

Professional 3D Laser Scanner for Space Reconstruction



Galois M2

Galois M2, as professional 3D laser scanner independently developed by Realsee, integrates image performance, accurate modeling and efficient operation, which can produce 1:1 accurate replica of indoor and outdoor spaces. Companies can utilize Realsee's 3D tour platform to implement digital and intelligent transformation for their business in various ways, including online marketing, space operation and maintenance, visualizing digital management, etc.



reddot winner 2021



GOOD DESIGN
AWARD 2021

01 Stable output of capturing

Continuous learning based on massive data from more than 27 million spaces

Based on Realsee's advantages in the field of 3D reconstruction, its space AI algorithm platform has been established. The platform can automatically optimize images and point clouds to ensure stable output of data collection results.

02 More Accurate Models

The absolute error can be as low as 20 mm* and its measurement area error can be as low as 0.4%.*

Galois uses LiDAR sensors for accurate point cloud acquisition, without fear of environmental impact.

03 Superior Image Quality

Galois captures high resolution images up to 1.34 megapixels.*

It also relies on more advanced lens coating and larger CMOS image sensor, which can still produce ideal picture effects in special scenes such as backlight and dark light, effectively reducing common imaging problems such as purple edges and bright light.

04 Easy to Operate

Galois only takes 15 minutes to scan and collect data for 100 square meters of indoor space*.

The device can be controlled by Realsee App, which is available on mobile phones and iPads. The built-in algorithms can automatically complete point cloud registration and panoramic image stitching, generating a 3D mesh model and a VR link for interactive walk-through.

05 More Applications and Extensions

Through the Realsee Console editor, the virtual spaces can be further enriched.

You can make initial viewing settings, brand Logo placement, image/audio/video and other form labels placement, floorplan drawing, etc. The editor supports the superposition of more diversified space experience. Features such as preset guided tours, route guidance, and space labeling, further strengthening the VR information concentration and interactivity of your 3D spaces.

Product details:



Galois M2

Color : Bright white

Scan range (radius) : 0.2-25 m (@reflectance 90%)

Specifications

Dimensions : Length × width × height: 150 × 104 × 208.5 mm

Weight : With battery: 2.66 kg; without battery: 2.18 kg

Laser lidar scanner

3D sensor : Lidar, 940nm, Class 1

Depth accuracy : $< \pm 20$ mm (@10m)

Scan speed : About 20K points / s capture efficiency

At one station, 300K (fast mode) / 1.2M (slow mode)

Angular resolution : Vertical 0.25° , horizontal 0.8° (15s) / 0.2° (60s)

Measurement error : $< \pm 20$ mm (@5m)

View : $360^\circ \times 150^\circ$

Processor and storage

Processor : Quad-core Cortex-A53 + dual-core Cortex-A72

Storage : 4GB LPDDR3 memory, 16GB eMMC storage

Operating conditions

Working temperature : 0°C to 40°C (32°F to 104°F)

Storage temperature : -10°C to 50°C (-14°F to 122°F)

Charging temperature : 10°C to 45°C (50°F to 113°F)

Relative humidity : 40% to 85% (non-condensing)

Network and supported operating system

Wireless connection : WiFi 802.11 b / g / n 2.4GHz WiFi 802.11 a / n / ac 5GHz

Supported operating system : iOS or Android

Battery and range

Input : 20V \equiv 1.9A 38W

Battery type : Lithium ion battery

Battery capacity : About 92.16Wh

Range : About 8 hours

Charging system (battery) : Removable battery

Full charge : Powers the scanner for up to 3.5 hours

Boot-up : About 60 seconds

Rotation time : About 25 seconds (fast mode)

About 60 seconds (slow mode)

Camera

CMOS sensor : 20 megapixel, 4 / 3 inch

Focal length : 7.5mm

Exposure mode : Auto exposure, triple exposure HDR

Resolution : 16000×8000

View : $360^\circ \times 135^\circ$

About Realsee

Realsee is providing the world-leading digital space integrated solutions.

By replicating physical spaces, Realsee has built the world's largest 3D spatial database, covering over 27 million spaces and boasting over 400 global authorized patents.

Realsee offers digital solutions for your space, spanning from its design and construction stage, to online marketing , and visual operation.

The services provided by Realsee have found broad application across nine major fields, namely commercial retail, industrial facilities, cultural exhibitions, public affairs, home decor, and real estate transactions.

E-mail:

mkt@realsee.com,
support@realsee.com

Website:

<https://home.realsee.ai/>



Realsee App QR code