



SHINING 3D[®]

China's first OTC company in the 3D digitizing and printing industry (830978)

EinScan-Pro vs. EinScan-Pro+

EinScan-Pro & Pro+

Multi-functional 3D Scanner More than a Handheld 3D Scanner



1. The world's first multi-functional and multi-configurable handheld 3D scanner, with international patents.
2. Capable of both, portable handheld scanning mode and high-precision fixed scan mode.
3. Aimed at meeting the diverse 3D measurement and reverse engineering needs of engineers and designers.
4. Provide efficient high-quality 3D data for personal customization.

EinScan-Pro & Pro+

Expand your EinScan Pro/Pro+ by Adding Optional Packs On



Innovative modular design concept. Users can choose among different 3D scanning modules according to their needs, in order to access different scanning functions.



Industrial Pack (optional)

Offer Automatic scan
and Fixed scan mode



Color Pack (optional)

Offer color Texture scan
(except in the
Handheld HD Scan
mode)



HD Prime Pack (optional)

Offer a markers-free scan
experience, and 30% speed
enhancement in Handheld
HD scan mode (only
available in **Pro+**)

EinScan-Pro & Pro+

Accuracy Tests



Scanner Configuration	Actual Value (mm)	Measured value with "Pro"	Error (mm) with "Pro"
Fixed Scan mode/ Automatic Scan mode	60.032	60.050765	0.018765
Scanner Configuration	Actual Value (mm)	Measured value with "Pro+"	Error (mm) With "Pro+"
Fixed Scan mode/ Automatic Scan mode	60.032	60.053966	0.021966

EinScan-Pro & Pro+



Accuracy Tests

("*" refers to the competitor' s structured light handheld scanner with a much higher Manufacturer' s Suggested Retail Price)

Scanner Configuration	Actual Value (mm)	Measured value with "Pro+"	Error (mm) with "Pro+"	Measured value with Competitor' s *	Error (mm) with Competitor' s *
Handheld HD scan mode	500.1331	500.170345	0.037245	--	--
Handheld Rapid scan mode (with markers)		500.212351	0.098551	500.186383	0.072583
Handheld Rapid scan mode (without markers)		500.260717	0.146917	500.364961	0.251161

EinScan-Pro & Pro+



Photogrammetry System



Capable of working with a photogrammetry system for more accurate measurements of large objects, and with higher accuracy three-dimensional digital models.

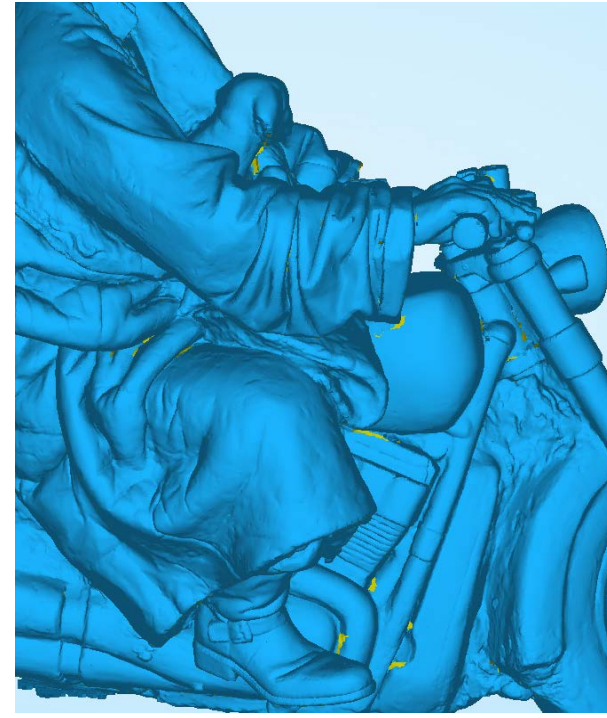
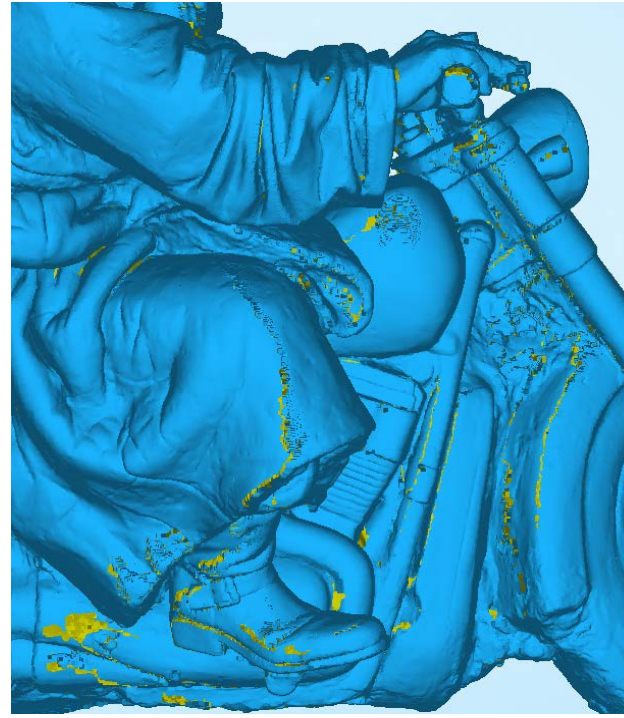
EinScan-Pro & Pro+

Sometimes malposition may happen during big scale scanning. This can now be automatically rectified during data post-processing with the latest version of our software.

