

SHINING 3D
METROLOGY

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.

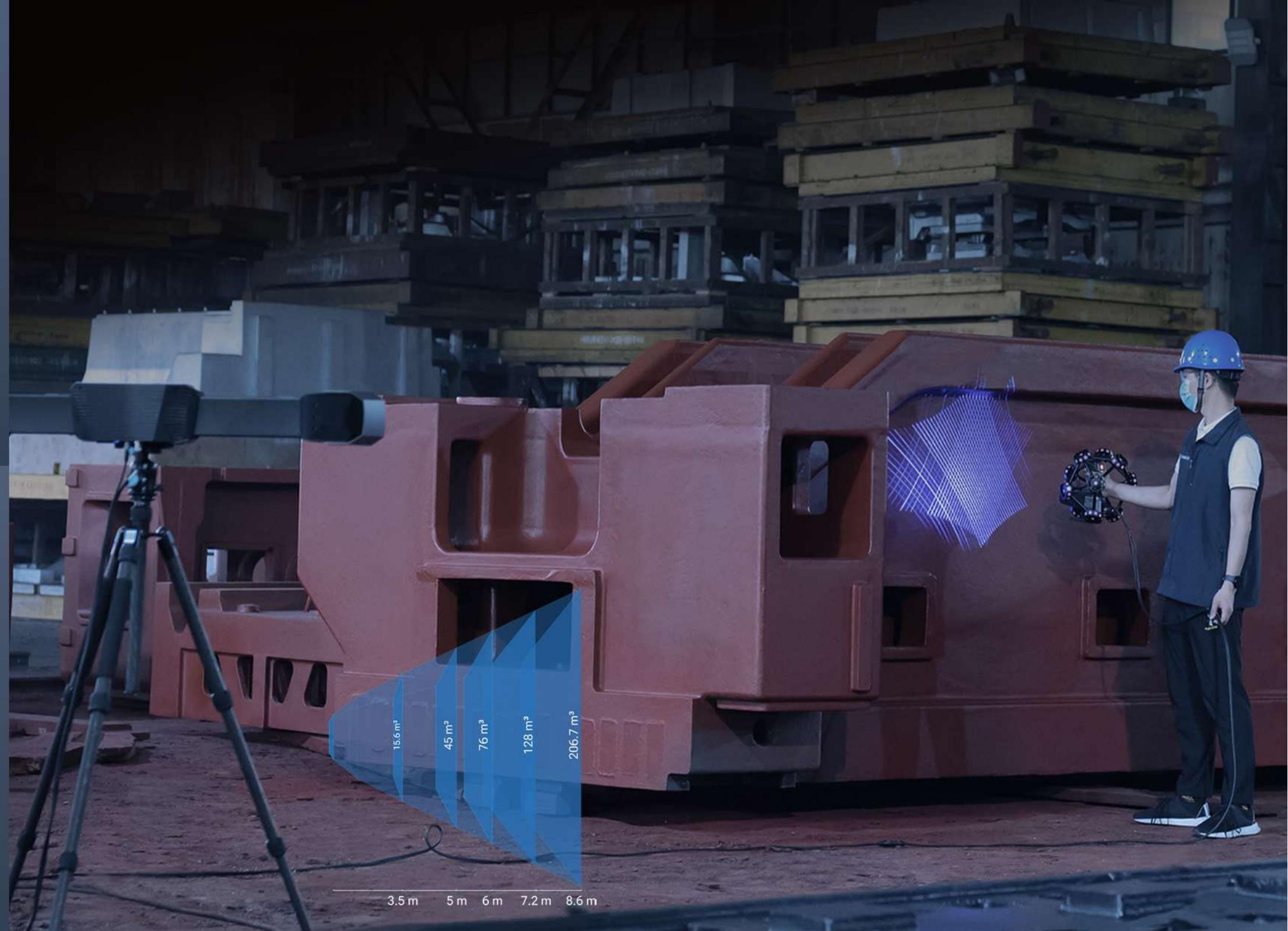
With battery-powered, wireless operation, it eliminates cable constraints, offering unparalleled freedom and flexibility. The system features an extended tracking range and an impressive expanded scanning volume, making it an ideal solution for large-scale 3D measuring tasks.

