

SHINING 3D
METROLOGY

FreeScan UE Pro2

Wireless Multi-Functional Laser Handheld 3D Scanner

Inspect on the move



FreeScan UE Pro2

Inspect on the move

Based on the capabilities of FreeScan UE series, FreeScan UE Pro2 features an innovative integrated WIRELESS module for more flexibility and mobility. With its ultra-fast scan speed, efficiency is doubled, empowering quicker project completion.

The patented innovative built-in photogrammetry technology enhances volumetric accuracy, making it perfect for scanning a wide range of parts from small to large.

Additionally, the integrated inspection module facilitates on-site quality control, streamlining your workflow effortlessly with all-in-one shopfloor solution.

Ideal for inspections and versatile applications, FreeScan UE Pro2 sets a new standard in portable 3D metrology world.





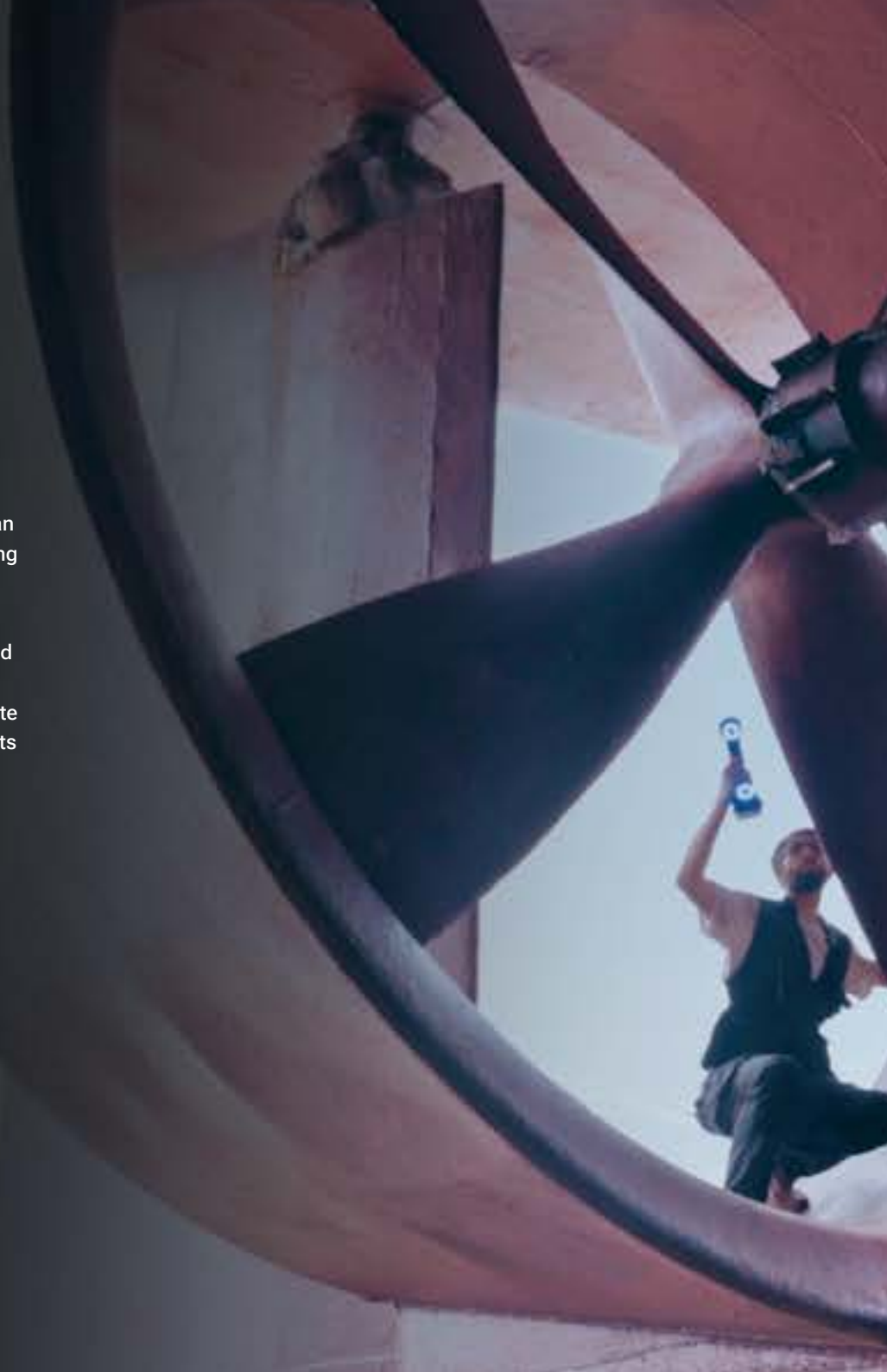
Wi-Fi 6



Wireless and Portable

Integrated with Wireless module, FreeScan UE Pro2 liberates you from cables, allowing seamless data transmission during scanning.

Perfect for on-site fieldwork, shopfloor and harsh working environment, this 950g scanner empowers you to capture accurate 3D data effortlessly, wherever your projects happen.





Scan speed up to
3,460,000
points/sec



Double the Speed, Double the Productivity

FreeScan UE Pro2 offers nearly double scanning efficiency compared to the previous generation.

With a rapid scan speed up to **3,460,000 points/s**, you can complete the scanning tasks smoothly, thus allowing you to focus on inspection applications to enhance your overall productivity.

Embedded Computing Module

