



PRECISE3DM

FreeScan UE

SIMPLE HIGH
ACCURACY INSPECTION



SHINING3D®

VERSATILE AND USER FRIENDLY



PORTABLE AND LIGHTWEIGHTED

The device weights only 750g, facilitating handheld scanning and avoiding fatigue due to long working time.



SEAMLESS DOCKING TO INSPECTION SOFTWARE

The scan data can be imported into inspection softwares like Geomagic Control X, Verisurf and with one click, increasing the inspection efficiency.



EASY OPERATION

User-friendly operating system with simple software setup and guidance through the whole workflow process, allowing users to master the operation at ease.

SMART AND STREAMLINED INSPECTION DEVICE

HIGH EFFICIENCY

The scan area can reach 510*520mm, providing larger field of view for a smoother and more efficient scanning experience.

METROLOGY-CLASS HIGH ACCURACY

Accuracy up to 0.02mm, Volumetric accuracy 0.02mm+0.04mm/m.

STABILITY OF REPETITIVE MEASUREMENT

When measuring the same workpiece repeatedly, FreeScan UE delivers consistent results, proving stability and reliability.

WIDE RANGE OF MATERIAL ADAPTATIONS

Supporting the scan of black and reflective surfaces to accommodate a wider range of scanning applications.

SIMPLE HIGH ACCURACY INSPECTION

As the blue laser handheld 3D scanner of the FreeScan series, FreeScan UE inherits the iconic features of "high accuracy" and "high precision". At the same time ergonomic and lightweight equipment design make it easier to hold and operate, providing metrology-grade, high-accuracy inspection solutions for the automotive, transportation, aerospace industry, moulding inspection, energy generation, machinery manufacturing etc.



DATA PRESENTATION



APPLICATIONS



AUTOMOTIVE INDUSTRY



TRANSPORTATION



MOULD INSPECTION



**ENERGY
MANUFACTURING**



**AEROSPACE
INDUSTRY**



MACHINE MANUFACTURING

Product Model	FreeScan UE7	FreeScan UE11
Scan Mode	Multiple Lines Scan, Single Line Scan	
Scan Accuracy	Up to 0.02mm	
Volumetric Accuracy	0.02 mm+0.04 mm/m	
Volumetric Accuracy with DigiMetric*	0.02 mm + 0.025 mm/m	
Scan Speed	860,000 points/s	1,350,000 points/s
Working Distance	500mm	
Scan Depth (Depth of Field)	300mm-700mm	
Max. Scan Range	510mm x 520mm	
Point Distance	0.05mm-3mm	
Light Source	14 lines+1 line blue laser	22 lines +1 line blue laser
Laser Class	Class II (eye safe)	
Connection Standard	USB 3.0	
Dimensions	298mm x 90mm x 74.5mm	
Weight	750g	
Powering	DC: 12V, 5.0A	
Operating Temperature Range	-20°C - 40°C	
Operating Humidity Range	10%-90%	
Certifications	CE, FCC, ROHS, WEEE	
Inspection Module	Compatible with multiple inspection software solutions such as Geomagic Control X/Control X Essentials, Polyworks, Catia, Verisurf etc.	
Output Formats	OBJ ; STL ; ASC ; PLY ; P3 ; 3MF	
Data Compatibility Software	3D System (Geomagic Solutions), InnovMetric Software (PolyWorks), Dassault Systemes (CATIA V5 & SolidWorks), PTC (Pro/ENGINEER), Siemens (NX & Solid Edge), Verisurf, Autodesk (Inventor, Alias, 3ds Max, Maya, Softimage) etc.	
Recommended Computer Configuration	OS: Win10, 64 bit; Graphics Card: NVIDIA GTX/RTX series cards, higher or equal to GTX 1080; GPU Memory: ≥4G; Processor: I7-8700; Memory: ≥32GB	

Volumetric accuracy is the relationship between the accuracy of the 3D data and the size of the object, with a reduction in accuracy of 0.04 mm per 100 cm² a reduction in accuracy of 0.025 mm per 100 cm with DigiMetric. The standard above is determined by measuring the sphere centre distance by splicing the marker points.