

PARTNERED
SOFTWARE SOLUTION
SOFTWARE SOLUTION

SINGULARCLOUD POST-PROCESSING
SOFTWARE

- Point cloud filtering, denoising & optimization
- RTK/GCP registration for coordinate alignment
- Colorized point cloud & mesh reconstruction
- Supports PCD, LAS, LAZ, E57, PLY & OBJ standard formats
- Cross-section viewing & DXF CAD floor plan output
- Length, area & volume measurement tools
- Compatible with 3rd-party software workflows



SINGULARCLOUD GO FIELD
POINT CLOUD VIEWER

- Compatible with iOS & Android devices
- WiFi connection for smooth data transmission
- Adjustable scan settings & point cloud detail control
- RGB, Intensity & Elevation visualization modes
- Real-time point cloud viewing & device status monitoring
- Quick project review & DXF CAD export on-site
- Onsite point, length, and area measurement



Handheld 3D Laser Scanner

Version 07-20-2026

LIDAR

Laser product classification	Class 1 Eye Safe
Accuracy	1cm@10m
Scan radius	40-70m (measured at >10% or >80% reflectivity)
Max. effective measurement rate	200,000 points/sec
Wavelength	905nm
FOV (horizontal)	360°
FOV (vertical)	59° (-7° to 52°)
Scanning channel	40-lines

CAMERA

Number of cameras	3 fisheye cameras
Camera type	Global shutter
Resolution	2 MP per camera
FOV (per camera)	- Horizontal: 127° - Vertical: 101° - Diagonal: 170°

POSITIONING SYSTEM ¹

GNSS channels	1408 channels
Satellite tracking	- GPS L1C/A, L2C, L2P, L5 - BDS B1I, B3I, B1C, B2a, B2b - GLONASS G1, G2 - Galileo E1, E5a, E5b, E6 - QZSS L1C/A, L2C, L5 - SBAS L1C/A
RTK accuracy	8mm+1ppm Horizontally 15mm+1ppm Vertically
IMU	High-precision 6-axis IMU module

PHYSICAL & ELECTRICAL

Size	115*113*120mm (without handle)
Weight	740g without handle
Battery Handle	- 4000mAh, support up to 2-hour continuous work - Weight: 485g

ENVIRONMENT

Waterproof & dustproof	IP54
Operating temperature	-10°C~40°C

RECOMMENDED CONFIGURATION

Mobile App

Operating system	Android 7.0 or above, iOS
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Post-Processing Software

Operating system	Windows 10 or above
CPU	Intel Core i5 12th Gen or above
GPU	NVIDIA RTX 2050 or above
RAM	16 GB or above
Storage	256 GB or above

CONNECTIVITY & EXPANSION

Interface	Type C-USB 3.0
Storage	Built-in SSD, 256 GB
Network	WiFi

DATA OUTPUT

Point Cloud (colorized)	PCD, LAS, E57, LAZ, PLY
Mesh (colorized)	OBJ
CAD	DXF (indoor floor plan)

¹. The GNSS RTK module is optional.
All specifications are subject to change without notice.
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H2
HANDHELD 3D LASER SCANNER

From Vivid Color to Precise Coordinates



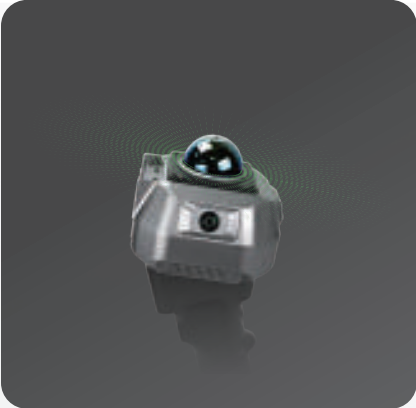
SingularXYZ®

The H2 brings real-world environments into digital space with vivid colored point clouds and detailed spatial reconstruction. Combining advanced imaging, high-density LiDAR sensing, and intelligent SLAM algorithms, it delivers efficient 3D data capture with professional results. Its modular design, optional expansion capabilities, and user-friendly workflow make the H2 an accessible solution for professionals entering 3D scanning.



Triple Camera For Vivid Colorization

Realistic colored point cloud with triple global-shutter fisheye cameras & advanced color fusion.



Precise & Dense Lidar System

Dense point cloud with 40-line LiDAR, 200,000 pts/sec scan rate & 1cm accuracy at 10m.



Modular Design For Flexible Deployment

Modular structure with optional RTK module and smartphone bracket for flexible configurations.



