

# 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

This system achieves high-quality models with accuracy of  $0.04 + 0.06 \text{ mm/m}$  and a resolution of  $0.05 \text{ mm}$ . 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



Scan Data

# 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.

## Combine Freely for Maximum Efficiency



Feature+Marker+Texture



Feature+Texture



Markers

Maximum Stability



Texture Tracking

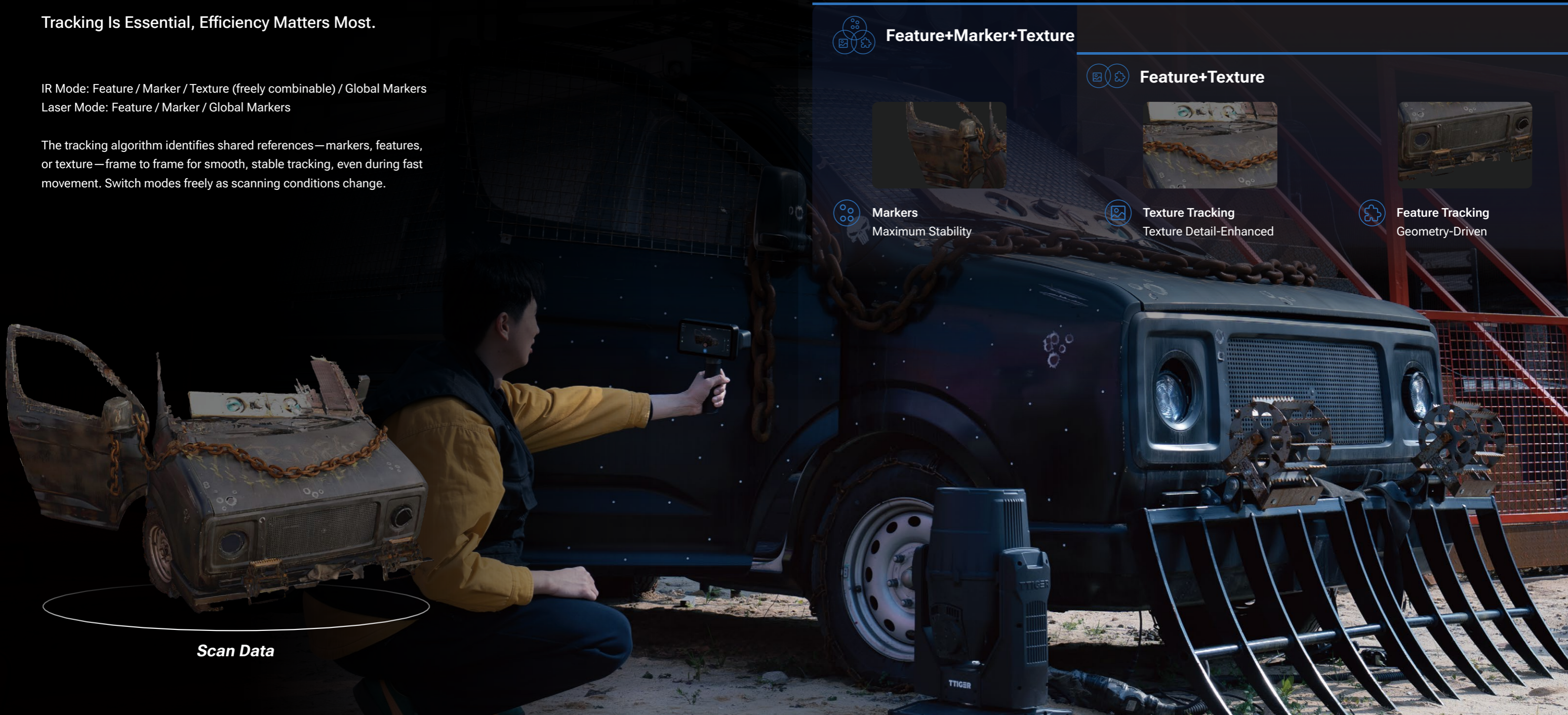
Texture Detail-Enhanced



Feature Tracking

Geometry-Driven

Scan Data



# 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

-  IR VCSEL Projector
-  7 Parallel Laser Lines Projector
-  25+25 Crossed Laser Lines Projector