Global registration optimization



Without global registration optimization After global registration optimization
--Since V 2.6



Without global registration optimization After global registration optimization
--Since V 2.6

EinScan-Pro & Pro+

True Color, Instant Results

EinScan-Pro & Pro+ texture scanning function can rapidly capture the color information of the object, to show its actual color. External Color Pack with texture camera can rapidly output texture scanning.



EinScan-Pro & Pro+



True Portal scanning experience

EinScan-Pro & Pro+ offer you a true portal scanning experience by using optional mobile Powerpack and screen attachment with your mobilephone.



EinScan-Pro & Pro+



Scan Everything You Want

The EinScan-Pro series scanners are multi-functional 3D scanners to meet your most diverse applications, thanks to their four versatile scanning modes:

Handheld Rapid Scan, Handheld HD Scan, Automatic Scan, and Fixed Scan.

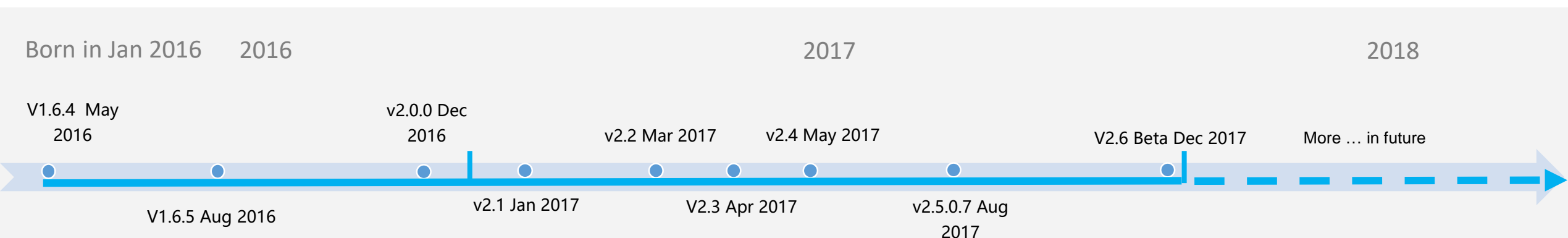
The EinScan Pro series is ergonomically designed, with a light weight of only 0.8 Kg, making it easy to operate, and very comfortable for long-time handheld scanning sessions. It comes in a compact packaging, easy to carry, and safe transportation.



Continuous Software Upgrading

No annual charge for software maintenance

Free Upgrade and Keep growing with users' expectations



*From v1.6 to v2.6 a total of 9 software upgrades in 1.5 years;
according to thousands of EinScan users' kind feedbacks*

EinScan Pro/ Pro+ include Solid Edge ST10 (Classic) inside

EinScan Pro/ Pro+ include Solid Edge ST10 (Classic) perpetual license inside starting on Jan. 2018, for a “Scan-Design-Simulate” in 3D environment.

The future of 3D product design software is available now with Solid Edge generative modeling, additive manufacturing and reverse engineering capabilities. Enabled by unique Siemens’ convergent modeling technology, these capabilities work alongside traditional Solid Edge editing tools to seamlessly integrate existing products into your development process.

Solid Edge ST10
Technical Publications

SIEMENS
Ingenuity for life



Solid Edge ST10 Classic inside

Solid Edge ST10
Technical Publications

SIEMENS
Ingenuity for life



Solid Edge Classic includes:

- 2D drafting
- Data import and reuse
- Advanced 3D part design
- Advanced 3D assembly design
- Synchronous technology
- Sheet metal design
- Frame & weldment design
- Surface modeling
- Plastic part design
- Jig & fixture design
- Conceptual assembly layout
- Cam design
- Gear design
- Pulley & shaft design
- Spring Design
- Beam & column design
- Automated 2D drawings
- Standard parts library (includes machinery)
- Rendering and animation
- IFC import & export for Building Information Modeling (BIM)
- Mesh data reuse (Convergent Modeling)
- Reverse engineering (3D scanning)
- Generative design
- 3D print preparation and service
- SolidWorks data migration
- Inventor data migration
- Pro/Engineer / Creo data migration
- Motion simulation
- Basic stress simulation
- Basic vibration simulation
- Built-in data management
- Cloud-enabled productivity
- Collaboration tools (viewing and comments)

Solid Edge ST10 Classic inside

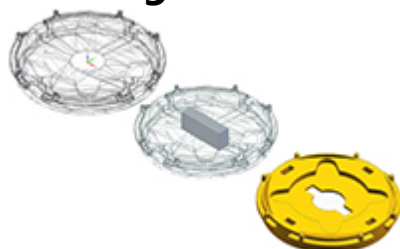
EinScan Pro/ Pro+ include Solid Edge ST10 (Classic) perpetual license inside, for a "Scan-Design-Simulate" in 3D environment.

