SHINING 3D

FreeScan Trak ProW

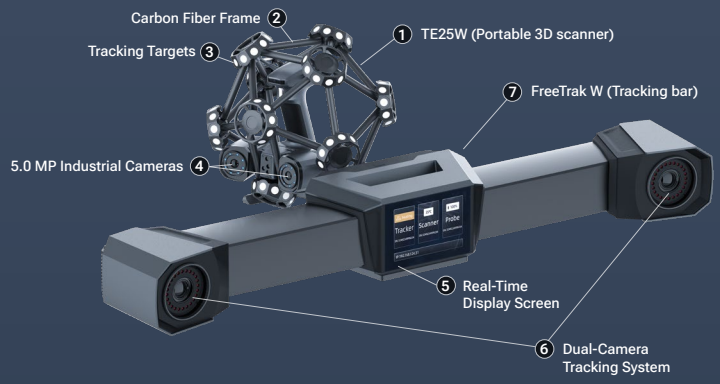
Wireless 3D Dynamic Tracking & Scanning System with Expanded Range

Track Smarter, Expand Further

FreeScan Trak ProW

FreeScan Trak ProW is a wireless 3D dynamic tracking system that elevates the performance of the FreeScan Trak Pro series. It maintains core features such as marker-free scanning and guaranteed high accuracy, while introducing advanced upgrades for improved performance.

With battery-powered, wireless operation, it eliminates cable constraints, offering unparalleled freedom and flexibility. The system features an extended tracking range and an impressive expanded scanning volume, making it an ideal solution for large-scale 3D measuring tasks.



Ultra-Wide Measuring Range

FreeScan Trak ProW features a groundbreaking design with an ultra-long 8.6 m tracking distance and widely expands the single-station tracking volume to 206.7 m³, significantly reducing the need for leapfrog* during large-scale object scanning.

*(1) Leapfrog: Refers to the technique of relocating the measuring device to extend its working volume. This involves measuring reference geometries (artifacts) in one position, then repositioning the device and measuring the same reference geometries again. These reference points establish a link between the new device position and the original coordinate system, allowing measurements to be consistently reported in the same reference frame.


先临三维

No Markers Needed
Fast Paced Scanning

FreeTrak W enables real-time TE25W scanner recognition and positioning, eliminating the need for reference markers, which enhances scanning efficiency and streamlines the workflow, while ensuring rapid data acquisition with a scanning speed of up to 5,500,000 points per second.


SHINING 3D
Device
FreeScan Trak ProW
Calibration
Scan Mode
Trak Mode
Scan
In Progress
Post-Process
Scan Mode
Scanning


Tracker
Scanner
Probe

Wireless Scanning Wherever You Go

Built-In Computing Modules

With advanced computing modules, FreeScan Trak ProW accelerates data capture and processing, ensuring rapid, efficient results on the go.

Integrated Wireless Modules

FreeScan Trak ProW features a built-in wireless module that provides greater freedom by eliminating the need for cables and external devices. This seamless integration allows for real-time transmission of scan data, ensuring high frame rates and stable data transfer.

Flexible Power Supply

The external power bank reduces the weight of the TE25W 3D scanner, making it ideal for scanning large workpieces during long working time.

Real-Time Display Screen

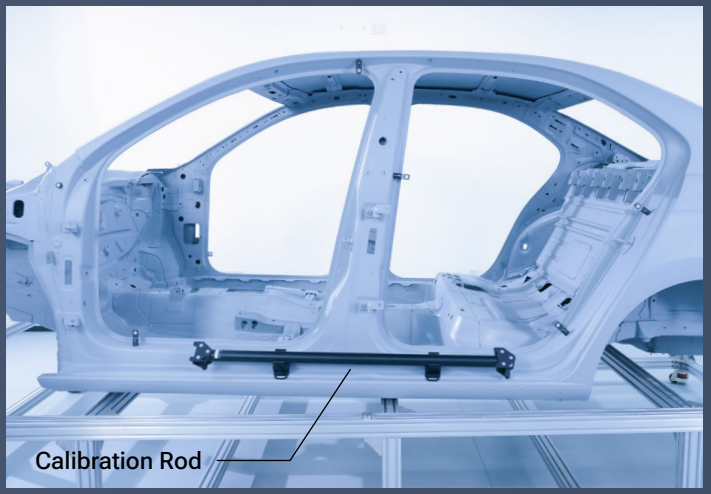
FreeTrak W features an intuitive screen that displays critical device data, including connection status, operating temperature, tracking distance, and range, ensuring real-time monitoring and precision scanning.

