

FreeScan Trak Nova+

Wireless Multi-Functional Dynamic Tracking & Scanning System

Small in Form, Big on Performance



All-In-One
Scanning System



Detachable
Handheld Scanner



Dynamic
Tracking



Integrated
Video Photogrammetry



Completely
Wireless



Effortlessly
Portable



Wide-Range Laser Scan: Vast and Fast

FreeScan Trak Nova+ transforms traditional tracking scanners by offering exceptional versatility. The tracker, FreeScan UE Nova+, also serves as a handheld laser scanner with the largest FOV on the market, delivering unparalleled efficiency and flexibility.



Dynamic Tracking Scan: Compact and Agile

Real-time dynamic tracking enables fast, flexible, and marker-free 3D scanning. Combined with its wireless, compact design, the system excels at capturing fine details in confined spaces while delivering efficient and precise measurements.



Video Photogrammetry (VPG)

FreeScan Trak Nova+ 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:

Achieve greater freedom when scanning large objects or in tight spaces, without the limitations of cables or external devices.

Built-in computing modules:

With advanced computing modules, both the tracking scanner and wide-range scanner ensure rapid and efficient processing.



Ultra fast scan speed

FreeScan Trak Nova+ achieves scanning speeds of up to 7,600,000 points/s, enabling rapid acquisition of high-quality 3D data while maintaining fine detail.

93 laser lines for
high-speed scan

25 parallel laser lines
for detailed scan

1 laser line for
deep pockets scan





Mobile Workstation

A dedicated all-in-one mobile workstation for FreeScan Trak Nova+, integrating a high-performance computer and built-in power supply for flexible, cable-free 3D scanning and inspection on site.



SHINING3D Inspect (optional)

SHINING3D Inspect (optional) delivers a streamlined, modular, and customizable approach to 3D inspection, simplifying workflows from data acquisition to reporting.



SPECIFICATIONS

	FreeScan Trak Nova+	FreeScan UE Nova+	FreeProbe Series (Optional)
Accuracy	0.02 mm (0.0008 in)	0.072 mm (0.0028 in)	0.025 mm (0.01 in)
Volumetric accuracy	0.062 mm (12m³) 0.0024 in (423.78 ft³)	/	0.062 mm (12m³) 0.0024 in (423.78 ft³)
Volumetric accuracy with VPG	0.046 mm + 0.012 mm/m (extension volume) (0.0018 in + 0.00014 in/ft)	0.072 mm + 0.012 mm/m (0.0028 in + 0.00014 in/ft)	0.046 mm + 0.012 mm/m (extension volume) (0.0018 in + 0.00014 in/ft)
Scan speed	7,600,000 points/s	5,714,000 points/s	100 measurements/s
Resolution	0.01 ~ 10 mm (0.0004 ~ 0.3937 in)	0.5 ~ 10 mm (0.0197 ~ 0.3937 in)	/
Flexible FOV	Up to 2600 x 2200 mm (102.36 x 86.61 in)		/
VPG	Included (no coded markers required)		/
FOV indicator of VPG	Included		/
High-speed scan	Included (62 laser lines)	Included (62 laser lines)	/
Detailed scan	Included (25 parallel laser lines)	Included (support near mode)	/
Deep pockets scan	Included (1 laser line)	/	/
Working distance	300 mm (11.81 in)	1200 mm (47.24 in)	/
Depth of field	TE Nova+: 380 mm (170 ~ 550 mm) 14.96 in (6.69 ~ 21.65 in) UE Nova+: 4000 mm (500 ~ 4500 mm) 157.48 in (19.69 ~ 177.17 in)	2300 mm (300 ~ 2600 mm) 90.55 in (11.81 ~ 102.36 in)	/
Connection	Wireless & Wired mode (fiber optic)		
Output formats	stl, obj, ply, asc, 3MF, P3		
Working temperature	-10 ~ 40 °C (14 ~ 104 °F)		
Working humidity	10% ~ 90% RH		
Net weight	TE Nova+: 1.2 kg (2.6 lb) UE Nova+: 1.6 kg (3.5 lb)	1.6 kg (3.5 lb)	FreeProbe 2: 0.46 kg (1.0 lb) FreeProbe 2 Pro: 0.59 kg (1.3 lb)
Dimensions	239 x 191 x 232 mm (9.41 x 7.52 x 9.13 in)	580 x 119 x 87 mm (22.84 x 4.69 x 3.43 in)	FreeProbe 2: 50 x 110 x 363 mm (1.97 x 4.33 x 14.29 in) FreeProbe 2 Pro: 50 x 114 x 455 mm (1.97 x 4.49 x 17.91 in)
Certifications	CE, FCC, ROHS, WEEE, KC, FDA, UKCA, IP50, TELEC, TiSAX		/
Acceptance test	VDI/VDE 2634 Part 3 & ISO 10360 certified (Tested in the ISO/IEC 17025 accredited accuracy lab)		ISO 10360 certified (Tested in ISO/IEC 17025 accredited accuracy lab)

Recommended
computer configuration

OS: Windows 10 Pro (64-bit) / Windows 11 Pro (64-bit)
Processor: Intel Core i7 or i9 (13th/14th Gen HX) or above; Intel Core Ultra 9 285HX or above
Graphics card: NVIDIA GeForce RTX 5080 Laptop GPU or above
VRAM: 16G or above; RAM: 64G or above



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