SHINING 3D

FreeScan Trak Nova

Wireless Multi-Functional Dynamic Tracking & Scanning System

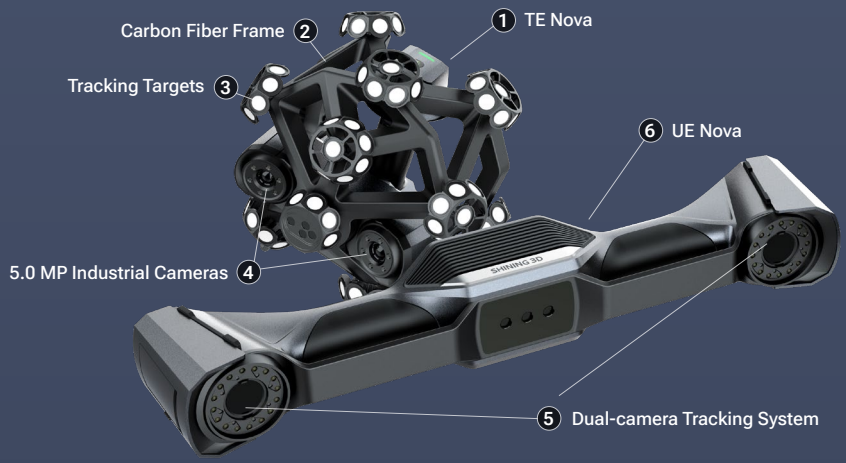
Small in Form, Big on Performance

All-In-One Scanning System: Master Every Measurement

FreeScan Trak Nova integrates a portable tracking scanner, the largest-FOV handheld laser scanner, and video photogrammetry (VPG) module into one advanced wireless tracking system.

From construction machinery to rail transit, civil aviation to energy, FreeScan Trak Nova is built to meet the diverse needs of industries requiring accurate and efficient large-scale measurements with extreme portability, productivity and versatility.

Shaping the future of 3D measurement—now in your hands.



Wireless Lightweight Accurate Markerless Efficient


HYDAC

Dynamic Tracking Scan: Compact and Agile

The real-time tracking technology allows for the capture of fine details.

With its wireless and compact design, the system excels in scanning confined spaces, ensuring efficient and precise measurements.

Wide-Range Laser Scan: Vast and Fast

FreeScan Trak Nova Wireless Dynamic Tracking & Scanning System transforms traditional tracking scanners by offering exceptional versatility. The tracker, FreeScan UE Nova, also serves as a handheld laser scanner with the largest field of view (FOV) on the market, delivering unparalleled efficiency and flexibility.

- Large-scale scanning coverage
- Ultra fast scan speed
- Free from constraints of cords
- Certified & guaranteed accuracy

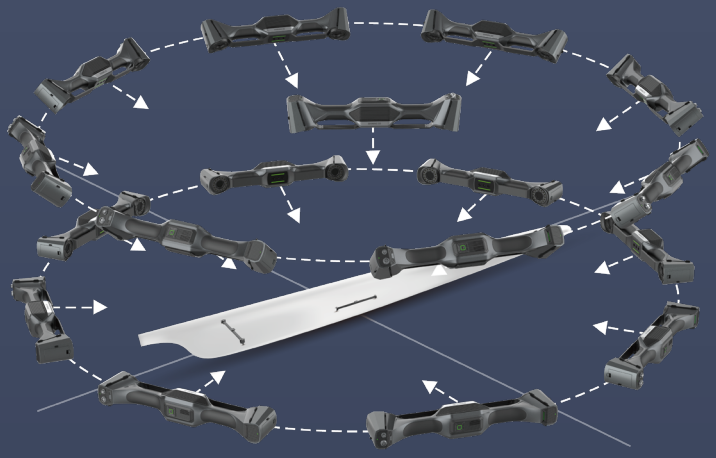

2.2 m
2.6 m

Video Photogrammetry (VPG)

FreeScan Trak Nova system 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.



Free to Scan, Built to Perform

Integrated wireless modules

Built-in computing modules

Swappable batteries

Easy to Carry, Light to Move

Compact and complete

Built for stability, designed for flexibility

Remote button control

Advanced Software for Seamless 3D Measure

Multi-scan modes data fusion

The system seamlessly combines wide-range laser scanning for overall structure capture with dynamic tracking for detailed local features, integrating broad coverage and fine details into a unified dataset.

Inspection module

Integrated inspection module, certifie
reliable, high-quality full-size inspectio

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.

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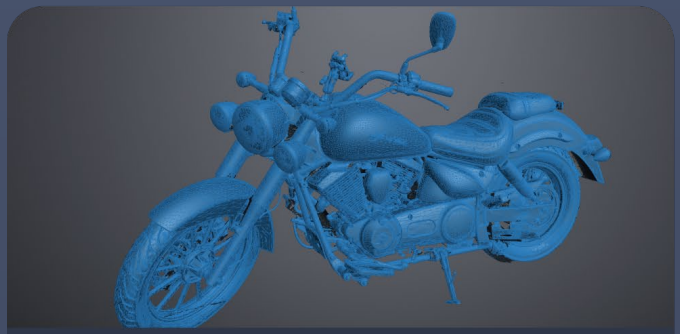
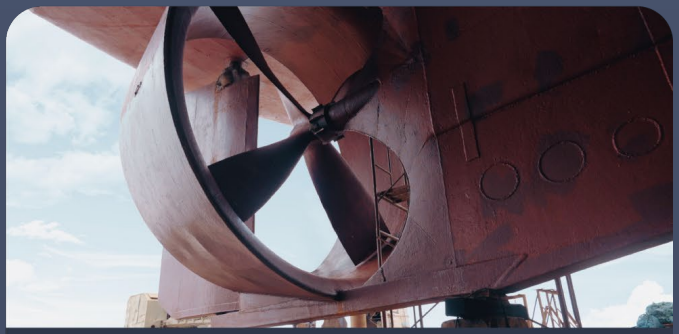
Quality Control

Product Design



Reverse Engineering



Maintenance Repair & Overhaul

Digital Archiving

Archaeology & Heritage Preservation

SPECIFICATIONS

	FreeScan Trak Nova	FreeScan UE Nova
Volumetric accuracy	0.062 mm (12 m³)	/
Volumetric accuracy with VPG	0.046 + 0.012 mm/m (extension volume)	0.072 + 0.012 mm/m
Flexible FOV	Up to 2600 x 2200 mm	
VPG	Included (no coded markers required)	
FOV indicator of VPG	Included	
High-speed scan	Included (50 laser lines)	Included
Detailed scan	Included (7 parallel laser lines)	Included (support near mode)
Deep pockets scan	Included (1 laser line)	/
Depth of field	TE Nova: 380 mm (170 ~ 550 mm) UE Nova: 2700 mm (800 ~ 3500 mm)	2300 mm (300 ~ 2600 mm)
Connection	Wireless & Wired mode (fiber optic)	
Net weight	TE Nova:1.2 kg / UE Nova: 1.6 kg	
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

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