Reverse Engineering



Many teams design products utilizing components imported from other CAD systems. With the rapid growth of high-resolution 3D scanners, even legacy parts designed on the drawing board can be digitally represented and modified to suit contemporary designs without complete reconstruction. Solid Edge delivers tools which support reverse engineering workflows.

Convergent Modeling



Solid Edge seamlessly combines traditional "b-rep" solid models with triangular mesh models without time-consuming and error-prone conversions. It allows for traditional b-rep operations on digitally scanned 3D data and models born out of generative design, reducing rework while supporting modern additive manufacturing processes for complex shapes.

Synchronous technology



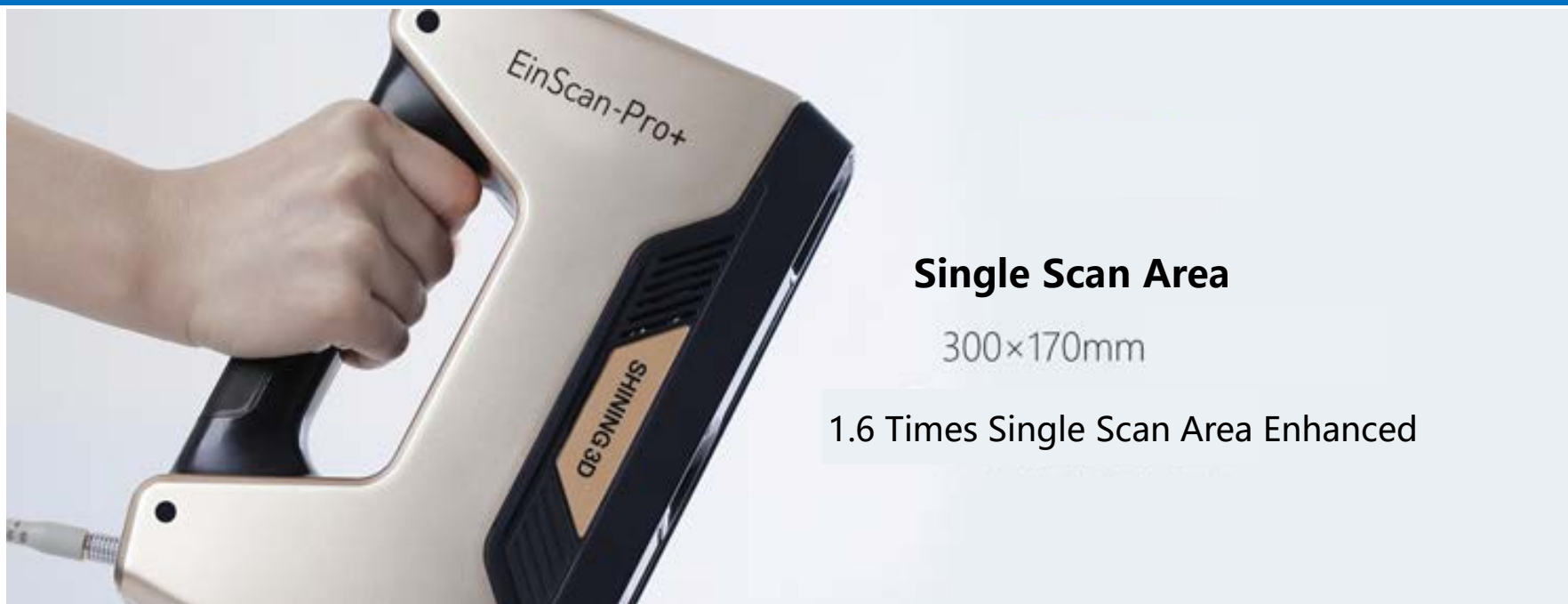
Solid Edge makes creating and editing 3D product designs faster and easier through our unique synchronous technology – combining the speed and simplicity of direct modeling with the flexibility and control of parametric design.

Generative Design



Supplementing powerful design tools with topology optimization, generative design speeds creation of lighter components perfectly suited for immediate manufacture via today's additive processes. Or use Solid Edge to further refine the shape for more traditional manufacturing.

EinScan-Pro vs. EinScan-Pro+



The scan range in the Pro+ has been re-calibrated, compared with the Pro. The Pro+ uses a larger 300 * 170 mm single-sided scanning range, resulting in a single scan area which is increased 1.6 times. Handheld scanning speeds for medium and large size objects have been significantly improved , so the scanning of larger objects with the EinScan-Pro+ is significantly easier and more efficient.

EinScan-Pro vs. EinScan-Pro+



R^2 (Rapid Registration) scan module is a new feature added to the hand-held rapid scan mode included in the Pro+ (Pro users can purchase R^2 software module as an option.) It is compatible with markers recognition stitching function, when working with large-size objects, with less geometric features, or even without geometric features, of the plane objects. It also offers fast and accurate 3D scanning.

