SHINING 3D®
For More Shining Ideas

EinScan Pro HD

HIGH DEFINITION, MULTI-FUNCTIONAL HANDHELD 3D SCANNER

Improves the Efficiency of High-quality 3D Modeling

· Impressive high resolution for fine details
· Handle dark or casting metal surface with less limitations
· Fast scan speed for high efficiency





EinScan Pro HD

Inherited multi-functional and modular design of EinScan Pro series handheld 3D scanner, EinScan Pro HD delivers unparalleled performance in capturing high resolution and accuracy by handheld scanning. Exceptional versatility and powerful optimizations come together for the ultimate high-efficiency and professional-grade 3D scanning experience. It is reliable assistant for designers and engineers who care about high quality 3D modeling.



Handheld HD Scan Mode

Impressive High Resolution for Fine Details

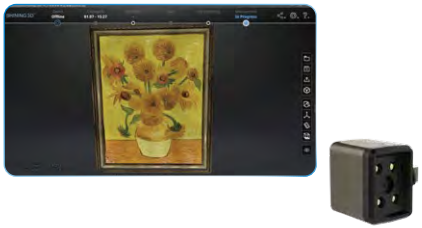
By adopting a new structure light projection modular, the stripe pattern scanning which was traditionally used in Fixed Scan Mode is now utilized to Handheld HD Scan Mode. By 0.2mm minimum point distance setting with optimized algorithm, it brings high resolution and accuracy in handheld scanning as good as under fixed scan.



Modular Design for a Wide Range of Applications by Multi Scan Modes and Data Alignments

Modular designed Color Pack, Industrial Pack as optional add-ons to EinScan Pro HD extend your scanning experience for more applications. Multiple positioning methods, including feature alignment, marker alignment, turntable coded targets alignment, manual alignment and texture alignment (with Color Pack) , greatly enhance the scanning efficiency without additional preparation.

*Optional Add-on



Color Pack

Gets the full-color texture with geometry.
Improves scanning efficiency through texture alignment.



Industrial Pack

Makes a static automatic scan on a turntable possible for a better accuracy.



Less Limitations of Scan Objects

With new lighting projection hardware and software algorithm, EinScan Pro HD is capable to scan a wider range of objects of dark or black color and casting metal surface, enriching the capability for 3D scanning of materials.





Fast Scanning Speed and Data Transmission

EinScan Pro HD has a dramatic breakthrough in scanning capability, processing up to 3,000,000 points per second under handheld scan mode, and less than 0.5s for every single frame in Fixed Scan Mode. USB 3.0 provides high speed data transmission.



High Accuracy for High Quality 3D Modeling

By kinds of positioning methods, both scanner or objects can be moved during scanning. It delivers accuracy up to 0.04 mm in Fixed Scan Mode. Under handheld scanning mode by marker alignment, the volumetric accuracy is up to 0.045mm+0.3mm/m.

Take the Portable EinScan Pro HD Anywhere You Go

Ergonomic designed EinScan Pro HD with a light weight, you can easily take the scanner anywhere you go; easy plug-and-play lets you run the scanner without complex installation; the compact size allows scanner to move freely with unlimited scanning experience.



Software : ExScan Pro & Solid Edge SHINING 3D Edition

ExScan Pro: Developed by SHINING 3D, ExScan Pro is a professional software for 3D scanning and data processing with a collection of both scan and mesh editing tools for generating high-quality 3D models. Either novice or experienced users can easily scan for high quality 3D data. ExScan Pro software and upgrade are free to all users.

- **Clear work guide process**
- **User friendly interface**
- **Data post processing: simplification, hole filling, smooth, sharpen, delete, etc**
- **Data measuring: Coordinate adjustment, feature creation, and measurement**
- **High compatibility**

Output file formats include STL, OBJ, PLY, ASC, 3MF and P3(global markers file). Compatible with most mainstream 3D design softwares in the market. By saving watertight models, seamlessly connect to 3D printers for 3D printing.

Solid Edge SHINING 3D Edition: EinScan Pro HD, including Solid Edge SHINING 3D Edition with the mainstream 3D CAD design functions, brings a convenient and powerful 3D design tool to help achieve your creative ideas.