OPTIONAL RTK CAPABILITY

Full-constellation RTK delivers centimeter-level absolute positioning for accurate real-world alignment alongside high-performance SLAM.



WIDE 360°x59° FOV

With a 360° horizontal and 59° vertical FOV, the H2 minimizes blind spots and is ideal for detailed interior, facade, and industrial scanning.



4000MAH BATTERY HANDLE

A 4000mAh battery handle delivers up to 2-hour continuous operation, keeping field work productive and uninterrupted.



EXTERNAL INTEGRATION

H2 reserves 4 Type-C USB ports and fixing slots for external integration, supporting external detail camera, RTK module, and robotic systems.



IP54 PROTECTION

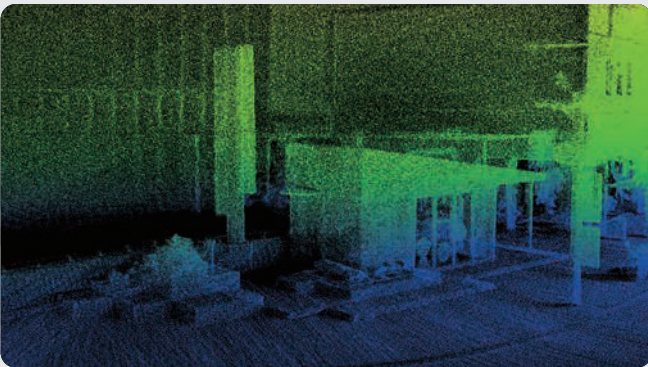
Rated IP54 for water and dust resistance, the H2 withstands challenging field environments across diverse job sites.



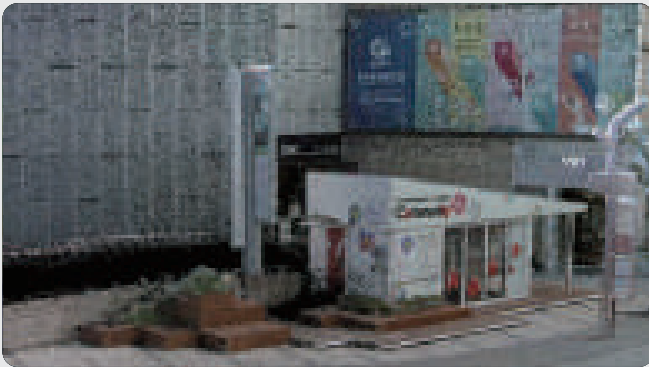
FLEXIBLE TRANSMISSION

Type-C USB, WiFi transmission, and 256GB SSD storage enable efficient data transfer and storage management.

PRECISE & VIVID POINT CLOUDS

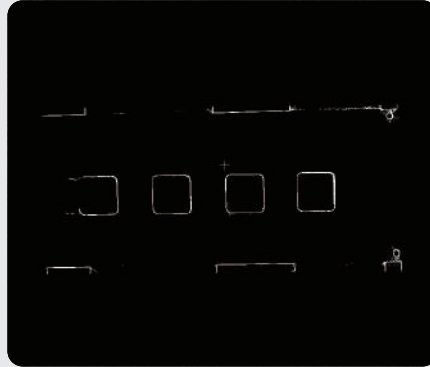


Raw Point Cloud

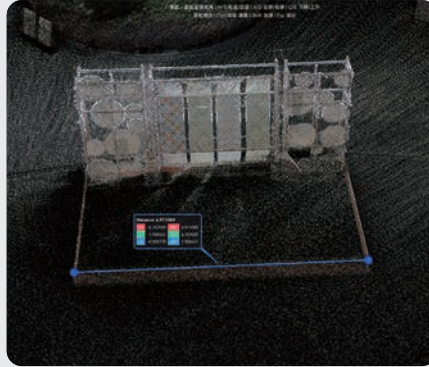


Colorized Point Cloud

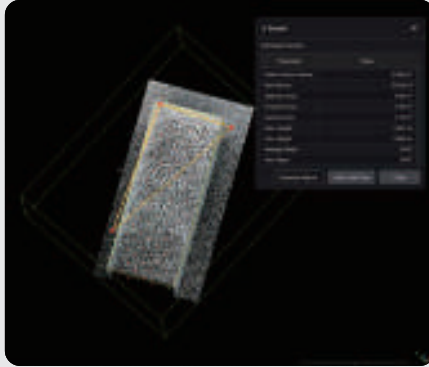
SINGULARCLOUD ANALYTICAL TOOL



CAD Floor Plan



Basic Measurements



Volume Calculation