EinScan-Pro vs. EinScan-Pro+



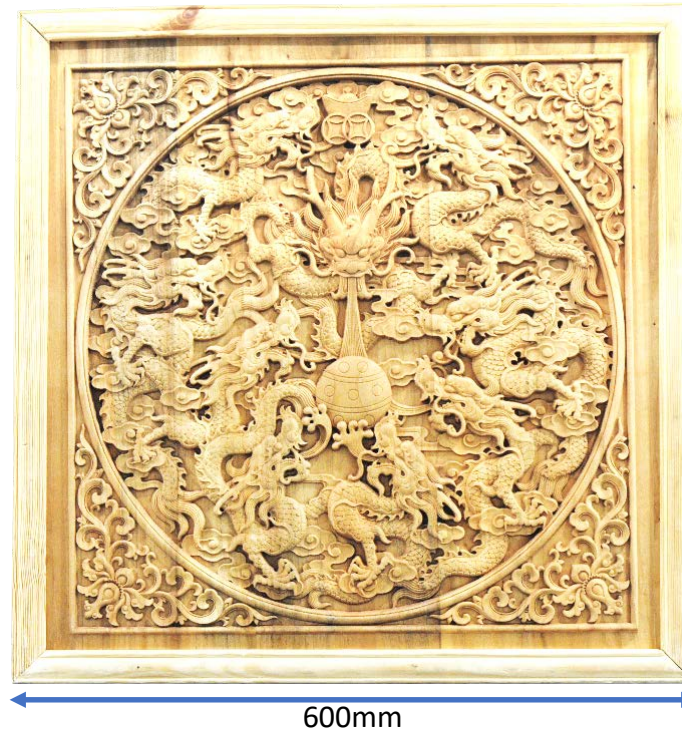
The EinScan-Pro + Handheld Function has been enhanced in comparison to the EinScan-Pro. The 100-thread hand-held HD scanning mode increases the scanning speed and data details, enhancing the functionality of handheld HD scanning. In this mode the data acquisition speed is increased by 7.6 times.

EinScan-Pro vs. EinScan-Pro+

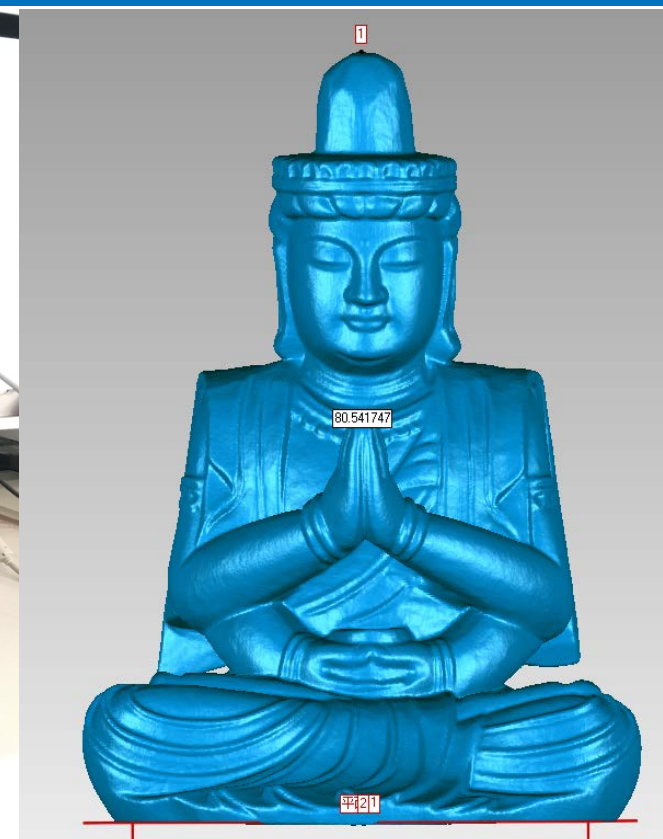


HD Prime Pack offers high resolution, accuracy and speed, all-in-one.

HD Prime pack works under Handheld HD Scan mode in Pro+, offers 30% faster scanning speed, and a markers-free scan experience.