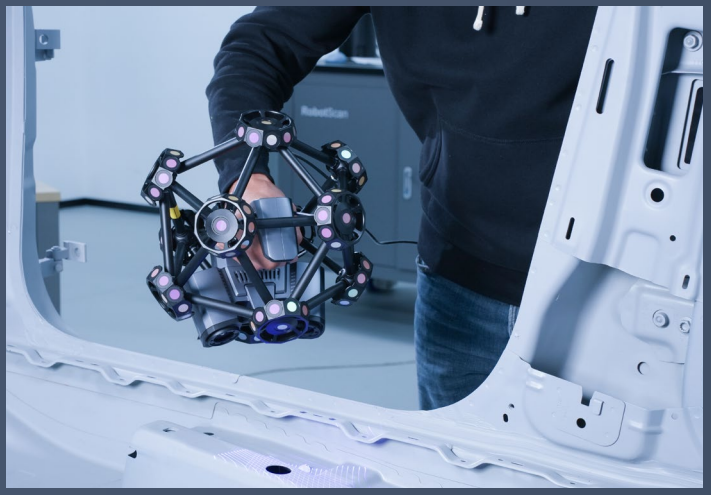
Video Photogrammetry (VPG)

FreeScan Trak ProW features SHINING 3D's patented video-based photogrammetry, which eliminates the need for coded markers.

By integrating photogrammetry technology with a calibration rod, it enables real-time marker verification through video capture.

This ensures consistent volumetric accuracy and streamlines the setup process for efficient large-object scanning.

