NavVis VLX 3



LiDAR

LiDAR sensor	2 × 32-layer class 1 ⁽¹⁾ 905 nm 2 × 1,280,000 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	Ground and wall

Cameras

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

Operation

Live scanning feedback	Real-time visual feedback on data coverage and SLAM status
Battery	2 × 2 Li-ion 98 Wh V-Mount Micro hot swappable
Operating time	1.5 hours (with 1 set of 2 batteries)
Storage	Portable SSD with 1 TB storage (4)
Interfaces	Wi-Fi Bluetooth
IMU	Industrial-grade

Display

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

Environment

Operating temperature	0°C to 40°C
Extended temperature	-10°C to 40°C (5)
Robustness	Outdoor and indoor
IP rating	IP42

Output

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

Device

Form factor	Wearable
Housing	Powder coated & anodized aluminum, carbon frame
Dimensions (H x W x L)	111 × 33 × 57 cm in XL position
Weight	8.5 kg

Transport Case

Dimensions (H × W × L)	43 × 54 × 82 cm
Weight (fully equipped)	23.9 kg
Weight (excluding batteries)	21.7 kg

 $^{^{\}mbox{\tiny (1)}}$ 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 (navv.is/data-quality).

⁽⁴⁾ exFAT file system (compatible with Windows, macOS, Linux)

⁽⁵⁾ Operation possible down to −10°C (14°F) for a maximum of 20 minutes in calm conditions (no wind). Device to be switched on 20 minutes before use at or above a temperature of 0°C (32°F).