Accelerates data capture and processing, reducing overall scanning time and computer workload, ensuring the wireless scanning mode to achieve same scanning frames as scanner connected with cable.

50 Laser Lines

Ensures faster and more comprehensive scanning.

High Frame Rate

Achieves up to 180fps for smooth and rapid data acquisition.



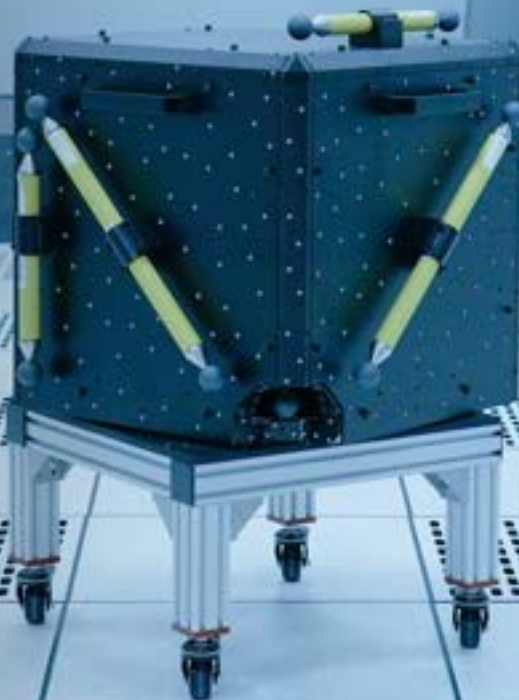
Notice: Compatible with all power banks.



Certified and Guaranteed Results

With the volumetric accuracy up to 0.02 mm + 0.015 mm/m using photogrammetry, FreeScan UE Pro2 delivers consistent and reliable global accuracy and scanning results.

SHINING 3D Accuracy Laboratory, accredited by CNAS in accordance with ISO 17025, ensures rigorous calibration of optical metrology. Based on VDI/VDE 2634 guidelines, the laboratory guarantees the traceability of measurement processes and calibration results. This certified metrology system is ISO compliant and can easily be integrated into your ISO quality control processes.





Elevated Accuracy for Large-Scale Scans

Patented Binocular Photogrammetry

FreeScan UE Pro2 features patented innovative built-in photogrammetry technology for scanning large objects, quickly optimizing the spatial position of global markers, ensuring consistent accuracy.

Different from traditional photogrammetry methods, our binocular photogrammetry technology eliminates the usage of coded targets, reducing preparation time by at least half while maintaining the same high level of volumetric accuracy.



Scale Bar

FreeScan Software: Intuitive and Powerful



Real-time Display of Mesh Data

Our streamlined software displays mesh data in real time as you scan your workpiece, enhancing visual quality and saving time on meshing later on.



