SHINING 3D

EinScan Pro HD
HIGH DEFINITION, MULTI-FUNCTIONAL HANDHELD 3D SCANNER

WorldSkills Designated Competition Model

EinScan Pro HD is designated model the Mechanical Engineering CAD in WorldSkills Competitions. It provides competitors with a highly accurate and versatile device capable of capturing complex mechanical parts with seamless precision.

Modular Design
Scans Objects of All Sizes

The EinScan Pro HD can capture objects of all sizes with ease. Whether you need to scan a car door or the intricate details of small industrial components, the EinScan Pro HD provides unmatched precision and efficiency for a variety of applications.

The Color Pack and Industrial Pack are optional add-ons for the EinScan Pro HD, offering various scanning experiences and applications.

Color Pack

Enables the EinScan Pro HD to capture full-color texture along with geometry.

Industrial Pack

Enables the EinScan Pro HD to perform static automatic scans on a tripod for improved accuracy.

Texture Mapper Lite

Download the free software Texture Mapper Lite to combine scanned data and photogrammetry using digital camera photos, and create a photorealistic texture 3D model.

220cm

71cm

Scanning Time < 1 min

Seamless Integration with Multiple Software Platforms

Currently, EXScan Pro software seamlessly intergrates with Geomagic Control X and Geomagic Design X. This integration enhances the ease and convenience of your subsequent data processing.

You can also switch to Texture Mapper Lite directly within EXScan Pro to edit your textures and make them more realistic and accurate.
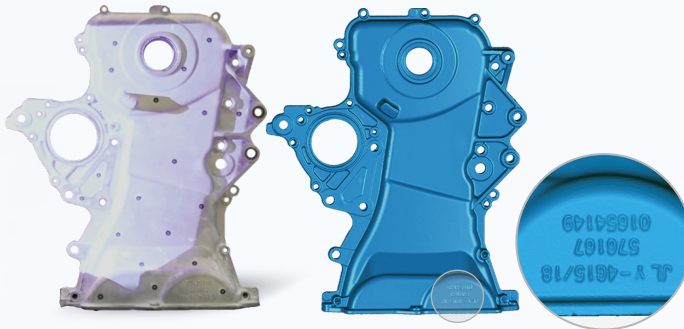
High Accuracy for High Quality 3D Modeling

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.

EXModel

EXModel is a powerful bridge that simplifies CAD modeling from 3D scanning to manufacturing. With the integration of EXScan Pro, you can now seamlessly import data to EXModel with a single click after completing a scan. EXModel offers a comprehensive set of tools that enable you to create professional-grade CAD digital models that are compatible with your CAD software.
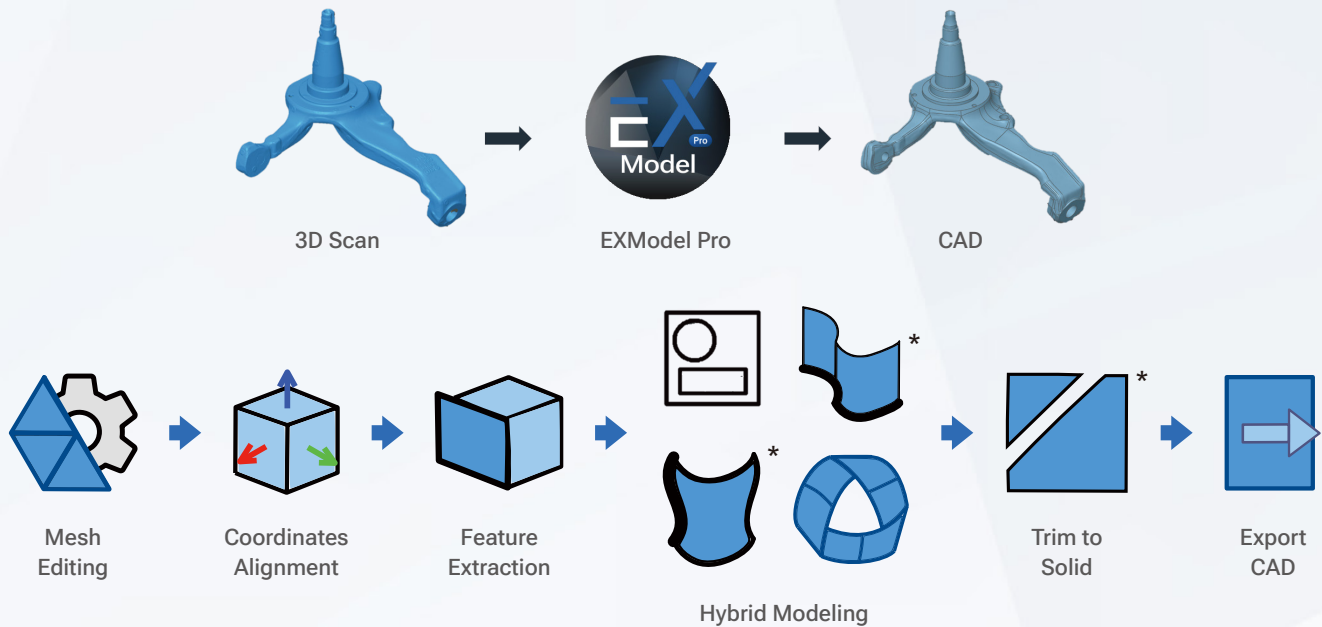
Effortless Mesh Processing

