm/m}$ for reliable and consistent measurement results. Built-in SHINING 3D's patented video photogrammetry (VPG) enhances volumetric accuracy while streamlining setup for efficient large-object scanning.

Blazing-fast performance

Powered by a high-performance processor, the system leverages an edge-based computing module for rapid 3D scanning and data processing, significantly enhancing workflow efficiency.

Exceptional detail capture

Features dual 5MP cameras, capturing sharp and highly detailed 3D data for superior measurement and analysis.



Specifications

Product	FreeScan Omni
Accuracy	0.02 mm (0.0008 in)
Volumetric accuracy with VPG	$0.02 + 0.015 \text{ mm/m}$ (0.0008 in + 0.00018 in/ft)
Scan speed	Up to 7,619,000 points/s
Hardware	Built-in computing (32G) / FPGA / 1TB SSD
Max. FOV	Laser: 580 x 650 mm; IR: 1205 x 1104 mm (Laser: 22.8 x 25.6 in; IR: 47.4 x 43.5 in)
VPG	Included (no coded markers required)
Inspection module	Included (integrated on-device inspection)
High-speed scan	Included (93 laser lines) VCSEL
Detailed scan	Included (25 parallel laser lines)
Deep pockets scan	Included (1 laser line)
Hole scanning	Intelligent hole boundary detection
Smart dock connection	Wireless & Wired mode (Fiber optic)
Output format	.stl, .asc, .3mf, .p3
Working temperature	-10 ~ 40 °C (14 ~ 104 °F)
Working humidity	10 ~ 90%
Certifications	CE, FCC, ROHS, WEEE, KC, FDA, UKCA, IP50,TELEC, TiSAX
Acceptance test	VDI/VDE 2634 Part 3, ISO 10360 (certified in ISO 17025 certificated accuracy lab)



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SHINING 3D
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www.shining3d.com
sales@shining3d.com