EinScan-Pro vs. EinScan-Pro+



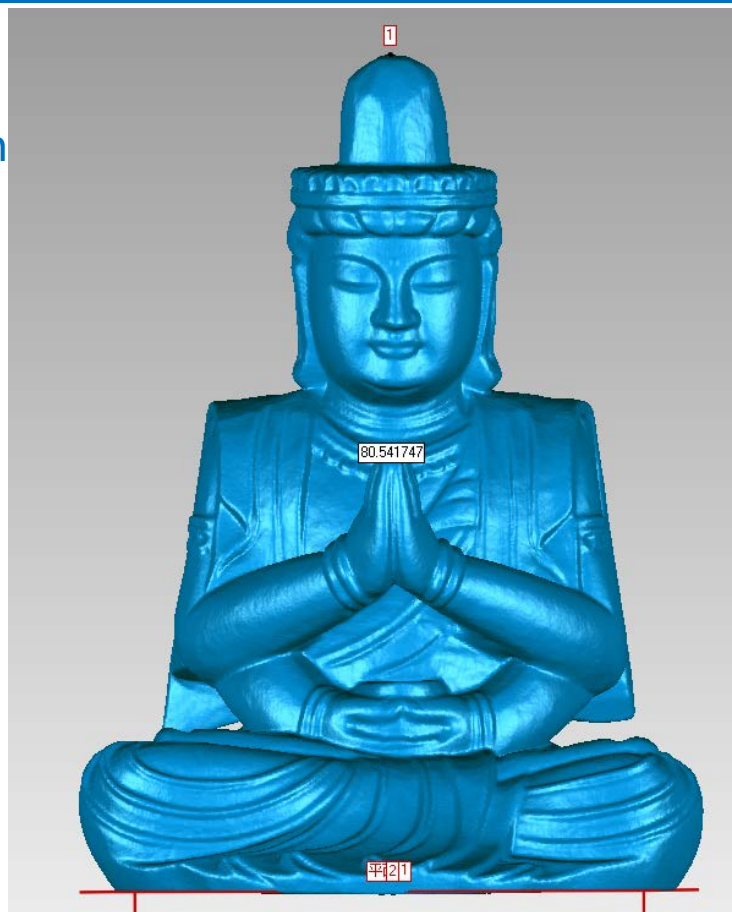
Scanned by EinScan-Pro

Based on the same measurement accuracy, the EinScan-Pro focuses more on model details in the fixed scan mode.

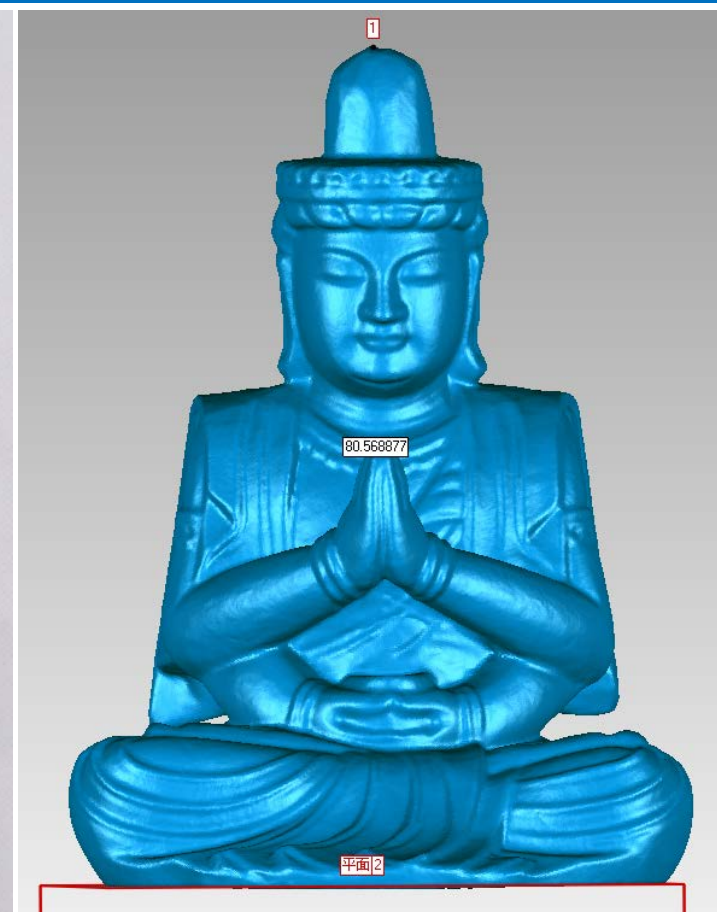
EinScan-Pro vs. EinScan-Pro+

Data resolution comparison

Both data sets scanned in Fixed Scan Mode.



EinScan-Pro: 80.541747mm



EinScan-Pro+: 80.568877mm

EinScan-Pro & Pro+ Parameters Comparison

	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	15 fps	10 fps	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.			

* Available when Rapid Registration Module is added.

(Note: A shaded area is required, when scanning outdoors)

	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	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.			

EinScan-Pro & Pro+ Parameters Comparison

	Automatic Scan		Fixed Scan		Handheld HD Scan		Handheld Rapid Scan	
	Pro	Pro+	Pro	Pro+	Pro	Pro+	Pro	Pro+
Scan Speed	single scan < 2s	single scan < 2s	single scan < 2s	single scan < 2s	15frames/s	550,000dots/s	10frames/s	450,000dots/s
Point Distance	0.16mm	0.24mm	0.16mm	0.24mm	0.2-3mm	0.5-3mm	0.5-3mm	0.7-3mm
Single Scan Range	210*150mm	300*170mm	210*150mm	300*170mm	210*150mm	300*170mm	210*150mm	300*170mm

- EinScan-Pro+ single scan area expanded 1.6 times and the minimum space point spacing expanded 1.5 times in comparison to EinScan-Pro;
- EinScan-Pro+ enhances hand-held scanning efficiency, when scanning large and medium objects (above 1000mm), when compared to EinScan-Pro;
- EinScan-Pro is better at acquiring model details in automatic and fixed scan mode, making it more suitable to scan smaller objects than EinScan-Pro+.

