

SHINING 3D



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EinScan-Pro Series

Multi-Functional Handheld 3D Scanners



EinScan-Pro series are multi-functional 3D scanners for your most diverse application because of its four versatile scanning modes: Handheld Rapid Scan, Handheld HD Scan, Automatic Scan, and Fixed Scan.

EinScan-Pro series are your best choice for capturing real world data to convert into a digital 3D model. It can be used on consumer and commercial applications in manufacturing, engineering, design, development, artwork archival, animation and even human body acquisition.

EinScan-Pro series can capture objects in full color ranging in size from 30 mm up to 4 meters. EinScan-Pro series' comfortable, ergonomic design makes it as the perfect choice for extensive, long-lasting projects. This light, handheld portable scanner weighing only 0.8kg, it can often create more-accurate and better-fitting parts when compared with from-scratch models from a CAD system. EinScan-Pro scanning software allows users to do reverse engineering from 3D scanned cloud points or meshes, or create watertight meshes that is ideal for 3D printing.

## Diverse Scanning Modes



#### Handheld Rapid Scan Mode

The most prominent characteristic of the Handheld Rapid Scan mode is speed.

This mode is recommended for large objects with rich features that don't require high precision or accuracy, like large-scale sculptures, human forms, organic shapes, furniture and so on. It can support both markers (R<sup>2</sup> scanning module) and feature alignment.





#### R<sup>2</sup> (Rapid Registration)

R<sup>2</sup> (Rapid Registration) scanning module is a newly-added module that allows you to recognize and align reference points in the handheld rapid scanning mode. It is targeted to be used with large-size objects, with few geometrical characteristics, even flat objects without any geometrical characteristics can be easily scanned. Color information of the objects can also be obtained. It delivers a rapid and smooth operating experience while ensuring scanning accuracy.

\* This module is an optional paid module which needs to be activated after purchasing of a license.





#### Handheld HD Scan Mode

While choosing between two handheld modes, we recommend selecting the High Definition mode if the object is richly detailed and difficult to move. Although the HD Scan mode requires the use of Markers, it offers convenience with highly detailed, precise results.

The handheld HD scan mode utilizes white light scanning which is highly suitable for large sculptures, automotive parts, castings and so on.







#### **Automatic Scan Mode**

An optional Industrial Pack enables automatic scanning by matching the EinScan-Pro series with a fully-automatic turntable. It's recommended to use Automatic Scan Mode if the object's size is less than 20cm. Since the turntable is very convenient and easy-to-use, it's best to scan small objects. This mode can be used for industrial components, ornaments and small artistic pieces like sculptures. The Automatic Scan Mode accuracy is 0.05mm for a single scan.





#### Fixed Scan Mode

An optional Industrial Pack also enables free scanning by fixing the scan head to the tripod. The Fixed Scan Mode is recommended for large, complicated workpieces and richly detailed sculptures (accuracy 0.05mm). It's possible to scan larger objects up to 4 meters in size. What's more, the Fixed Scan Mode is suitable for highly detailed objects that are light weight and easy to move around during the scan process. If the object has enough feature, the EinScan-Pro will automatically align multiple scan meshes to form a perfect 3D model. Experienced users gain their best results by manually controlling the number of scans.





#### Full Color Scan

By attaching an external texture camera, EinScan-Pro can capture geometry with full-color texture. This can be useful for computer graphics, animation, game development, digital archiving, prototyping and color 3D printing. Handheld HD Scan Mode doesn't support color scan.



**Texture Camera** 





### **Product Features**



#### **High Accuracy**

The EinScan-Pro Series 3D scanner utilizes white light scanning technology which features low noise and superior capture characteristic accuracy. The single range scanning accuracy is <0.05mm under Automatic Scan and Fixed Scan.



#### High Speed

Einscan Pro Series help 3d scanning quickly and easily. In the handheld HD Scan mode of EinScan-Pro+, the scan speed is 550,000 points/sec, and in the Automatic and Fixed scan modes, a single scan takes less than 2 seconds.



#### Easy to Use

EinScan-Pro series 3D scanners is highly portable and automatic because of its versatile operating modes. EinScan-Pro series' comfortable, ergonomic design makes it as the perfect choice for extensive, long-lasting projects. This light, handheld portable scanner weighing only 0.8kg. Every scanning step is guided in software with clear instruction. All you have to do is "point and click" and the scan process turns your real world objects into 3D digital models in your computer.



#### EinScan Software Features

- Automatically mesh output
- Real-time visualization during the scanning
- Data simplification supported
- Point distance is adjustable based on user's demand.
- \* A variety of alignment modes (feature, turntable, turntable coded targets, markers, and manual align), the user can choose accordingly.



