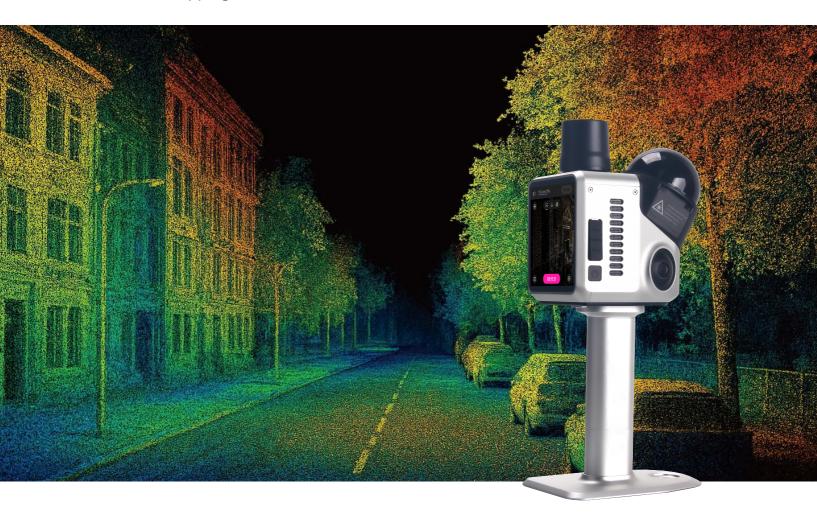
HANDHELD 3D LASER SCANNER

Real-Time Mapping, Portable Precision



HIGH PRECISSION PERFORMANCE

H1 leverages advanced SLAM technology to generate highly accurate point clouds with a relative point accuracy of 1.5cm. RTK and IMU module integrated help to deliver precise georeferenced point clouds in real-world coordinates. With a 360°×63.5° ultra-wide field of view and 480,000 points-per-second capture rate, it ensures efficiency across complex outdoor environments.

ALL-IN-ONE SLAM SOLUTION

With dual fisheye cameras and a vision tracking camera, the H1 integrates imaging and point cloud acquisition. Its 3.9-inch touchscreen allows users to view point cloud rendering in the built-in software during data collection. Powered by an 8-core processor, the system supports both high-speed generation and efficient colorization simultaneously.

USER FRIENDLY DESIGN

Weighing only 900 grams with IP65-rated protection, H1 is lightweight, compact, and performs reliably in challenging outdoor conditions. A high-capacity 12,000mAh battery supports uninterrupted operation for long-duration scanning projects. Built-in Wi-Fi and Type-C ports enable fast data transfer, helping users move smoothly from field capture to final delivery.

LASER

Laser product classification	Class 1 Eye Safe
Accuracy	1.5cm@10m; 3cm@20m; 5cm@40m
Scan Radius	40-70m (measured at >10% or >80% reflectivity)
Scan Range	80-140m
Max. effective measurement rate	480,000 points/sec
Wavelength	905nm
FOV (Horizontal)	360°
FOV (Vertical)	63.5°
Scanning Channel	32-lines

CAMERA

Camera System	- Fisheye camera *2 - NIR tracking camera *1
Resolution	13 MP (fisheye camera)
Sensor Size	1-inch CMOS (fisheye camera)
HDR Mode	Supports 3–5 EV
FOV	360° × 300°

GNSS PERFORMANCE

Channels	1408
BDS	B1I, B2I, B3I, B1C, B2a, B2b
GPS	L1C/A, L1C, L2C, L2P(Y), L5
GLONASS	G1, G2, G3
Galileo	E1, E5a, E5b, E6
QZSS	L1C/A, L1C, L2C, L5
NavIC	L5
SBAS	WAAS, EGNOS, SDCM, BDSBAS, GAGAN
RTK Accuracy	8mm+1ppm Horizontally 15mm+1ppm Vertically

CONNECTIVITY & EXPANSION

Interface	USB Type-C×2 (1 for external power, 1 for data transmission)
Screen	3.9" AMOLED touchscreen
CPU	8-core 2.4 GHz
Storage	32 GB storage (expandable via TF card)
IMU	High-precision 6-axis IMU
Network	WiFi 5

DATA OUTPUT

Point Cloud (color)	PCD, LAS, E57, PLY
Mesh (color)	OBJ
3D Gaussian Splatting	PLY

PHYSICAL & ELECTRICAL

Size	120*145*85mm (without handle)
Weight	900g without handle
Battery Handle	Dual battery handles - 12000mAh, support up to 1-hour continuous work - Size: 64*158*38mm - Weight: 342g

ENVIRONMENT

Waterproof & dustproof	IP65
Operating temperature	-10 °C ~50 °C

All specifications are subject to change without notice.

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