3D Cameras for Blue Laser x2

5MP Texture Camera

3D Cameras for IR x2



**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

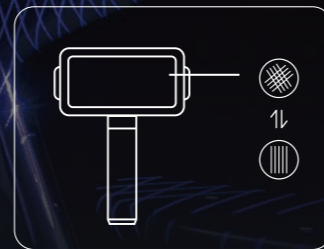
## 25+25 Crossed Laser Lines

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



### Fast Scan. Fine Scan. Switchable During Scanning.

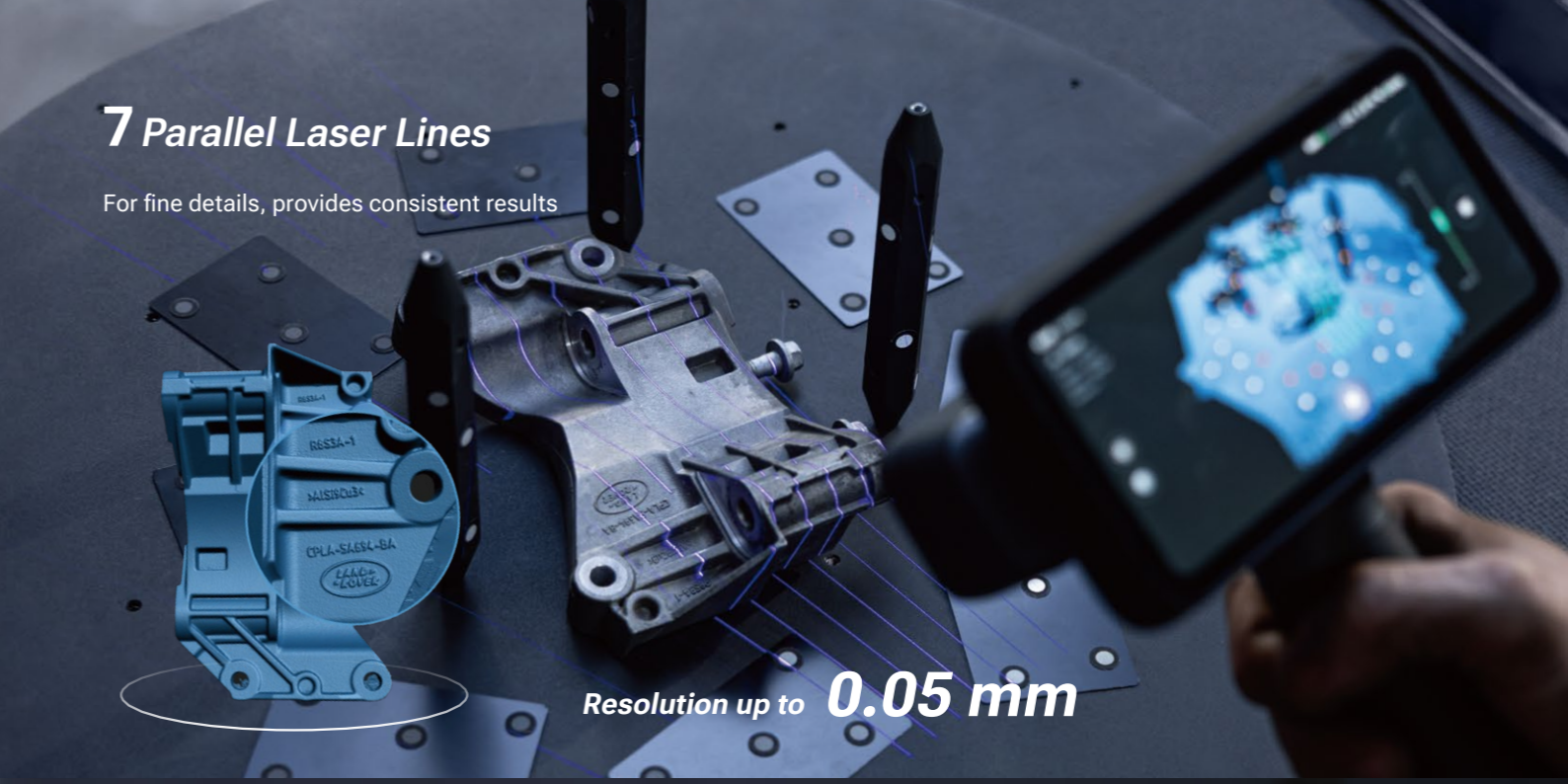
Switch two laser patterns between them in 1 second during the same scan, whenever the task requires.