Customized Scanning Template

Save time and ensure consistency by customizing scanning settings. No need to set parameters manually.



AI Feature Recognition

Intelligent boundary detection provides fast, precise measurement of round holes, rectangular holes, and slots, ensuring high-quality and high-accuracy data capture.





Data Quality Visualization

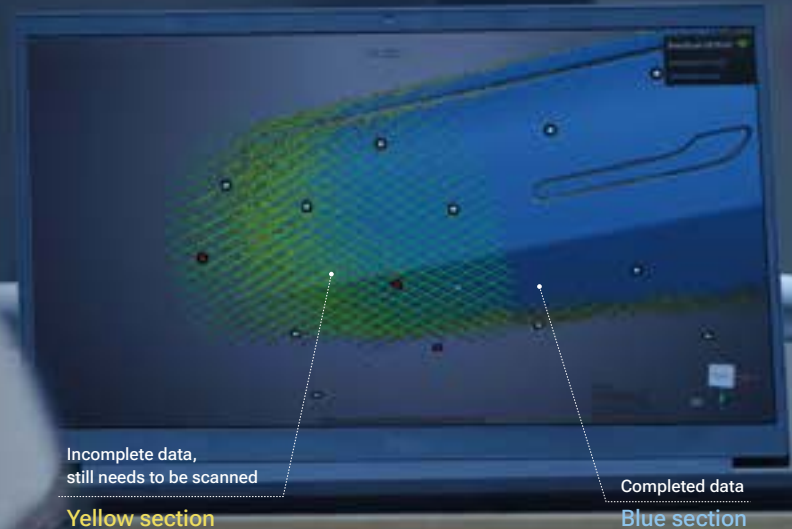
Users can determine if the scanning distance is appropriate by observing the rendering color of the laser lines projected onto the object in the 3D view of the software or by the LED indicator on the scanner.

There is also a real time mesh quality indicator to determine the quality of the collected data. So an operator knows which areas of the scan are sufficient or not.



Flexible Resolution

Be able to change the resolution later according to your need, without restarting the project.

