SHINING 3D

EinScan *Rigil* Series

The Tri-Mode Laser 3D Scanner

Rapid · Refined · Reliable

Hybrid-Light Source · Fully Wireless · Multi-Tracking Mode · Full On-Device Workflow

EinScan Rigil Series
Professional All-in-One 3D Scanner

The EinScan Rigil Series represents the complete form of all-in-one 3D scanners, integrating hardware components such as the scanner, display, computing, storage, and power supply into a unified design, with the entire workflow independently accomplished on-device through software.

Equipped with 25+25 crossed and 7 parallel blue laser lines, and infrared VCSEL multi-light sources, the Rigil enables wireless operation and innovative hybrid alignment technology for seamless tracking.

It reliably captures detailed scans of reflective metals, black plastics, and various materials despite environmental lighting conditions, supporting modeling of objects of all sizes.

*EinScan Rigil Lite: 17+17 crossed laser lines

Scan Data

This system achieves high-quality models with accuracy of 0.04 + 0.06 mm/m and a resolution of 0.05 mm. As a truly professional all-in-one handheld scanner, the Rigil redefines the industry standard by delivering comprehensive versatility in 3D scanning solutions.

In Rigil series, the EinScan Rigil combines peak efficiency, accuracy, and performance in one device, while the EinScan Rigil Lite offers a cost-effective option that retains core capabilities balancing affordability with essential features for 3D scanning daily works.

*only Rigil has certified accuracy

Advanced Multi-Tracking Mode (IR & Laser)

Tracking Is Essential, Efficiency Matters Most.

IR Mode: Feature / Marker / Texture (freely combinable) / Global Markers
Laser Mode: Feature / Marker / Global Markers

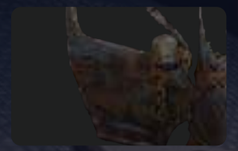
The tracking algorithm identifies shared references—markers, features, or texture—frame to frame for smooth, stable tracking, even during fast movement. Switch modes freely as scanning conditions change.

Scan Data

Combine Freely for Maximum Efficiency

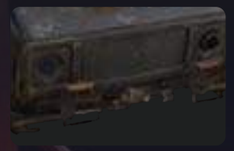
Feature+Marker+Texture

Feature+Texture



Markers
Maximum Stability

Texture Tracking
Texture Detail-Enhanced

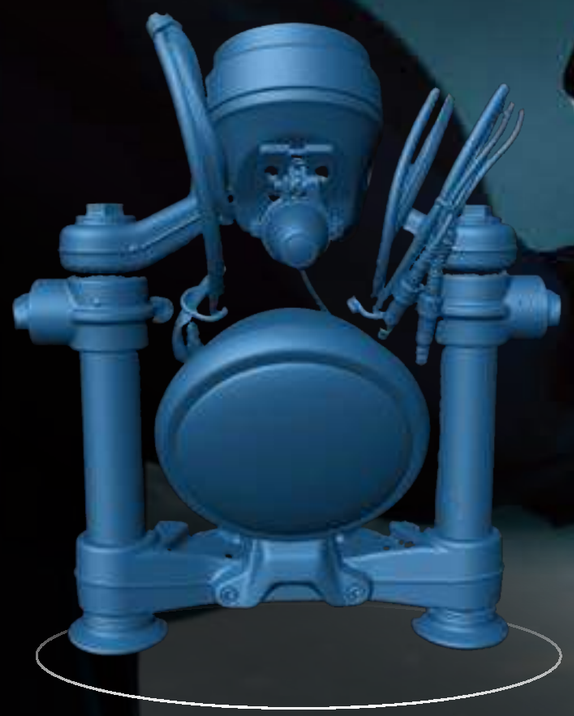


Feature Tracking
Geometry-Driven

Marker-free Laser Scanning

No markers. Less prep. Faster starts.

For high-featured surface, and for tight spaces or hard-to-place markers (e.g., motorcycle structures), enable marker-free laser scanning:
start from a feature-rich area → cover by sections → refine details locally.
Skip marker prep and keep the workflow moving.



