



reddot winner 2024

FreeScan UE Pro

Multi-Functional Laser Handheld 3D Scanner

For High Precision Metrology-Grade Inspection





FreeScan UE Pro

FreeScan UE Pro inherits the high-precision, metrology-grade accuracy, and lightweight design of FreeScan UE, while improving the ability of fine scanning and global precision control of large-scale workpiece scanning. It adopts 26+7+1 blue laser lines and integrates a photogrammetric module. Taking into account speed, accuracy and details, this professional 3D metrology solution can be applied to different sized scanning scenarios and perform metrology-grade accuracy inspection, reverse design, additive manufacturing and other applications.





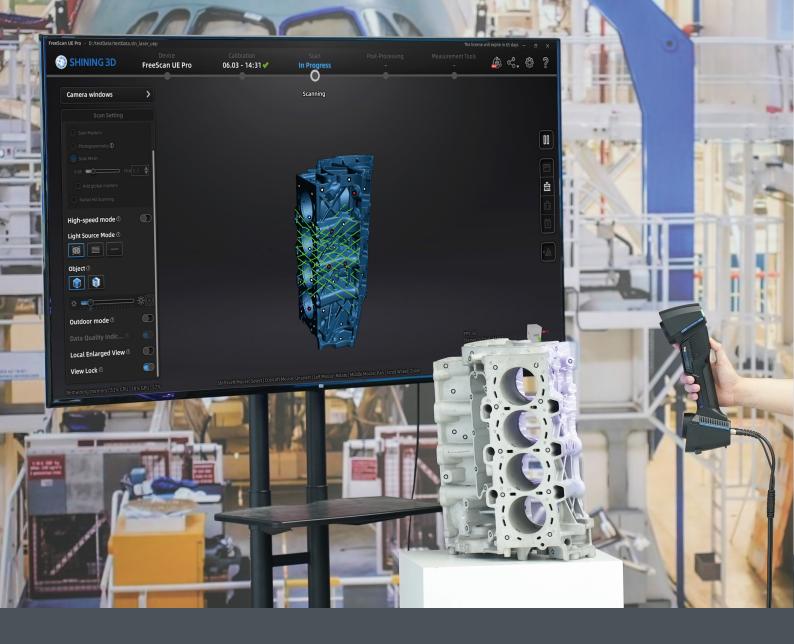
Metrology-Grade High Accuracy

Accuracy up to 0.02mm, delivers consistent scanning results with high precision.



Global Precision Control

Integrated photogrammetry function no need to apply coded targets, quickly locks the spatial position of the target frame.





Multiple Scanning Modes

13 cross laser lines to scan large objects quickly, 7 parallel laser lines to scan fine details and single laser line for deep hole and pocket area scanning.



Easy Operation

Inheriting the lightweight and ergonomic design of the UE series, the user-friendly scanning software enables an easy operation and shortens the learning curve.





Wide Range of Material Adaptations

Supports scanning of black and high-reflective surfaces, more efficient scanning process.



Fine and Rich Details

With higher resolution cameras and 7 parallel laser lines, FreeScan UE Pro enables rich feature object scanning and restores fine details more accurately.

APPLICATIONS



- ·Vehicle appearance design
- Supply chain quality management
- ·Production quality control
- ·Car modification



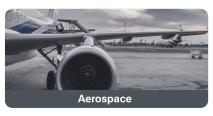
- ·Reverse engineering design ·Fluid dynamics analysis
- Deformation analysis
 Impeller blade inspection



- ·Modeling design
- ·Production line assembly and debugging
- ·Overall size control
- ·Workpiece repair and maintenance



- ·Virtual assembly
- ·Wear analysis and maintenance ·Quality control
- ·Fixture design
- ·Fixture design



- ·Aircraft structure inspection
- ·Interior design
- ·Engine inspection
- ·Maintenance and operation



- ·Quality inspection and control
- Tool and mold adjustment
- ·Rapid prototyping inspection
- ·OEM and old parts remanufacturing