[Product Components](#)

[Technical Principle](#)

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.



No Markers Needed
Fast Paced Scanning



3.5 m 5 m 6 m 7.2 m 8.6 m



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.

Wireless Scanning Wherever You Go

< Built-In
Computing Modules 

< Integrated
Wireless Modules 

< Flexible
Power Supply 

< Real-Time
Display Screen 



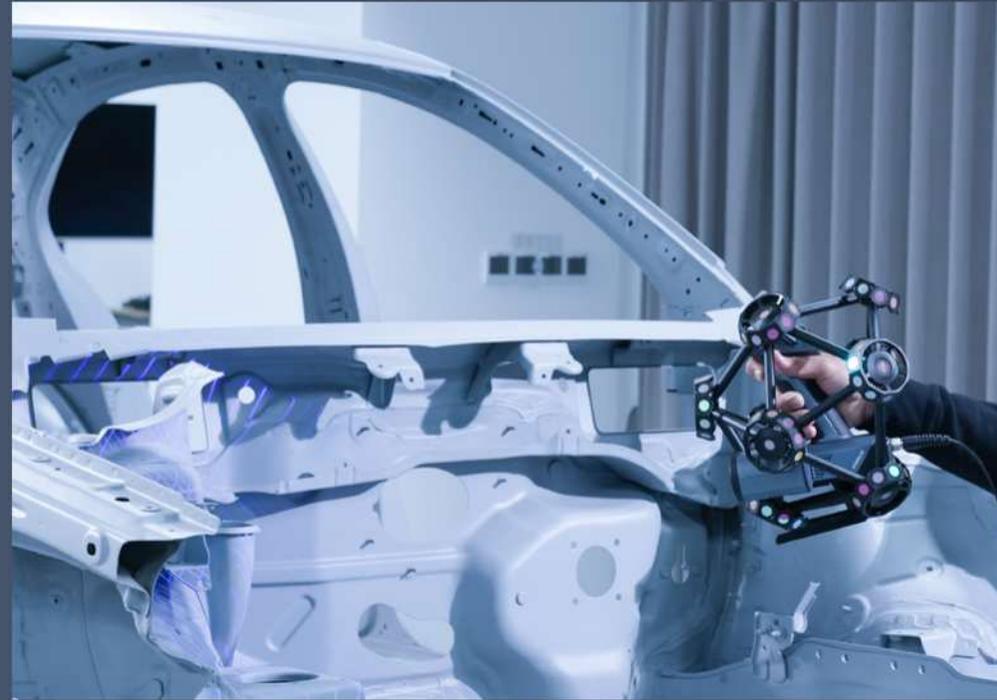
Video Photogrammetry (VPG)

