MAPTEC

SHINING 3D

EinScan *Rigil*

The Tri-Mode Laser 3D scanner

Real · Rapid · Robust

• **Wireless**   • **Built-In Computing**   • **Hybrid Light**

The Tri-Mode Laser 3D Scanner

EinScan Rigil is the world's first Tri-Mode 3D scanner with built-in computing, wireless solution and hybrid light technology. EinScan Rigil offers a fully integrated 3D scanning wireless workflow with three working modes that effectively eliminates the traditional compromise between computing power and flexibility.

It provides high quality models with 0.04 + 0.06 mm/m volumetric accuracy and high geometric resolution up to 0.05 mm. Its three types of light sources — 38 blue laser lines, 7 parallel blue laser lines, and infrared VCSEL — which paired with two separate groups of tailored cameras to ensure versatile performance and peak efficiency for objects of wide-range of sizes and surface types.

Hybrid Light Source

38 *(19*2)* *Laser Lines*

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

7 *Parallel Laser Lines*

For fine details, provides consistent results

Scan Data

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.

Scan Data

Two Scanners In One

2 Groups of Cameras and Projectors

EinScan Rigil's 2 separate groups of cameras are specifically designed to capture different light sources, enables best adaptability to laser and IR light source respectively; to achieve better data recognition under strong environmental light, to ensure precise data captured even in complex lighting environments.

Scan Data

Reliable Volumetric Accuracy

Up to **0.04 + 0.06 mm/m**

Three Working Modes

Unlock MAX Performance And Flexibility

The EinScan Rigil offers three operating modes:

Standalone Mode

All scanning and processing tasks are completed directly on the hardware, delivering exceptional portability and ease of use.

Wireless PC Mode

Leveraging built-in Wi-Fi 6, this mode enables seamless wireless scanning and allows connection to a computer for maximum computing power, optimizing performance for complex tasks.

Traditional PC Mode

Maintaining availability and maximum stability in complex network environments or under restricted network conditions.

Superior adaptability to scan objects with dark and reflective metal surface without spray

Marker-Free Laser Scanning

EinScan Rigil has special feature tracking algorithm, provides a marker-free blue laser scanning mode, enabling better efficient than traditional marker based laser scan and better data quality than marker-free IR scan.

Working Efficiently in Sunlight Outdoors

Both Blue Laser and Infrared VCSEL projectors have strong environment light adaptability, which ensure smooth scanning experience under strong sunlight.

5MP Full Color Laser Scanning

EinScan Rigil is equipped with a 5MP high-definition camera that can restore high-quality texture details in both Blue Laser and IR rapid modes, allowing designers, engineers and artists to maintain a high fidelity of model during the digitization process, providing more precise information for subsequent analysis and creation.

Scan Data

For Prosumer, For Automotive

EinScan Rigil is designed to comprehensively address the 3D modeling needs prosumers in automotive aftermarket. It significantly enhances efficiency in generating high-quality 3D models, combining fast scanning capabilities, streamlined professional workflows, lightweight computing solutions, and rich data editing functions.

Calibrate > **Scan** > **Edit** > **Mesh** > **Export & Share**

EXModel

BlueStar Mapping

*The Screen Casting (Standalone Mode Only) feature seamlessly integrates into every stage of the workflow, enhancing team productivity through real-time collaboration.

All-In-One Powerful Hardware

32GB DDR5 RAM, 32GB eMMC+ 1TB SSD ROM

Built-in 2 x 6000mAh Replaceable Batteries

6.4'' 2K AMOLED Touchscreen

EXScan Rigil

EXScan Rigil is a dedicated PC software designed specifically for the EinScan Rigil scanner, covering the full spectrum of advanced professional scanning workflows—from calibration, scanning, data modification, closed surface generation, model editing, to export and sharing.

When paired with the EinScan Rigil scanner, it delivers a seamless, flexible, and portable scanning experience that combines stability and high-quality results.