\*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.

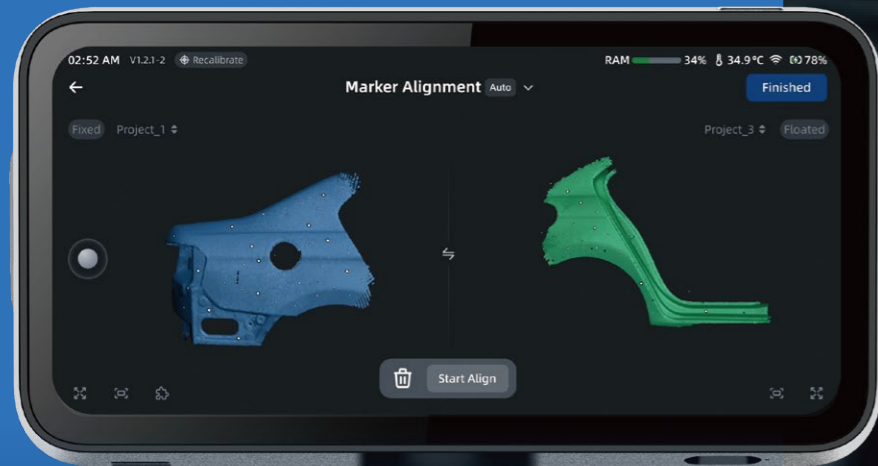
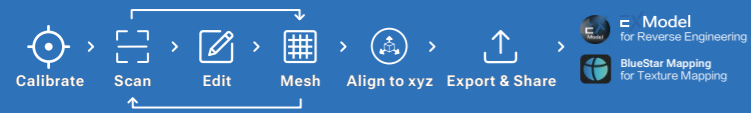


Scanning speed up to

**16,000,000 points/s**

# Full on-device workflow

Scan → Process → Export, all on one device.