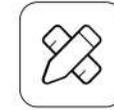
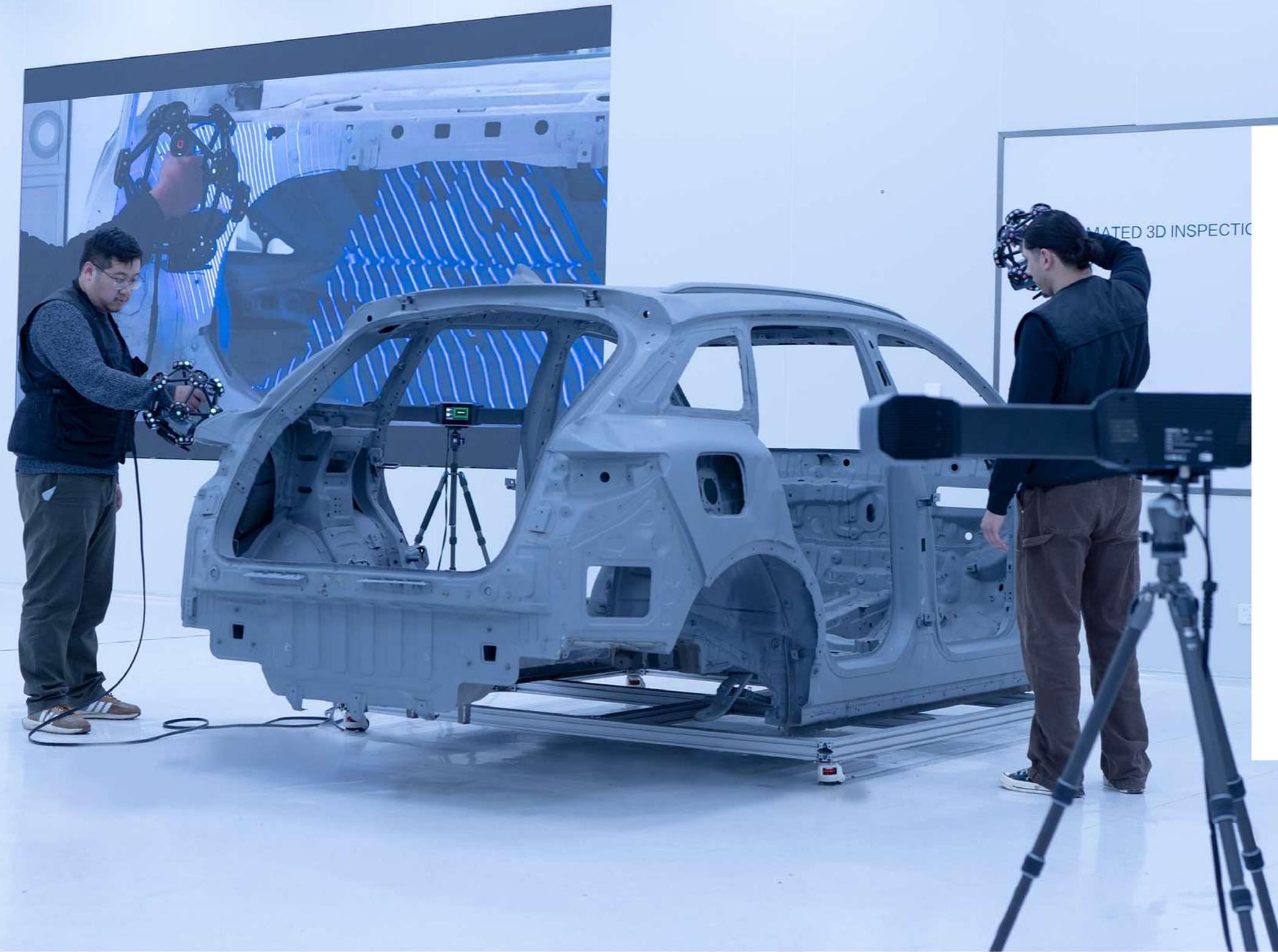
FreeScan Trak ProW features SHINING 3D's patented video-based photogrammetry, which eliminates the need for coded markers.

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.

[Learn More](#)





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 >



Intelligent
Resolution >



AI Feature
Recognition >



Inspection
Module >



Real-Time Data Quality Visualization

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



FreeProbe Series (Optional)

FreeProbe line-up, combined with the FreeScan Trak ProW, forming a powerful portable probing solution designed for precise, shop-floor measurements.

With dynamic tracking and wireless operation design, the system enables free movement of the part, probe, and tracker during measurement and enhances the measurement capabilities for hard-to-reach or non-scannable features.