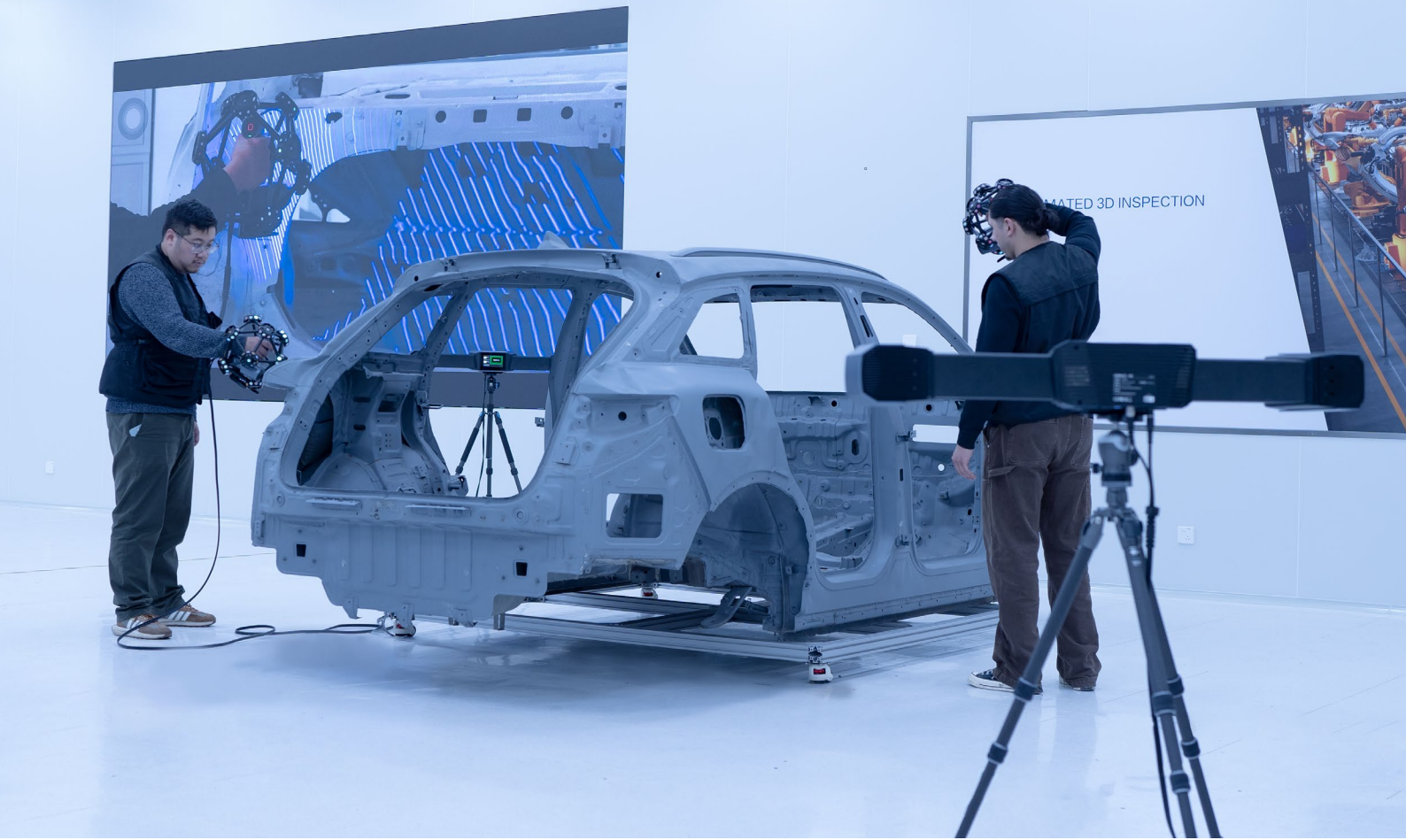




Customized Measurement Solutions

SHINING 3D offers flexible, customized solutions to accommodate diverse scanning needs. For instance, it supports a collaborative solution with multiple systems, significantly expanding the scanning range and easily meeting the scanning demands of extremely large objects.

By working together, multiple devices can cover a broader area, enabling efficient, flexible and accurate full-field scanning.



Advanced Software for Seamless 3D Measurement

Real-Time Data Quality Visualization

Users can access the quality of scanned markers during video photogrammetry and check data completeness during scanning.

Intelligent Resolution

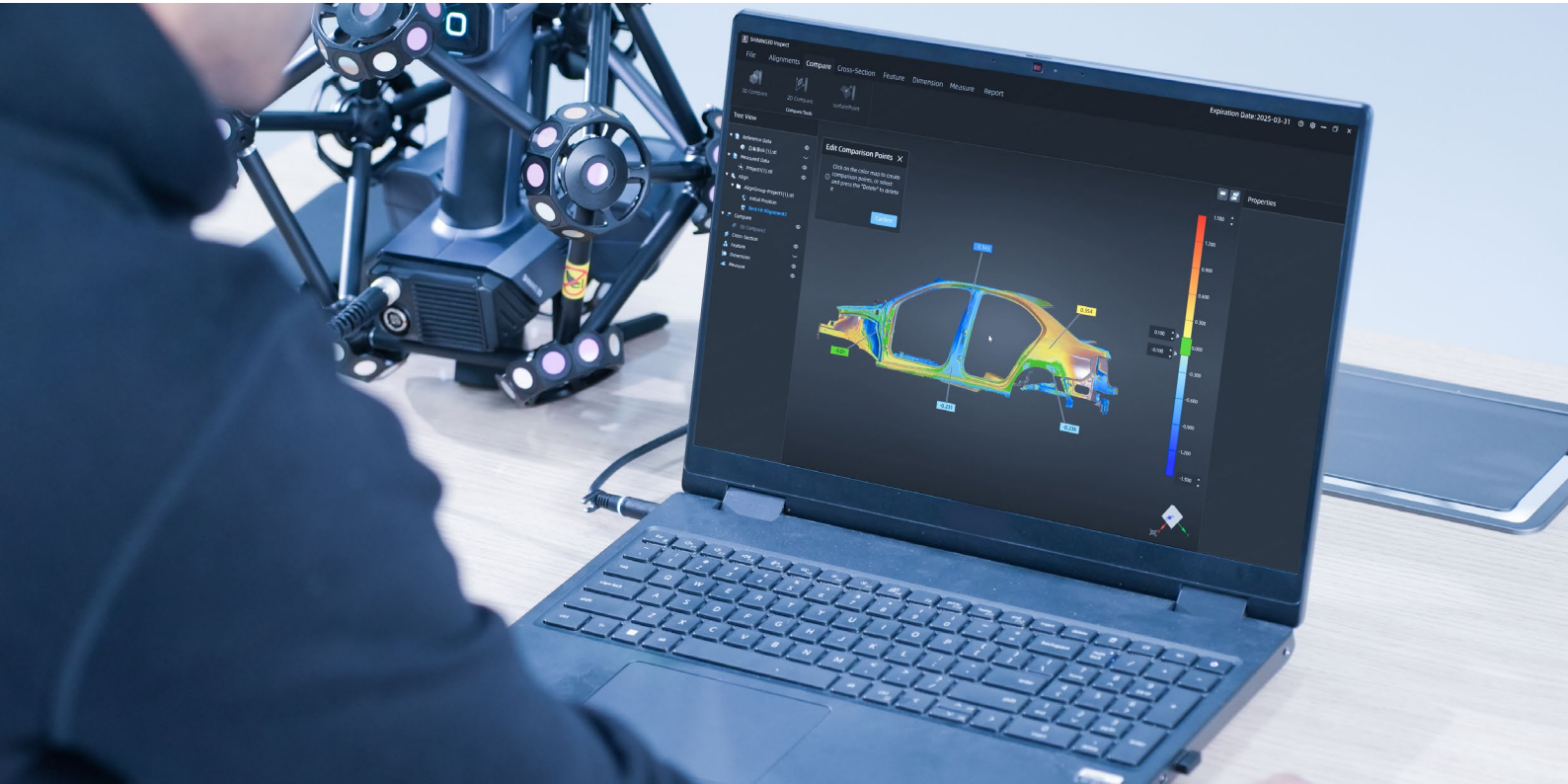
Automatically adjusts mesh resolution based on the object's curvature, ensuring clearer and more detailed features.