Scan Data

Hybrid Light Source

Built on Two Independent Camera & Projector Groups

DESIGN AWARD 2026

1TB Storage + 64GB eMMC
Your entire project library, on device.

Built-in computing
No PC required. 32GB RAM for a full on-device workflow.

6.4-inch 2K Touchscreen
Drag. Zoom. Confirm—right on screen

Built-in Wi-Fi 6

Rechargeable & Replaceable Battery
Swap and keep scanning—no downtime, up to 3 hours of runtime

Ergo-Grip Design
One-hand stable, made for longer sessions

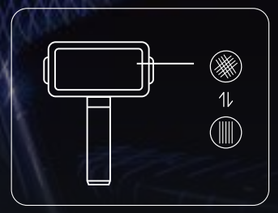
Hybrid Light Source

25+25 *Crossed Laser Lines*

For high-speed scanning, deliveries top-tier efficiency and flexibility.

Fast Scan. Fine Scan. Switchable During Scanning.

Switch two laser patterns between them in 1 second during the same scan, whenever the task requires.



*Switch during scanning.

7 *Parallel Laser Lines*

For fine details, provides consistent results

Resolution up to 0.05 mm

IR Rapid

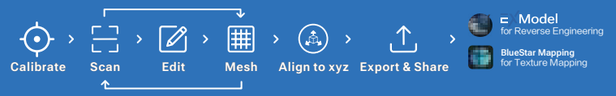
VCSEL Infrared-powered scanning solution for high efficiency and wide coverage of medium to large objects, with eye safe portrait scanning.

Scanning speed up to

16,000,000 points/s

Full on-device workflow

Scan → Process → Export, all on one device.



Multi-Projects Alignment

A new way to scan: Break down complex tasks into small and manageable parts and merge them back to final model

Scanning Rewind & Resume

Real-time rollback to previous stage, perfect every time.

Auto-Cutting Plane

Automatically identifies and filters out the base surface you don't need

Flexible Point Clouds Editing

Connect domain & inverse for unnecessary points quick removing, magnifier tool for clearer, detailed editing

Rich Mesh Editing Functions

All with one-click operation for rapid model customization

Advanced Noise Reduction

Deliver crystal-clear data quality and larger volume

Multi-Coordinate Alignment

Easy to operate with virtually clear results, seamlessly move to model design

Model Measurement

Quickly retrieve model dimensions — No traditional calipers needed

U-Drive Mode Innovation

Export model as U dish, no software required

SHINING3D Cloud Sharing

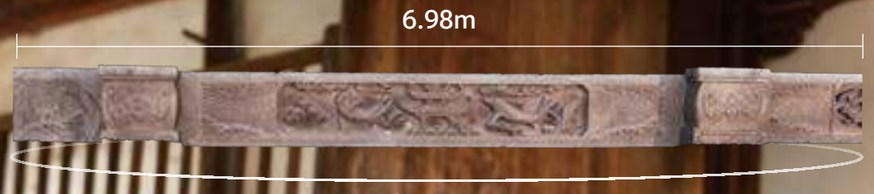
Collaborate and connect in seconds, share your achievement right now!

Scene-Adaptive Scanning:
Dark & Reflective Surfaces (No Spray)

Optimized for Reflective and Dark Materials.

For shiny or reflective parts, choose the reflective preset:
Less prep, fewer retries—get results faster without spray.

Scan Data



Scan Data

Scene-Adaptive Scanning:
Outdoor

In Sunlight or at Night. Still Smooth.

For outdoor scanning, choose the Outdoor preset:
capture the main outline first → walk around for full coverage → refine deep corners and detail areas.
Finish the job on-site with fewer rescans.

5MP Texture: Full-color Scanning

True-to-Life. Color-Accurate.

Bring out richer texture detail and faithful color reproduction for digital models that feel closer to the real object on screen.

*5MP texture capture is available in both Laser and IR modes.

Scan Data

Scan-to-Design: Bridging Reality to Digital

EinScan App + EXScan Rigil + EXModel

EXScan Rigil is an intuitive software platform for PC computing
It streamlines workflows through a unified interface, reduces system load,
and improves performance, allowing faster scanning, greater mobility, and lower operating costs.