Precision CAD Creation

Enhanced Data Utilization

Cost-Effective Solution

Workflow

3D Scan → EXModel Pro → CAD

Mesh Editing → Coordinates Alignment → Feature Extraction → Hybrid Modeling → Trim to Solid → Export CAD

*30 days Free Trial is avaible to apply to EXModel.

*Function features marked with asterisk are available in EXModel Pro.

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...
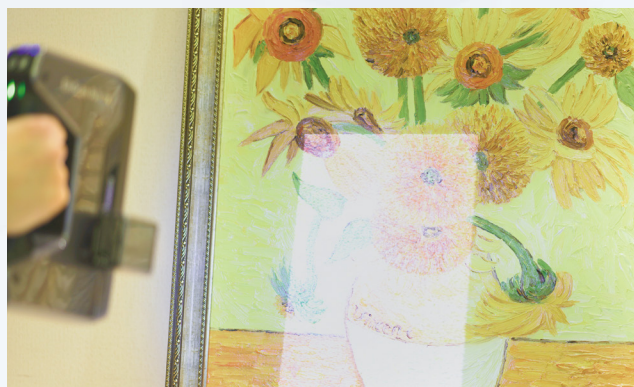
Impressive High Resolution for Fine Details

Adopted stripe pattern scanning to fixed scan mode and handheld HD scan mode, handheld scanning in EinScan Pro HD is as good as station fixed scan, making scanning more freely.

Point distance:
· Fixed Scan: 0.24mm
· Handheld: 0.2-3mm

High-Speed Scanning

EinScan Pro HD can capture up to 3,000,000 points per second under handheld scan mode, and less than 0.5 s for every single frame in fixed scan mode, significantly improving scanning efficiency.

Less Limitations of Scan Objects

With stronger lighting projection and a smart algorithm, EinScan Pro HD is capable of scanning a wider range of objects of dark or black color and casting metal surfaces, enriching the capability for 3D scanning of materials.

TECHNICAL SPECIFICATIONS
EinScan Pro HD

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)	
Volumetric 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			
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 RTX2060 and higher; video memory: >6G, processor: i7-9750, memory: 64G; interface: high-speed USB 3.0			
Required Configuration	Graphics card: NVIDIA GTX1080 and higher; video memory: >4G, processor: Intel i7-8700, memory: 16G; interface: high-speed USB 3.0			

[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.

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www.einscan.com

sales@shining3d.com