

APPLICATIONS



For Higher Efficiency & Quality

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



For Unlimited Inspiration

- Art & Heritage
- Design



For A Healthier Life

- Healthcare



For Creative Imagination

- Research & Education
- Virtual Display

For More Shining Ideas, Explore Unlimited Applications...



TECHNICAL SPECIFICATIONS

EinScan Pro 2X 2020

Model	EinScan Pro 2X 2020			
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)	0.04 mm (single shot accuracy)
Volumetric Accuracy [1]	0.3 mm/m (Marker Alignment)		/	/
Scan Speed	10 fps 3,000,000 points/s	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	150*120 mm — 250*200 mm			
Depth of Field	±100 mm			
Working Distance	400 mm			
Light Source	LED			
Align Mode	Marker Alignment, Feature Alignment [3], Hybrid Alignment [4]	Marker Alignment, Texture Alignment [2], Feature Alignment [3], Hybrid Alignment [4]	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 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 10, 64 bit			
Recommended	Graphics card: NVIDIA RTX2060 and higher; video memory: >6G; processor: i7-9750, memory: 64G; interface: high-speed USB 3.0			
Required	Graphics card: NVIDIA GTX1080 and higher; video memory: >4G, processor: Intel i7-8700, memory: 16G; interface: high-speed USB 3.0			

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.



SHINING 3D

For More Shining Ideas

EinScan Pro 2X **2020** MULTI-FUNCTIONAL HANDHELD 3D SCANNER



IMPROVE EFFICIENCY OF HIGH-QUALITY 3D MODELING

EinScan Pro 2X 2020, the next generation of handheld 3D scanner with the latest technology is 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 2020 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 2020 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, makes EinScan Pro 2X 2020 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 Mode is up to 0.04 mm. When using markers, the volumetric accuracy under handheld scanning modes is up to 0.045mm+0.3mm/m.

Catch Fine Details

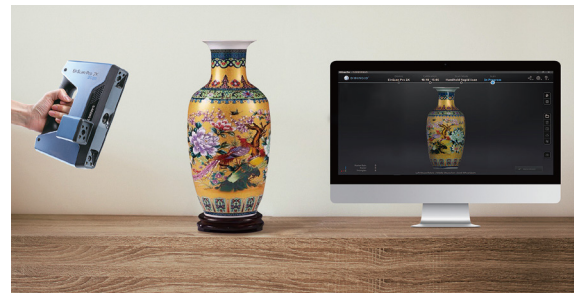
The minimum point distance is up to 0.2mm under Handheld Rapid Scan and Handheld HD Scan modes, generating high resolution 3D data.

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 and Industrial Pack, as optional add-ons to EinScan Pro 2X 2020 for various scanning experiences and applications.





Color Pack

(For EinScan Pro 2X 2020)
Gets the full-color texture with geometry.



Industrial Pack

(For EinScan Pro 2X 2020)
Makes a static automatic scan on a tripod possible for a better accuracy.

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

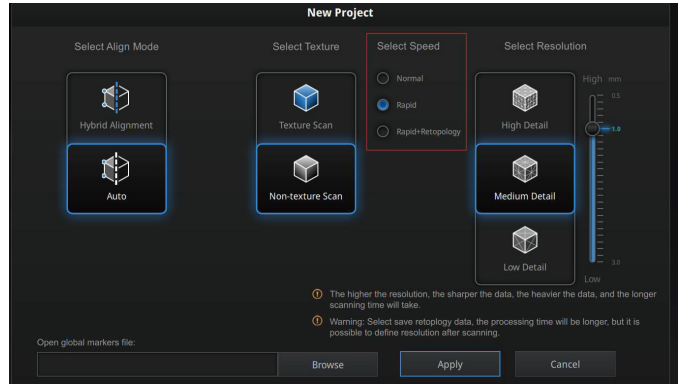
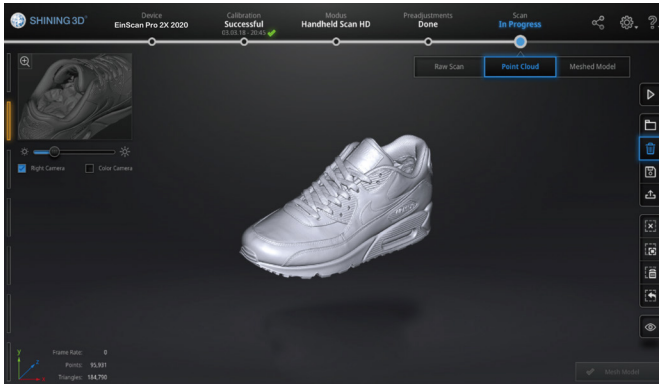
Free to choose feature alignment, marker alignment, coded target alignment, texture alignment or manual alignment in different occasions greatly enhance the scanning efficiency.

□ 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.

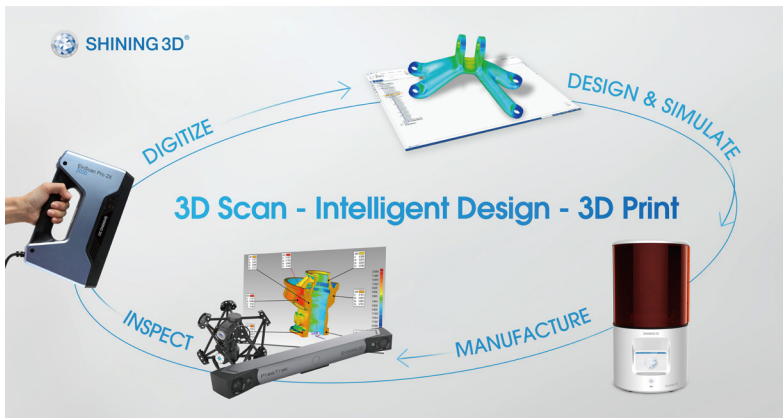
□ Mesh Editing

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