AI Feature Recognition

Intelligent boundary detection enables fast, accurate scanning and measurement of round and square holes, delivering high-accuracy hole data.

Inspection Module

Integrated an inspection module, certified by PTB, for reliable, high-quality full-size inspection.


SHINING3D Inspect
File
Alignments
Compare
Cross-Section
Feature
Dimension
Measure
Report
Expiration Date: 2025-03-31
Tree View
Edit Comparison Points
Properties

FreeProbe (Optional)

Designed for quick measurements and inspections, the FreeProbe captures precise geometric data without generating mesh.

It is ideal for hidden areas the scanner cannot reach, ensuring data acquisition with pinpoint accuracy.

- Ergonomic design for easy grip and use
- Sturdy structure for enhanced durability and measurement accuracy
- Multi-functional button for versatile functionality
- Seamless integration with mainstream industrial inspection software

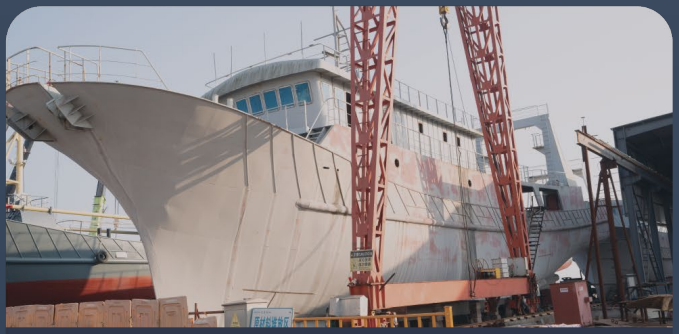
Civil Aviation

Engineering Machinery

Energy

Automotive

Heavy Industry



Shipbuilding

SPECIFICATIONS

	FreeScan Trak ProW
Volumetric accuracy (based on measuring range)	15.6 m³ (3.5 m away from the tracking bar): 0.046 mm; 45 m³ (5 m away from the tracking bar): 0.063 mm; 76 m³ (6 m away from the tracking bar): 0.088 mm; 128 m³ (7.2 m away from the tracking bar): 0.127 mm; 206.7 m³ (Max. tracking range, 8.6 m away from the tracking bar)
Volumetric accuracy with VPG	0.044 + 0.012 mm/m (extension volume)
High-speed scan	Included (50 laser lines)
Detailed scan	Included (7 parallel laser lines)
Deep pockets scan	Included (1 laser line)
Weight	FreeTrak W: 8.2 kg / TE25W: 1.47 kg
Connection	Wireless & Wired mode (fiber optic)
Certifications	CE, FCC, ROHS, WEEE, KC, FDA, UKCA, IP50, TELEC, TiSAX
Acceptance test	VDI/VDE 2634 Part3 (certificated in ISO 17025 certificated accuracy lab)

SHINING 3D Tech Co., Ltd.

Hangzhou, China
P: 400-0799-666
No. 1398, Xiangbin Road, Wenyan,
Xiaoshan, Hangzhou, Zhejiang,
China, 311258

SHINING 3D (HK) COMPANY LIMITED.

Hong Kong, China
P: 00852-23348468/23348568
Room 303A, 3/F, Tower 2, Enterprise Square Phase 1,9
Sheung Yue Road, Kowloon Bay, Kowloon, Hong Kong

SHINING 3D Technology Japan Inc.

Tokyo, Japan
Tradepia Odaiba, 2-3-1 Daiba, Minato-ku, Tokyo

SHINING 3D Technology GmbH.

Stuttgart, Germany
P: +49-711-28444089
Breitwiesenstraße 28, 70565, Stuttgart, Germany

Barcelona, Spain
Calle 27, 10-16, Sector BZ, 08040 Barcelona, Spain

SHINING 3D Technology Inc.

California, USA
P: +1415-259-4787
2450 Alvarado St, Unit 7, San Leandro, CA 94577

Florida, USA
2807 W Busch Blvd, Suite 200, Tampa, FL 33618

Facebook Instagram LinkedIn YouTube