EinScan Pro 2X/2X Plus
MULTI-FUNCTIONAL HANDHELD 3D SCANNER

IMPROVE EFFICIENCY OF HIGH-QUALITY 3D MODELING

Meet the completely new EinScan Pro 2X & EinScan Pro 2X Plus, the next generation of handheld 3D scanners with the latest technology. These new models are based on the feedback from thousands of users and the valuable input of SHINING 3D's own R&D team. Being faster and more accurate than ever before, the portable versatile EinScan Pro 2X & EinScan Pro 2X Plus will improve the efficiency of high-quality 3D modeling.

Portable & User-friendly Design
With a light weight and compact size, you can easily take the EinScan Pro 2X or 2X Plus anywhere like a laptop, enjoy plug-and-play installation and unlimited scanning experience.

Scan Faster than Ever Before
The latest development in data capture hardware and optimized algorithms, make the next generation EinScan Pro 2X series a dramatic breakthrough in scanning speed, processing up to 1,500,000 points per second (30 fps) under Handheld Rapid Scan Mode.

High Speed Data Transmission - USB 3.0

High Accuracy
Single scan accuracy under Fixed Scan without Turntable Mode is up to 0.04 mm. When using markers, the volumetric accuracy under handheld scanning modes is up to 0.05mm+0.3mm/m.

Catch Fine Details
The minimum point distance is up to 0.2mm under Handheld Rapid Scan and Handheld HD Scan modes, generating high resolution 3D data.

Versatile Scan Modes & Align Modes
Supports Handheld Rapid Scan, Handheld HD Scan, Fixed Scan without Turntable, and Fixed Scan with Turntable modes, as well as multiple alignment modes including feature alignment, marker alignment, texture alignment, turntable coded targets alignment, and manual alignment.

Modular Design to Meet Wider Range of Applications
Color Pack, Industrial Pack, and HD Prime Pack as optional add-ons to EinScan Pro 2X series for various scanning experiences and applications.
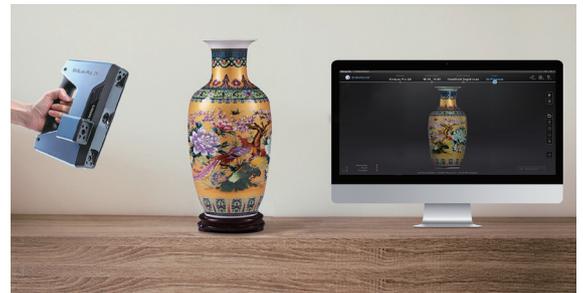
Color Pack
(For EinScan Pro 2X & 2X Plus)
Gets the full-color texture with geometry.

Industrial Pack
(For EinScan Pro 2X & 2X Plus)
Makes a static automatic scan on a tripod possible for a better accuracy.

HD Prime Pack
 (Only for EinScan Pro 2X Plus)
Allows markers free scanning under Handheld HD Scan mode to achieve fine detail 3D data when the object surface has enough geometries.

Scanning Software EXSCAN PRO

The scanning software EXSCAN PRO makes 3D scan process as simple as taking a video for either new or experienced users.

· User-Friendly Operation

· New Operation Mode Option

Allows users a faster scanning experience during operation and set the resolution option afterwards during the data processing, which improves scanning efficiency.

· Simultaneous Data Display

· Multiple Alignments

Free to choose feature alignment, marker alignment, coded target alignment, texture alignment or manual alignment in different occasions greatly enhance the scanning efficiency.

· High Compatibility

Outputs standard file formats includes STL, OBJ, PLY, ASC, 3MF and P3 (global markers file).
Compatible with most mainstream software packages in the market.
By saving watertight models, seamlessly connect to 3D printers for 3D printing.

