

LiDAR

LiDAR sensor	32-layer class 1 ⁽¹⁾ 905 nm 640,000 points per second
Operational range	Up to 50 m ⁽²⁾

Accuracy

Accuracy of the point cloud	5 mm in a dedicated test environment of 500 m ² ⁽³⁾
Control point support	Physical control point pin to capture ground and wall control points ⁽⁴⁾

Cameras

Cameras for panoramic images	4 × 12 MP 2.14 mm fisheye lens fixed focus f/2.0 rolling shutter
Panoramic capture modes	360° and 270° ⁽⁵⁾
Cameras for visual odometry	2 × 2 MP 1.34 mm fisheye lens fixed focus f/1.8 global shutter

Operation

Trajectory and mapping	LiDAR SLAM augmented by visual odometry
Live scanning feedback	Real-time visual feedback on data coverage and SLAM status
Battery and operating time	98 Wh Li-ion carry-on 45 min
Storage	External 256 GB USB-C flash drive ⁽⁶⁾
Interfaces	Wi-Fi USB-C port
IMU	Industrial-grade

Display

Type	Capacitive multi-touch display
Size	5.5"
Resolution	1920 × 1080

Environment

Operating temperature	-10°C to 40°C (14°F to 104°F) ⁽⁷⁾
IP rating	IP42 (indoor and outdoor)

Output

Point cloud formats	E57 PLY LAS PTS XYZ
Image formats	RAW (DNG) JPEG
Data processing	Automated object detection and blurring

Device and Harness

Form factor	Handheld with harness
Housing	Carbon reinforced polymer monocoque
Dimensions	60 × 19 × 15 cm
Weight (incl. battery)	3.6 kg
Harness	Ergonomic weight distribution, adjustable to fit all sizes

Transportation

Backpack	55 × 40 × 23 cm 8 kg carry-on rainproof
Shipping case	69 × 53 × 28 cm 17 kg IP67

⁽¹⁾ Eye-safe per IEC 60825-1:2007 & 2014.

⁽²⁾ Depending on the processing settings.

⁽³⁾ Local accuracy with fully constrained LiDAR SLAM. All accuracy statements are 1 sigma. Absolute accuracy depends on the environment.

⁽⁴⁾ Supports survey targets (e.g., checkerboards, nails, scribe marks) and natural features.

⁽⁵⁾ 270° panoramas are completed to 360° using the colorized point cloud.

⁽⁶⁾ exFAT file system (compatible with Windows, macOS, Linux)

⁽⁷⁾ Operation possible below 0°C (32°F) for a maximum of 20 minutes in calm conditions (no wind) following a 20-minute warm-up period above 0°C (32°F).