Complete Reverse Engineering Solution

— EinScan RED Bundle

SHINING 3D EinScan series 3D scanners, integrated with Geomagic Essentials and Solid Edge SHINING 3D Edition, combined with 3D printer, provide users the solution covering "3D Digitize — Design & Simulate — Additive Manufacture" to generate more high-quality 3D data for production.



VERSATILE APPLICATIONS

For Higher Efficiency & Quality

· Manufacturing & Reverse Engineering
· 3D Modeling for Customized Product and Service via 3D Printing

For A Healthier Life

· Digital Medical Analysis
· Orthotics & Prosthetics

For Unlimited Inspiration

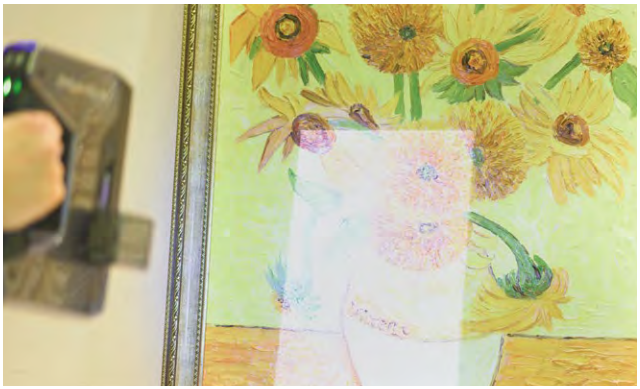
· Art & Heritage
· Design

For Creative Imagination

· Virtual Display

For More Shining Ideas, Explore Unlimited Applications…









TECHNICAL SPECIFICATIONS

EinScan Pro HD [Including Solid Edge SHINING 3D Edition]

Scan Mode	Handheld HD Scan	Handheld Rapid Scan	Fixed Scan with Turntable (with Add-on: Industrial Pack)	Fixed Scan without Turntable (with Add-on: Industrial Pack)
Scan Accuracy	up to 0.045 mm	up to 0.1 mm	0.04 mm (Single Shot Accuracy)	
Volume Accuracy[1]	0.3 mm/m (Markers Alignment)	0.3 mm/m (Markers Alignment)	/	/
Scan Speed	10 frames/s 3,000,000 points/s	30 frames/s 1,500,000 points/s	Single Scan＜0.5 s	
Point Distance	0.2 mm-3 mm	0.25 mm-3 mm	0.24 mm	
Single Scan Range	209*160mm-310*240mm			
DOF	±100 mm			
Working Center Distance	510 mm			
Light Source	LED			
Align Mode	Marker Alignment, Feature Alignment [2], Hybrid Alignment [3]	Marker Alignment, Texture Alignment [4], Feature Alignment, Hybrid Alignment	Turntable Coded Targets, Feature, Marker, Manual Alignment	Marker, Feature, Manual Alignment
Texture Scan	Yes (with Add-on: Color Pack)			
Outdoor Operation	Set up the shelter or cover to avoid direct sunlight			
Special Scan Object	For the transparent or highly reflective objects, please spray powder before scanning.			
Software Included	ExScan Pro, Solid Edge SHINING 3D Edition			
Data Format	OBJ，STL，ASC，PLY，P3，3MF			
Scan Head Weight (include a USB cable)	1.13 kg			
OS System Support	Win10, 64bit			
Recommended Configuration	Graphics card: NVIDIA GTX1080 and higher; video memory: >4G, processor: I7-8700, memory: 64G;interface: high-speed USB 3.0			
Required Configuration	Graphics card: Quadro card P1000 and above or NVIDIA GTX660 and higher; processor: Intel (R) xeon E3-1230, Intel (R) I5-3470, Intel (R) I7-3770; interface: high-speed USB 3.0; memory: 8G			

[1]. Volumetric accuracy refers to the relationship between 3D data accuracy and object size; the accuracy is reduced by 0.3mm per 100cm. The conclusion is obtained by measuring the center of sphere under marker alignment.
[2]. Select this alignment when scanning objects with rich geometrical features on the surface.
[3]. Hybrid alignment means marker alignment and feature alignment can be switched automatically.
[4]. This alignment needs Color Pack assisting, and requires rich color texture information on the surface of the object.

SHINING 3D reserves the right to explain any alteration of the specifications and pictures. Please refer to einscan.com to find more information.