Software Update Sharing



3D Design Software





3D Inspection Software



Geomagic Control X Essentials



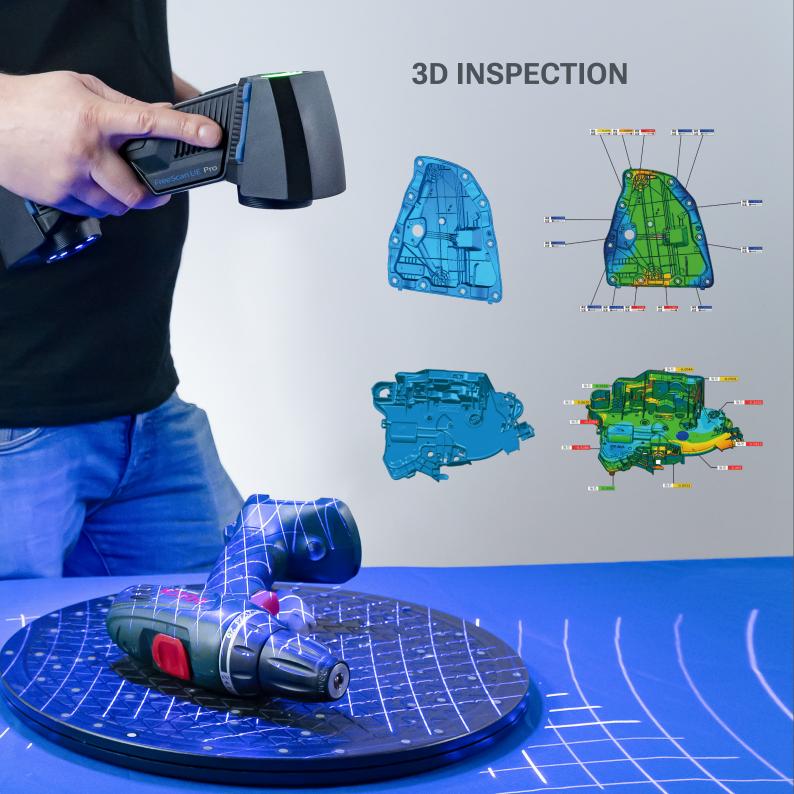
Over-the-Air-Update

Whenever there is a new update, a notification pops up to enable a direct download of the free software.



Seamless docking to inspection and design software

The scan data can be imported into all mainstream 3D inspection and design software programs, such as Geomagic Control X, Geomagic Design X, and Verisurf Inspect with one click, improving the workflow efficiency.



SPECIFICATION

| Product Model | FreeScan UE Pro | |
|---------------------------------------|--|------------------------|
| Scan Mode | Multiple Lines Scan, Single Line Scan | Fine Scan |
| Light Source | 26 laser lines + single laser line | 7 parallel laser lines |
| Scan Accuracy | up to 0.02 mm | |
| Scan Speed | 1,850,000 points/s | |
| Working Distance | 300 mm | 200 mm |
| Scan Depth | 170 mm ~ 680 mm | |
| Max. Scan Range | 600 mm×550 mm | |
| Point Distance | 0.01 - 10 mm | |
| Photogrammetry | Built-in scale bar photogrammetry mode | |
| Volumetric Accuracy* | 0.02+0.03 mm/m (standard mode); 0.02+0.015 mm/m (built-in photogrammetry mode) | |
| Laser Class | Class II (eye safe) | |
| Connection Standard | USB 3.0 | |
| Dimension | 298 mm x 103.5 mm x 74.5 mm | |
| Weight | 840 g | |
| Power Input | 12 V, 5.0 A | |
| Working Temperature | -20 ~ 40°C | |
| Working Humidity | 10 ~ 90% | |
| Certification | CE, FCC, ROHS, WEEE, KC, FDA, UKCA, IP50, TELEC, TISAX | |
| Accuracy certification | VDI/VDE 2634 Part3 (certificated in ISO 17025 certificated accuracy lab) | |
| Recommended Computer Configuration | OS: Win10, 64 bit; Graphics card: NVIDIA GTX/RTX series cards, higher or equal to GeForce RTX 3060; Video memory: ≥6 G; Processor: I7-8700; Memory: ≥32 GB | |

Note: SHINING 3D reserves the right to explain and modify the parameters and pictures described in this product brochure. FreeScan UE Pro-EN 20241106-V2.0