#### High Compatibility to 3D Applications

- \* The scanner outputs in standard file formats such as STL (the design format used for most rapid prototyping applications), OBJ, PLY, and ASC (a standardized file that contains 3D objects) which ensures that the data can be used in most 3D CAD applications.
- One-click data upload to the "Sketchfab" platform, and streamlined process to share scanned
   3D data directly over the Internet.
- Open SDK and API access.

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## EinScan-Pro+

High Speed Handheld 3D Scanner



#### New-generation Handheld HD Scanning Mode

With new-generation Handheld HD Scanning Mode, capturing 3D scanning details at high scanning speed can be done simultaneously. Now the EinScan-Pro+, equipped with a brand-new generation of handheld rapid HD scanning technology, protected by an international patent, offers an enhanced handheld HD scanning mode by implementing and using an intensive line-scanning strategy.



#### Scanning Range is Enlarged 1.6 Times

The EinScan-Pro+ recalibrates the scanning range by using a new 300 x 170 mm (11.8x 6.69 in) single-side scanning range. The area of single frame scanning is enlarged 1.6 times. The handheld scanning speed, for large-size objects, has been considerably increased. It is more efficient to scan large size object by EinScan Pro+



#### Glossy and Shiny Look in a New Champagne Gold Scheme

Closely following the trend of fashion, the appearance of EinScan-Pro+ is in a champagne-gold color, offering a delicate and profound metallic texture.



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## **Technical Specifications**

	EinScan-Pro				
Scan Mode	Handheld HD Scan	Handheld Rapid Scar	Automatic Scan	Fixed Scan	
Single Shot Accuracy	0.1 mm	0.3 mm	0.05 mm	0.05 mm	
Scan Speed	90,000 points/sec	550,000 points/sec	Single scan: < 2 s	Single scan: < 2 s	
Point Distance	0.2-2 mm	0.5-2 mm	0.16 mm	0.16 mm	
Recommended Size of Scanned Object	30-4000 mm	150-4000 mm	30-150 mm	30-4000 mm	
Align Mode	Markers	Feature, Markers (Optional) *	Markers, Feature, Turntable,Manual, Turntable coded targets	Markers, Feature, Manual align	
Texture Scan	No	Yes (With purchase of Color Pack)	Yes (With purchase of Color Pack)	Yes (With purchase of Color Pack)	
Outdoor Operation	No (Avoid direct sunlight)				
Special Scan Object	For a transparent, reflective or dark object, please spray powder before scanning.				
Single Scan Range	210×150 mm				
Light Source	White light LED				
Printable Data Output	Yes				
File Format	OBJ, STL, ASC, PLY				
Turntable Loading Capacity	5 kg				
Scan Head Weight	0.8 kg				
OS System Support	Windows 7, 8 or 10, 64 bits				
Sharing to Sketchfab	Yes				
Display Card	NVIDIA GTX660, or higher, Display memory : > 2G, Processor: I5 or higher, Memory Storage: 8G or more.				

<sup>\*</sup> Available when Rapid Registration Module is added.



# EinScan-Pro+

High Speed Handheld 3D Scanner

## **Technical Specifications**

Model	EinScan-Pro+				
Scan Mode	Handheld HD Scan	Handheld Rapid Scan	Automatic Scan	Fixed Scan	
Single Shot Accuracy	0.1 mm	0.3 mm	0.05 mm	0.05 mm	
Scan Speed	550,000 points/sec	450,000 points/sec	Single scan: < 2 s	Single scan: < 2 s	
Point Distance	0.2-3 mm	0.7-3 mm	0.24 mm	0.24 mm	
Recommended Size of Scanned Object	100-4000 mm	150-4000 mm	50-150 mm	50-4000 mm	
Align Mode	Markers	Feature, Markers (Optional) *	Markers, Feature, Turntable,Manual, Turntable coded targets	Markers, Feature, Manual align	
Texture Scan	No	Yes (With purchase of Color Pack)	Yes (With purchase of Color Pack)	Yes (With purchase of Color Pack)	
Outdoor Operation	No (Avoid direct sunlight)				
Special Scan Object	For a transparent, reflective or dark object, please spray powder before scanning.				
Single Scan Range	300×170 mm				
Light Source	White light LED				
Printable Data Output	Yes				
File Format	OBJ, STL, ASC, PLY				
Turntable Loading Capacity	5 kg				
Scan Head Weight	0.8 kg				
OS System Support	Windows 7, 8 or 10, 64 bits				
Sharing to Sketchfab	Yes				
Display Card	NVIDIA GTX660, or higher, Display memory : > 2G, Processor: I5 or higher, Memory Storage: 8G or more.				

<sup>\*</sup> Available when Rapid Registration Module is added.