- **More Computing Power**
- **More Editing Tools**
- **Detailed & Multiple Views**
- **Wide Data Format**

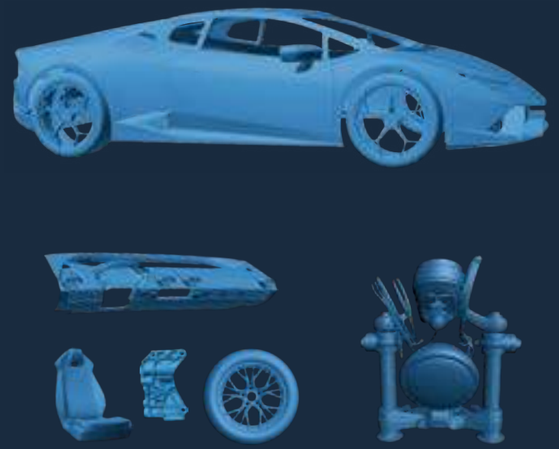
EXModel is a powerful gateway that simplifies CAD modeling, from 3D scanning to manufacturing. It provides a comprehensive set of tools that enable you to transform a mesh into a professional-quality CAD solid model in just a few simple steps.

3D Scan Mesh (.stl) › **Extracting information** › **CAD Modeling** › **Verifying** › **Exporting Final Model**

Analysing Feedback

Applications

- Aftermarket & Engineering

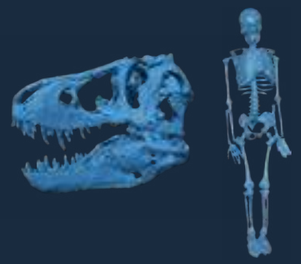


- 3D Printing & Personal Manufacturing

- Heritage Preservation & Art

- AR, VR & Digital Content

- Education & Scientific Research



SPECIFICATIONS

	EinScan Rigil Series		
Work Mode	Standalone /PC- Wireless / PC-Wired（for extra computing resource）		
Scan Mode	Laser HD		IR Rapid
Light Source	EinScan Rigil	EinScan Rigil Lite	IR VCSEL
	25+25 crossed laser lines	17+17 crossed laser lines	
	7 blue laser parallel lines		
Volumetric Accuracy	Up to 0.04 + 0.06 mm/ m	/	Up to 0.1 + 0.4 mm/m
Resolution	0.05 ~ 10 mm		0.2 ~ 10 mm
Scanning Speed	4,800,000 points/s	2,940,000 points/s	16,000,000 points/s
Working Distance	170 ~ 550 mm		160 ~ 1500 mm
Alignment Mode	Global Markers / Markers / Features		Global Markers / Markers / Features / Texture / Hybrid
Camera Resolution	3D: 2.3MP*2 1.3MP*2; Texture: 5MP		
Output Formats	STL, OBJ, PLY, 3MF, ASC		
Laser Class	Class II		/
Hardware	EinScan Rigil: CPU: 8-core, 2.4GHz; RAM: 32GB LPDDR5; Storage: 64GB eMMC + 1TB SSD; 6.4-inch 2K AMOLED Touchscreen EinScan Rigil Lite: CPU: 8-core, 2.4GHz; RAM: 24GB LPDDR5; Storage: 64GB eMMC + 512GB SSD; 6.4-inch 2K AMOLED Touchscreen		
Operation Conditions	Temperature -10°C ~ 40°C		
Certifications	CE, FCC, ROHS, WEEE, FDA, SRRC, IP50		
Recommended Configurations for PC	OS: Win11 (64-bit); Processor: 13th Gen Intel®Core™ i7-13700H or above; Graphics card: NVIDIA GeForce RTX 3060 Laptop GPU or above; VRAM: 8 GB or above;RAM: 64 GB or above, DDR5 dual-channel; Interface: USB 3.0;		
Interface & Power Source	USB Type-C Battery: 5500mAh*2; Support 60W-PD3.0 Charger		
Dimension	(H*D*W) 233 × 180 × 72.8 mm		
Net Weight	870 g (batteries included)		

SHINING 3D

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