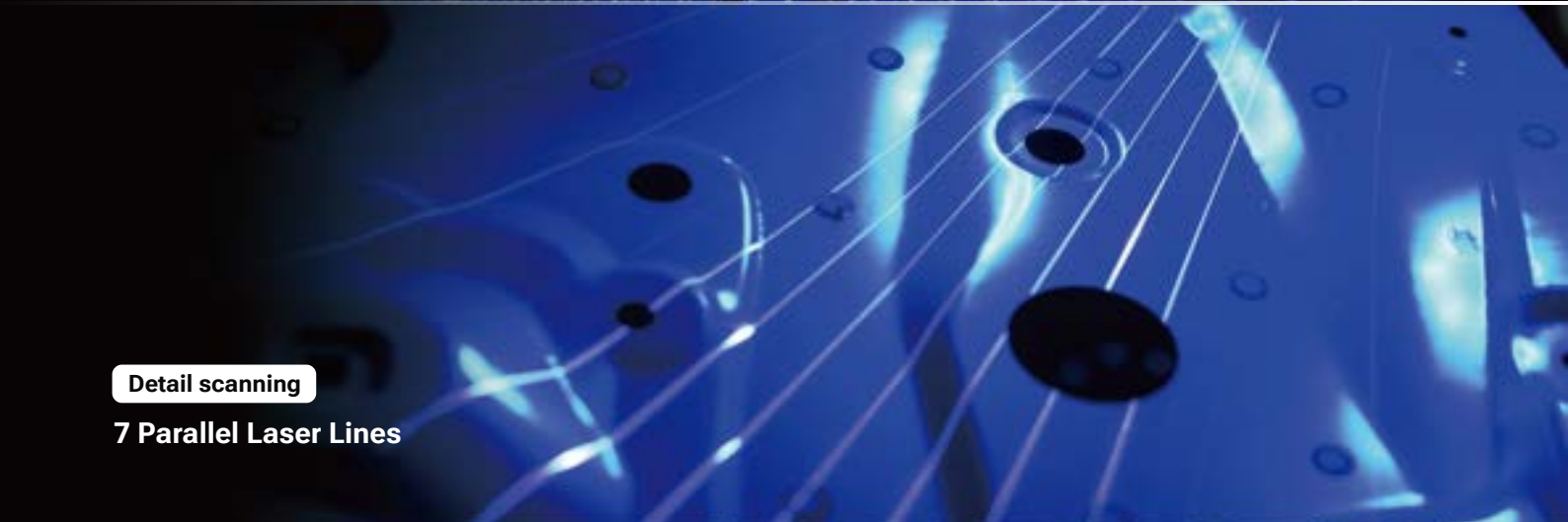


3 Functions for Versatile Applications

A close-up photograph of a metallic surface, possibly a cylinder or a large pipe, covered with a dense grid of fine, intersecting laser lines. The lines are a bright, glowing blue, creating a complex pattern across the surface. The background is dark, emphasizing the illuminated grid.

High-speed scanning

50 Laser Lines

A close-up photograph of a metallic surface, similar to the one above, but with a different laser pattern. Here, there are seven distinct, parallel, bright blue laser lines that run across the surface. The lines are more widely spaced than in the high-speed scanning image, and the overall lighting is slightly dimmer, focusing on the individual lines.

Detail scanning

7 Parallel Laser Lines

A close-up photograph of a complex mechanical part, likely a manifold or a valve body, with several large circular openings. A single, bright blue laser line is directed into one of these openings, illustrating the deep hole scanning function. The part is metallic and has a polished finish.

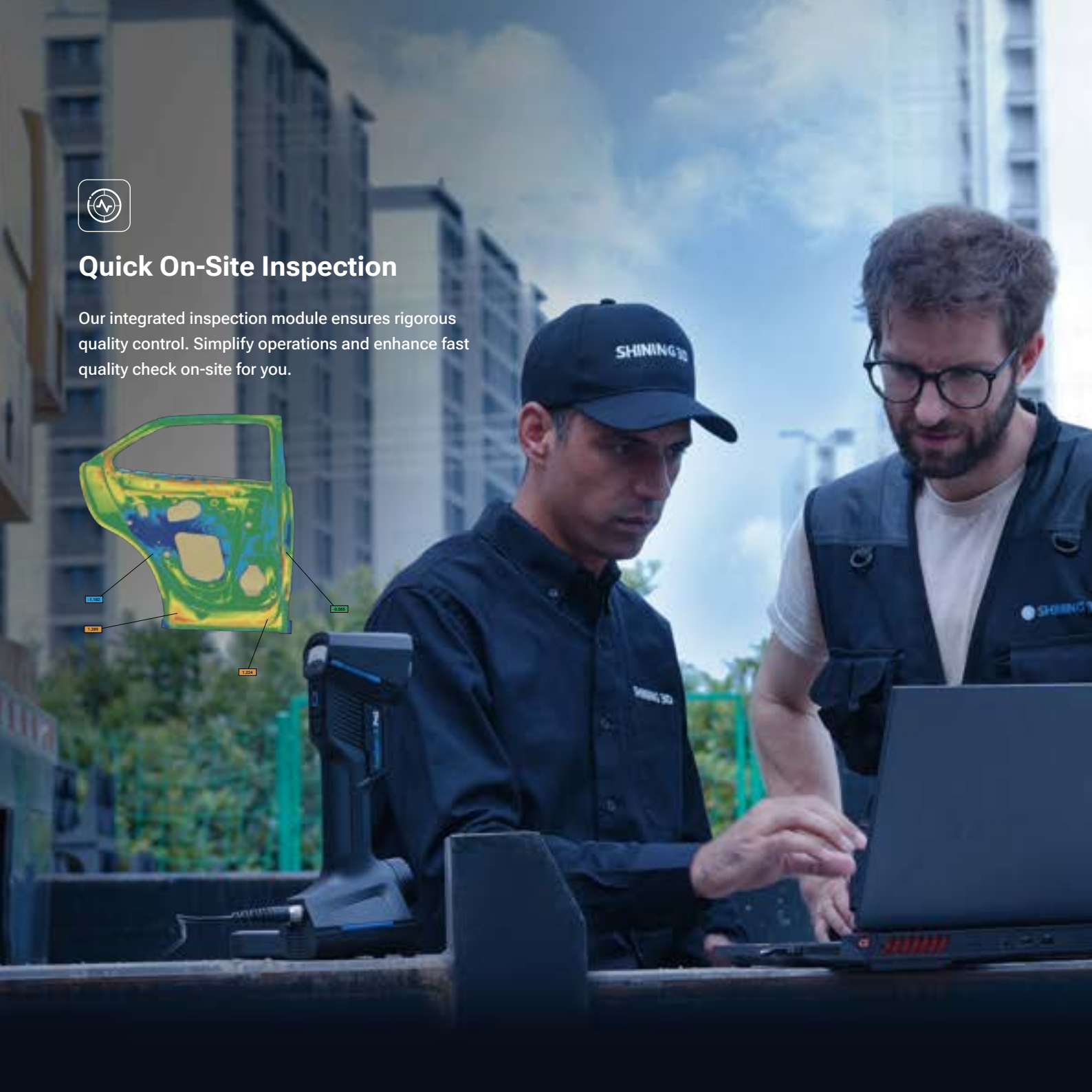
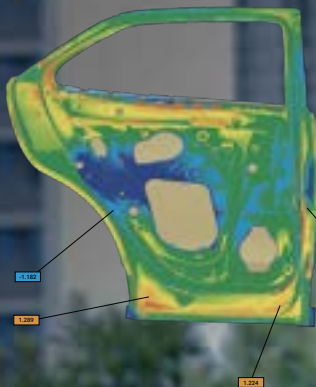
Deep hole scanning