EinScan-Pro & Pro+ Application Comparison



Aerospace, automotive, components, tooling, electronics, etc.
New product development, design modification, digital archiving



Relics 3D digital archiving, restoration, digital art, sculptures improvements, reproduction, virtual display



Orthopedics, beauty customization; medical research, digital detection in rehabilitation



The popularization of 3D technology STEM education in primary and secondary schools; Auxiliary in higher education and research on subjects



High-end consumer products, personalized customization such as sports shoes, headphones, fashion products...

EinScan-Pro & Pro+ Application Comparison



EinScan-Pro Recommended Use:

Each scan mode performance balanced, more emphasis on the small size of the object details of the scan.



EinScan-Pro+ Recommended Use :

Enhanced handheld scanning capabilities for faster alignment of larger objects (1000mm above) scanning modeling;



Reverse Engineering

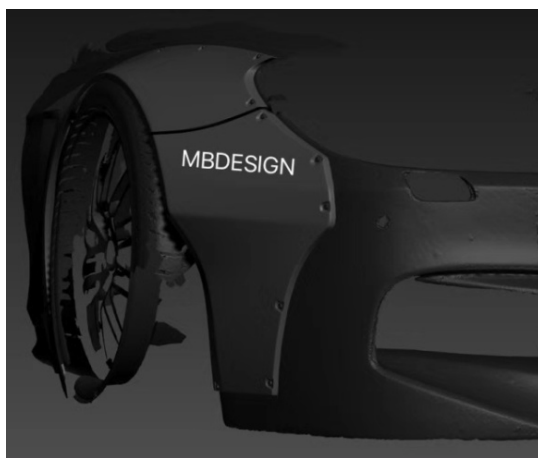
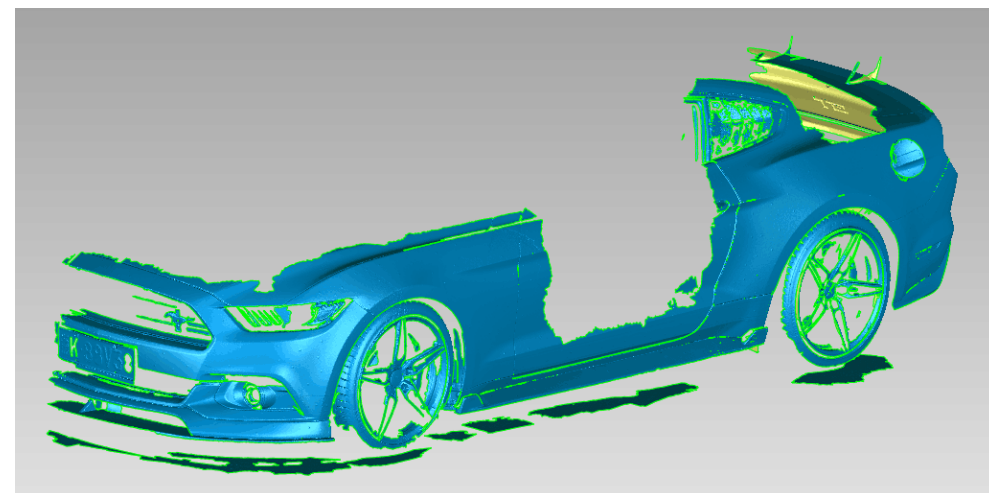
The "Apocalypse Motorcycle" Created By American Makers Through EinScan-Pro 3D Scanner