· Mesh Editing

Provides mesh editing such as clean, hole filling, data simplification, smoothing, sharpen etc.
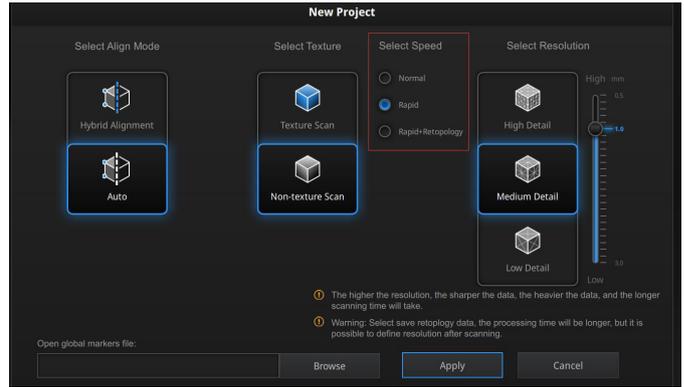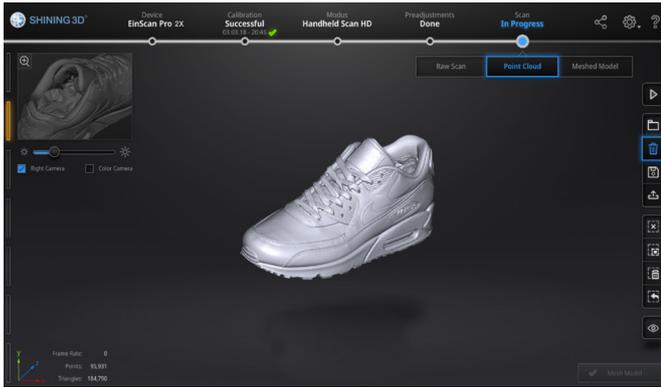
Design Tool From SIEMENS PLM Software: Solid Edge SHINING 3D Edition

As a new generation of digital innovation platform, Solid Edge SHINING 3D Edition includes reverse engineering, generative design, and simulation together with CAD tool in one platform. SHINING 3D EinScan series 3D scanners, integrated with Solid Edge SHINING 3D Edition, provide users the solution covering "3D Digitize – Design & Simulate – Additive Manufacture" to generate more high-quality 3D data for production.

CONVERGENT MODELING
SYNCHRONOUS MODELING
REVERSE ENGINEERING
GENERATIVE DESIGN
SIMULATION
ADDITIVE MANUFACTURING

APPLICATIONS

For Higher Efficiency & Quality
· Manufacturing & Reverse Engineering
· 3D Modeling for Customized Product and Service via 3D Printing

For A Healthier Life
· Healthcare

For Unlimited Inspiration
· Art & Heritage
· Design

For Creative Imagination
· Research & Education
· Virtual Display

For More Shining Ideas, Explore Unlimited Applications…

EinScan Pro 2X

The truly portable and versatile handheld 3D scanner for high resolution results. A great option for scanning of small to medium size objects and ideal for high-quality 3D modeling.

EinScan Pro 2X Plus

Featuring new powerful algorithms and intuitive workflow, EinScan Pro 2X Plus with a new color of dark grey, offering an enhanced Handheld HD Scan Mode and enlarged scan range, is perfect for capturing 3D model of medium to large size objects with high efficiency.

Model	EinScan Pro 2X			EinScan Pro 2X Plus		
Scan Mode	Handheld HD Scan	Handheld Rapid Scan	Fixed Scan with Turntable Fixed Scan without Turntable	Handheld HD Scan	Handheld Rapid Scan	Fixed Scan with Turntable Fixed Scan without Turntable
Scan Speed	20 fps 100,000 points/s 7 data capture lines	30 fps 1,500,000 points/s	Single Scan < 1s	20 fps 1,100,000 points/s 100 data capture lines	30 fps 1,500,000 points/s	Single Scan < 0.5 s
Point Distance	0.2 mm — 2 mm	0.2 mm — 2 mm	0.16 mm	0.2 mm — 3 mm	0.25 mm — 3 mm	0.24 mm
Single Scan Range	135*100 mm — 225*170 mm			208*136 mm — 312*204 mm		
Working Distance	400 mm			510 mm		
Compatible with HD Prime Pack	No			Yes		

