

LiDAR

LiDAR sensor	2 × 16-layer class 1 ⁽¹⁾ 903 nm 2 × 300,000 points per second
Operational range	Up to 50 m ⁽²⁾

Accuracy

Accuracy of the point cloud	6 mm in a dedicated test environment of 500 m ² ⁽³⁾
Control point support	Physical capture of ground and wall control points ⁽⁴⁾

Cameras

Cameras for panoramic images	4 × 20 MP 3.3 mm fisheye lens fixed focus f/2.4 rolling shutter
Panorama field of view	360°

Operation

Live scanning feedback	Real-time visual feedback on data coverage
Battery and operating time	2 × 95 Wh Li-ion V-Mount Micro hot swappable 1.5 hours (with 1 set of 2 batteries)
Storage	Portable SSD with 1 TB storage ⁽⁵⁾
Interfaces	Wi-Fi Bluetooth
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) ⁽⁶⁾
IP rating	IP42 (indoor and outdoor)

Output

Point cloud formats	E57 PLY LAS PTS XYZ
Image formats	JPEG
Data processing	Different processing presets including automated object detection and blurring

Device

Form factor	Wearable
Housing	Powder coated & anodized aluminum, carbon frame
Dimensions	108 × 33 × 56 cm (in XL position)
Weight	8.7 kg

Transportation

Transport case	43 × 54 × 82 cm 24.8 kg (fully equipped) 22.6 kg (excluding batteries)
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⁽¹⁾ Eye-safe per IEC 60825-1:2007 & 2014.

⁽²⁾ Depending on the processing settings.

⁽³⁾ Local accuracy. All accuracy statements are 1 sigma. Absolute accuracy is subject to the size of environment and can be controlled via control points. More details on the dedicated environment and accuracy metric can be found in our white paper (<https://navv.is/indoor-outdoor>).

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

⁽⁵⁾ exFAT file system (compatible with Windows, macOS, Linux)

⁽⁶⁾ 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).