Reverse Engineering

Car Customization





Heritage Artifacts

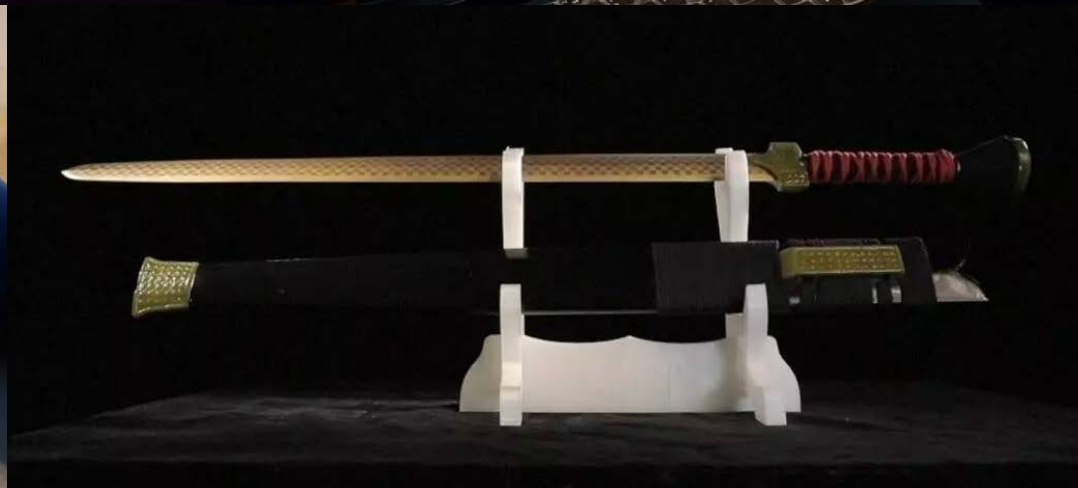
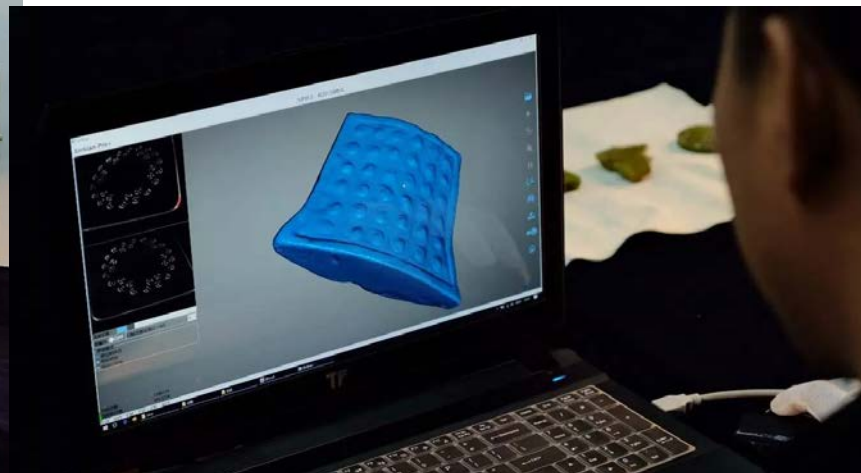
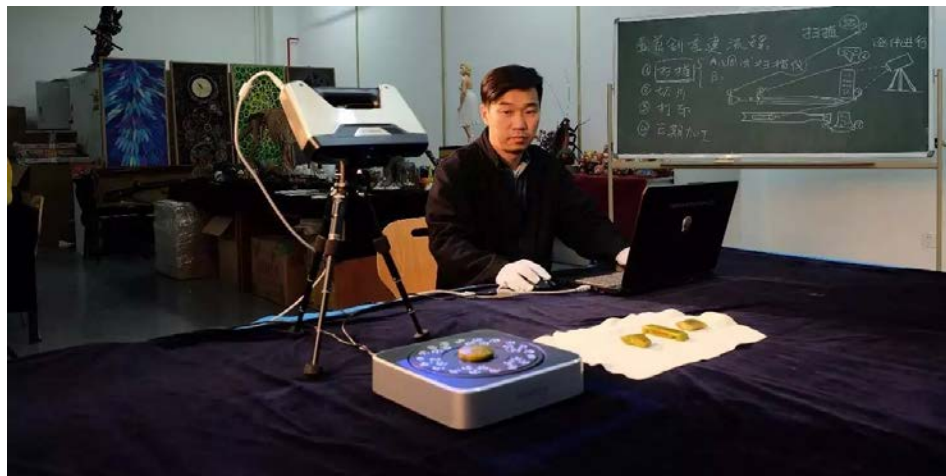
Heritage
Restoration





Heritage Artifacts

Zhangfei Printing
Art Studio Re-
Produced Yushou
Sword through
Reverse
Engineering with
SHINING 3D
Scanner and Printer





Arts, Statues & Monuments

Heritage
Restoration





Arts & Statues

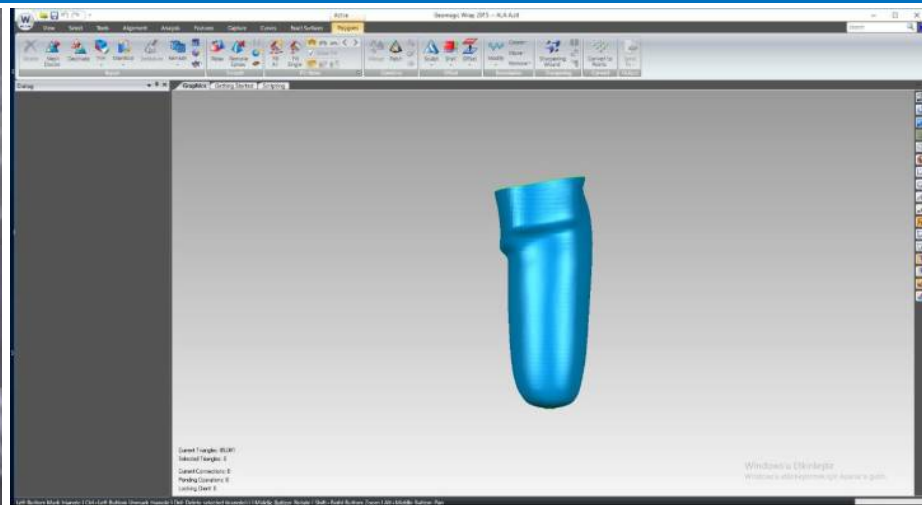
Miniature Artwork
Creation Integrated
3D Technologies
with Traditional
Culture