Wireless & Portable



Various Probe Tips



Deeper Probing Capability



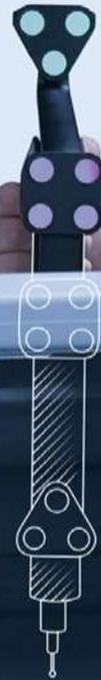
Quick Start with Fast Pairing



Ergonomic Design



Seamless Inspection
Software Integration



Multi-Function
Buttons

Easy Grip

Lightweight
590g

Multiple Tip
Options





Civil Aviation



Engineering Machinery



Energy



Automotive



Heavy Industry



Shipbuilding



	FreeScan Trak ProW	FreeProbe 2 Pro	FreeProbe 2
Accuracy	0.023 mm	0.025 mm	
Volumetric accuracy (based on measuring range)	15.6 m ³ (3.5 m away from the tracking bar): 0.046 mm; 45 m ³ (5 m away from the tracking bar): 0.063 mm; 76 m ³ (6 m away from the tracking bar): 0.088 mm; 128 m ³ (7.2 m away from the tracking bar): 0.127 mm; 206.7 m ³ (Max. tracking range, 8.6 m away from the tracking bar)		
Volumetric accuracy with VPG	0.044 + 0.012 mm/m (extension volume)		
Scan speed	5,500,000 points/s	/	
Resolution	0.01 ~ 10 mm	/	
High-speed scan	Included (50 laser lines)	/	
Detailed scan	Included (7 parallel laser lines)	/	
Deep pockets scan	Included (1 laser line)	/	
Weight	FreeTrak W: 10.6 kg TE25W: 1.4 kg	590 g	460 g
Dimensions	/	50 x 113.5 x 454.5 mm	50 x 110 x 363 mm
Connection	Wireless & Wired mode (fiber optic)		
Certifications	CE, FCC, ROHS, WEEE, KC, FDA, UKCA, IP50, TELEC, TiSAX	/	
Acceptance test	VDI/VDE 2634 Part 3, ISO 10360 (certificated in ISO 17025 certificated accuracy lab)	ISO 10360 (certificated in ISO 17025 certificated accuracy lab)	



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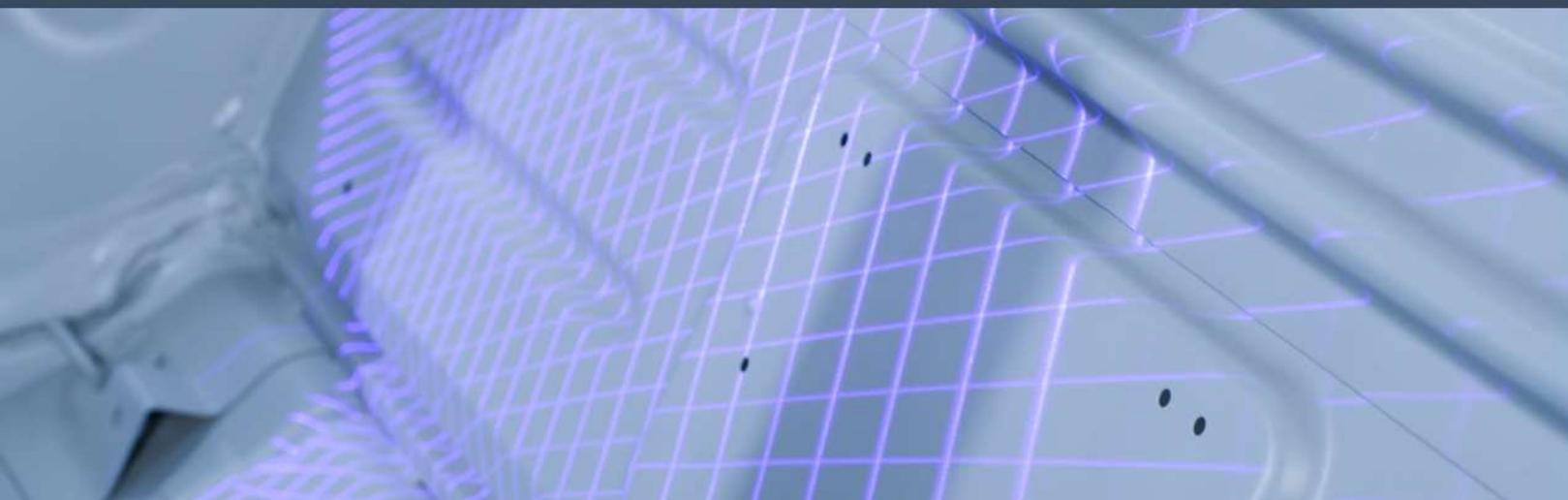
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