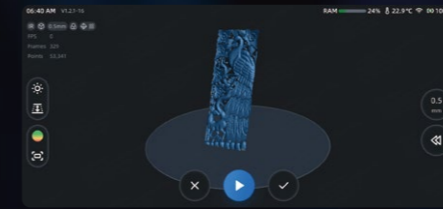
## Multi-Projects Alignment

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



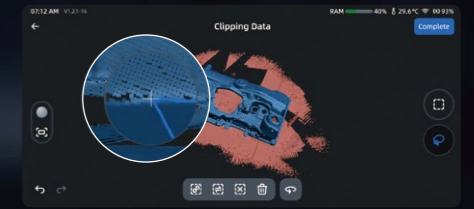
## Scanning Rewind & Resume

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



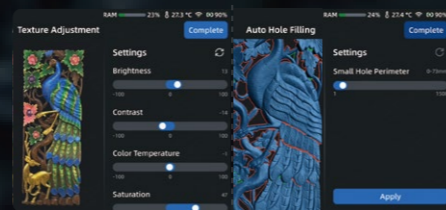
## Auto-Cutting Plane

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



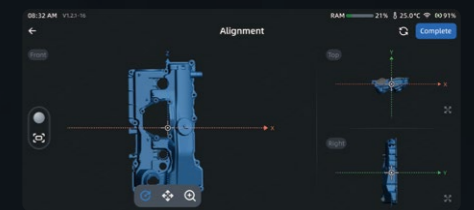
## Rich Mesh Editing Functions

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



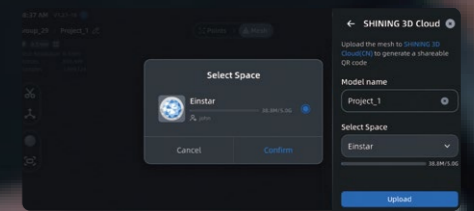
## Model Measurement

Quickly retrieve model dimensions — No traditional calipers needed



## U-Drive Mode Innovation

Export model as U dish, no software required



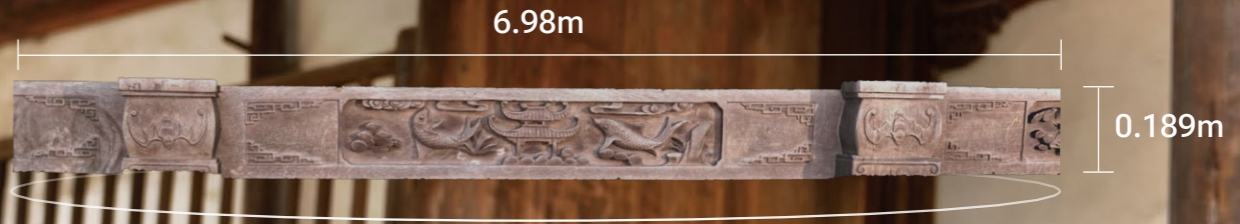
## SHINING3D Cloud Sharing

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.



# 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.

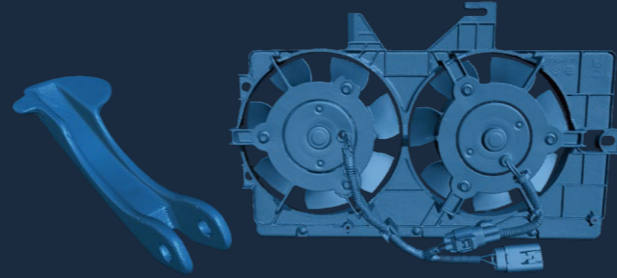


# Applications

## • 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
	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	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)	



Follow us on



Facebook



Instagram



Youtube



Community



Amazon



Web-Einstar

### SHINING 3D Tech Co., Ltd.

- 📍 Hangzhou, China  
P: +86-571-82999050  
No. 1398, Xiangbin Road, Wenyan,  
Xiaoshan, Hangzhou, Zhejiang,  
China, 311258

### SHINING 3D Technology GmbH.

- 📍 Stuttgart, Germany  
P: +49-711-28444089  
Breitwiesenstraße 28, 70565, Stuttgart, Germany
- 📍 Barcelona, Spain  
Calle 27, 10-16, Sector BZ, 08040 Barcelona, Spain

### SHINING 3D Technology Japan Inc.

- 📍 Tokyo, Japan  
P: + 03-6380-7622  
Tradepia Odaiba, 2-3-1 Daiba, Minato-ku, Tokyo

### SHINING 3D (HK) COMPANY LIMITED.

- 📍 Hong Kong, China  
P: 00852-23348468  
Room 303A, 3/F, Tower 2, Enterprise Square Phase 1,9  
Sheung Yue Road, Kowloon Bay, Kowloon, Hong Kong

### SHINING 3D Technology Inc.

- 📍 California, USA  
p: +1(888) 597-5655  
2450 Alvarado St, Unit 7, San Leandro, CA 94577
- 📍 Florida, USA  
2807 W Busch Blvd, Suite 200, Tampa, FL 33618