Medical Device Customizations

Orthotic Repair for
Disabled Syrian
Children by Using
EinScan-Pro 3D
Scanner

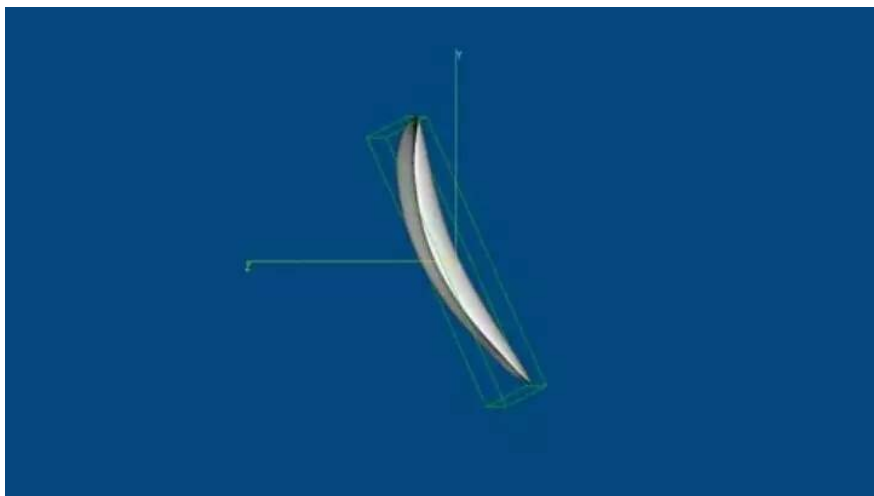




Medical – Plastic Esthetics and reconstructive surgery



3D Scanning +
Plastic surgery:
Making Available
Customized
Prosthesis by
EinScan-Pro

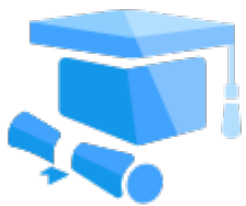




Education & Training

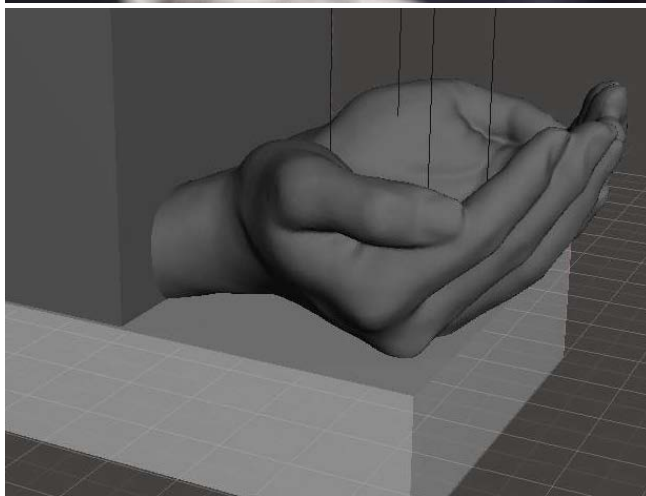
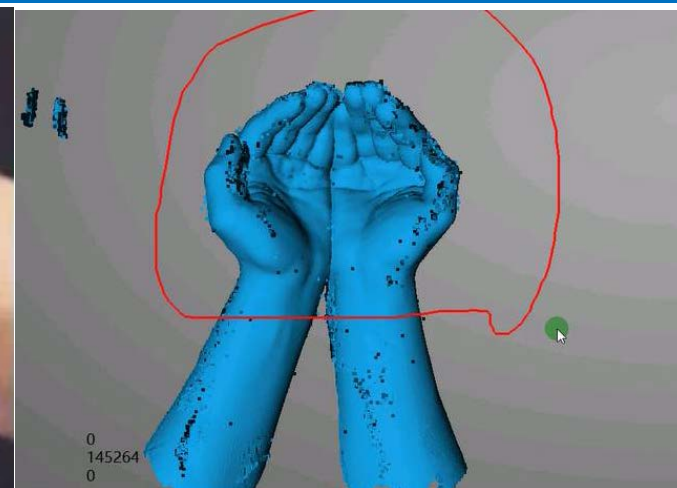
3D Scanning + 3D
Printing: Students
Restore Historic
Statue Leveraging
our Combined
Technology





Education & Training

3D Scanning + 3D
Printing: Students
Make Customized
Case Leveraging
the Combined
Technology





Fashion

3D Scanning +
Intelligent
Wearable: Making
Available Bespoke
Manicure Service by
EinScan-Pro





Fashion

New Concept of
High Heels
Developed through
3D Technologies



Corporate Vision

Building a 3D Printing Ecosystem which brings customized products, to Millions of homes





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