1 Laser Line



Quick On-Site Inspection

Our integrated inspection module ensures rigorous quality control. Simplify operations and enhance fast quality check on-site for you.





SPECIFICATIONS

Product model		FreeScan UE Pro2	
Scan mode	Multiple lines scan	Fine scan	Single line scan
Light source	50 laser lines	7 parallel laser lines	1 laser line
Working distance	300 mm (11.8 in)	200 mm (7.9 in)	300 mm (11.8 in)
Scan accuracy		0.02 mm (0.0008 in)	
Volumetric accuracy		0.02 + 0.03 mm/m (0.02 + 0.015 mm/m with photogrammetry) (0.0008 in + 0.00036 in/ft (0.0008 in + 0.00018 in/ft with photogrammetry))	
Scan speed		Up to 3,460,000 points/s	
Scan depth		360 mm (14.2 in)	
Max. FOV		600 x 550 mm (23.6 x 21.7 in)	
Point distance		0.01 ~ 10 mm (0.0004 ~ 0.4 in)	
Laser class		Class II (eye safe)	
Connection standard		USB 3.0	
Dimension		305.8 x 118.9 x 100.8 mm (12.0 x 4.7 x 4.0 in)	
Weight		0.95 kg	
Power input		24V, 3.75A	
Working temperature		-20 ~ 40°C (-4 ~ 104°F)	
Working humidity		10% ~ 90%	
Certifications		CE, FCC, ROHS, WEEE, KC, FDA, UKCA, IP50, TELEC, TiSAX	
Accuracy Certification		VDI/VDE 2634 Part 3, ISO 10360 (certificated in ISO 17025 certificated accuracy lab)	
Recommended computer configuration		OS: Windows 11 Professional 22H2 (64-bit) Processor: 13th Gen Intel® Core™ i7-13700H or above Graphics Card: NVIDIA GeForce RTX 4060 Laptop GPU or above Video Memory: 8G or above; RAM: 64G or above, DDR5 dual-channel; Interface USB 3.0	

Notice: SHINING 3D reserves the right to modify or adjust the above specifications and pictures.

*Based on VDI/VDE 2634 part3. Sphere-spacing error is assessed with traceable length artefacts and markers by measuring these at different locations and orientations within the working volume, in the accuracy lab with environment conditions: temperature 20 ± 0.5°C; humidity 40 ~ 60% RH.

SHINING 3D METROLOGY

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