TECHNICAL SPECIFICATIONS
EinScan Pro 2X

Model	EinScan Pro 2X			
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 0.05 mm	up to 0.1 mm	0.04 mm (single shot accuracy)	0.04 mm (single shot accuracy)
Volumetric Accuracy [1]	0.3 mm/m (Marker Alignment)		/	/
Scan Speed	20 fps 100,000 points/s 7 data capture lines	30 fps 1,500,000 points/s	Single Scan < 1s	Single Scan < 1s
Point Distance	0.2 mm-2 mm	0.2 mm-2 mm	0.16 mm	0.16 mm
Single Scan Range	135*100 mm — 225*170 mm			
Depth of Field	±100 mm			
Working Distance	400 mm			
Light Source	LED			
Align Mode	Marker Alignment	Marker Alignment, Texture Alignment [2], Feature Alignment [3], Hybrid Alignment [4]	Turntable Coded Targets, Feature, Marker, Manual Alignment	Marker, Feature, Manual Alignment
Texture Scan	No	Yes (with Add-on: Color Pack)		
Outdoor Operation	Set up the shelter or cover to avoid direct sunlight			
Special Objects for Scanning	For the transparent, highly reflective or some dark objects, please spray powder before scanning			
Printable Data Output	Able to export watertight 3D model directly to 3D printing			
Output Formats	OBJ , STL , ASC , PLY , P3 , 3MF			
Scanner Body Weight	1.13kg (include the USB3.0 cable)			
Supported OS	Win 7, Win 8, Win 10, 64 bit			
Recommended	Graphics card: NVIDIA GTX1060 and higher; video memory: >4G, processor: I7-8700, memory: 32G;interface: high-speed USB 3.0			
Required	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			

Notice:
[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]. This alignment needs Color Pack assisting, and requires rich color texture information on the surface of the object.
[3]. Select this alignment when scanning objects with rich geometrical features on the surface.
[4]. Hybrid alignment means marker alignment and feature alignment can be switched automatically.
SHINING 3D reserves the right to explain any alteration of the specifications and pictures. Please refer to einscan.com to find more information.

TECHNICAL SPECIFICATIONS
EinScan Pro 2X Plus

Model	EinScan Pro 2X Plus			
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 0.05 mm	up to 0.1 mm	0.04 mm (Single Shot Accuracy)	0.04 mm (Single Shot Accuracy)
Volumetric Accuracy [1]	0.3 mm/m (Marker Alignment)		/	/
Scan Speed	20 fps 1,100,000 points/s 100 data capture lines	30 fps 1,500,000 points/s	Single Scan < 0.5 s	Single Scan < 0.5 s
Point Distance	0.2 mm-3 mm	0.25 mm-3 mm	0.24 mm	0.24 mm
Single Scan Range	208*136 mm — 312*204 mm			
Depth of Field	±100 mm			
Working Distance	510 mm			
Light Source	LED			
Align Mode	Marker Alignment	Marker Alignment, Texture Alignment [2], Feature Alignment [3], Hybrid Alignment [4]	Turntable Coded Targets, Feature, Marker, Manual Alignment	Marker, Feature, Manual Alignment
Texture Scan	No	Yes (with Add-on: Color Pack)		
Outdoor Operation	Set up the shelter or cover to avoid direct sunlight			
Special Objects for Scanning	For the transparent, highly reflective or some dark objects, please spray powder before scanning.			
Printable Data Output	Able to export watertight 3D model directly to 3D printing			
Output Formats	OBJ , STL, ASC , PLY , P3 , 3MF			
Scanner Body Weight	1.13 kg (include the USB3.0 cable)			
Supported OS	Win 7, Win 8, Win 10, 64 bit			
Recommended	Graphics card: NVIDIA GTX1060 and higher; video memory: >4G, processor: I7-8700, memory: 32G;interface: high-speed USB 3.0			
Required	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			

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