Rigil EXScan

High-Speed Scanning and Processing Algorithms
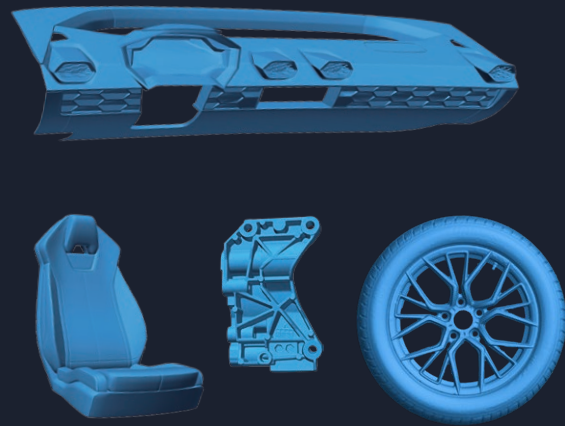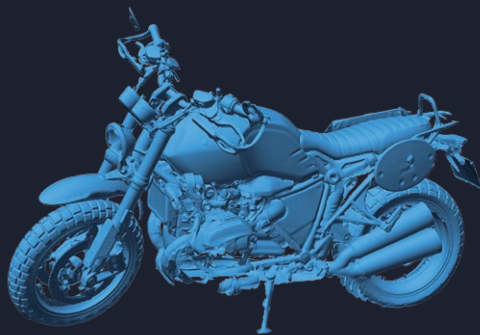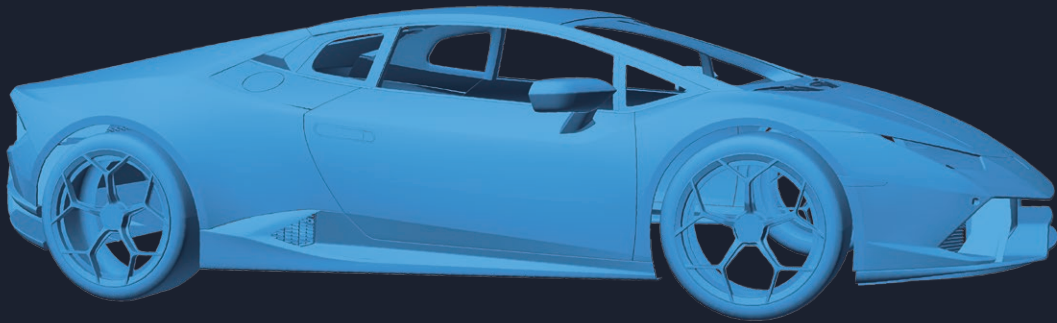
User-Friendly UI Design

Professional Modelling Workflow

- Global Marker Alignment
- Dynamic Laser Switching
- Scan Rewind
- Global Optimization
- X-Y-Z System Alignment

- Multiple Types of Marker Supported 3/6/12 mm
- Auto Detecting Plane
- Resume Edited Data Scanning
- Auto Hole Filling
- Model Measurement

Applications

- Aftermarket & Engineering

- AR, VR & Digital Content

- Heritage Preservation & Art

- Education

TECHNICAL SPECIFICATIONS
EinScan Rigil

Work Mode	Wireless Standalone For extra computing resource: PC- Wireless / PC-Wired		
Scan Mode	Laser HD		IR Rapid
Light Source	38 blue laser cross lines	7 blue laser parallel lines	IR VCSEL
Resolution	0.05 ~ 10 mm		0.2 ~ 10 mm
Scanning Speed	4,400,000 points/s	940,000 points/s	1,600,000 points/s
Working Distance	170 ~ 550 mm		160 ~ 1500 mm
Alignment Mode	Global Markers / Markers / Features / Hybrid		Global Markers / Markers / Features / Texture / Hybrid
Volumetric Accuracy	Up to 0.04 + 0.06 mm/ m		Up to 0.1 + 0.3 mm/m
Camera Resolution	3D: 2.3MP*2 1.3MP*2; Texture: 5MP		
Output Formats	STL, OBJ, PLY, 3MF, ASC		
Laser Class	Class II		/
Hardware	CPU: 8 core, 2.4GHz; RAM: 32GB LRDDR4; Hard Drive: 1T SSD ROM; 32GB DDR5 RAM; 6.4''2K AMOLED Touch Screen		
Operation Conditions	Temperature -10℃ ~ 40℃		
Certifications	CE, FCC, ROHS, WEEE, FDA, SRRC, IP50		
Recommended Configurations for PC	Win10/11, 64 bit; Graphics card: NVIDIA GTX1060; Video memory: ≥6GB; Processor: I7- 11800H; Memory: ≥32GB		
Interface & Power Source	USB Type-C Battery: 6000mA*2; Support 60W-PD3.0 Charger		
Dimension	(H*D*W) 233 × 180 × 72.8 mm		
Net Weight	870 g (batteries included)		

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