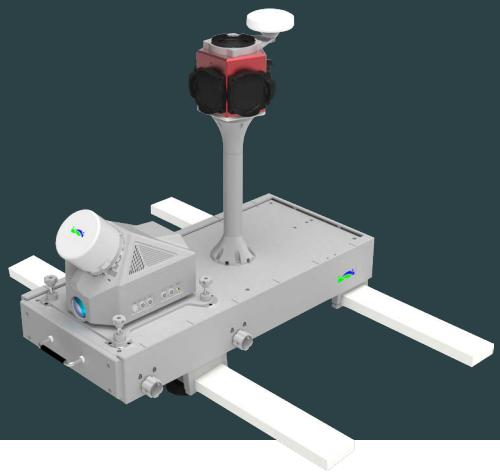
GreenValley International

LiMobile M1

Mobile Laser Scanning System



The LiMobile M1 mobile laser scanning (MLS) system is equipped with a 45-degree titled LiDAR, a high-resolution camera, and a Ladybug5+ panoramic camera, which can quickly obtain 3D data of the road and surrounding features. At the same time, it provides abundant expansion interfaces, supporting optional accessories such as the distance measurement indicator (DMI). It also supports a 2 TB pluggable hard drive, facilitating storage and transfer of large data volumes. The integrated vehicle mount design allows for installation in different car models. Paired with LiDAR360MLS software, it enables a one-stop data processing for the delivery of industry results.

Advantages

Lightweight Design

With a light weight compact design that significantly reduces the internal space, integrated device weighs only 12.68 kg, making it easy and convenient to install and transport quickly.

Continuous Operation

Hot-swappable battery design for a continuous and stable power supply.

Real-time Monitoring

Supports the display of collected data and monitor the operating status of the equipment in the web interface in real-time.

Multi-sensor

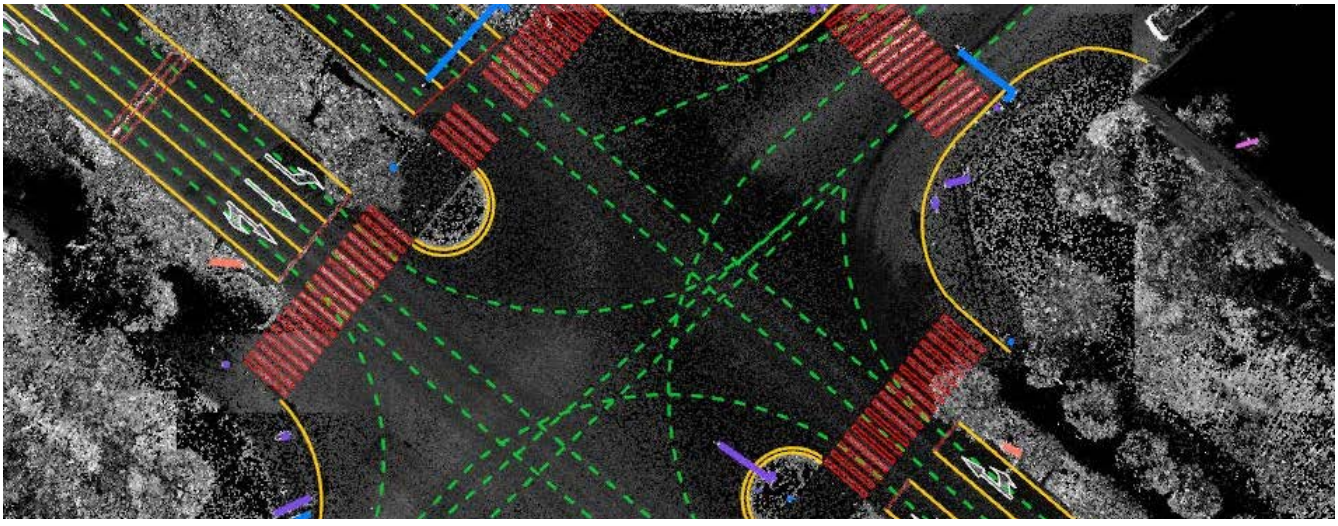
Integration of multi-channel laser, GNSS/INS integrated navigation system, and highresolution cameras, enabling the acquisition of high-definition point cloud data and image data.

Abundant Expansions

Pluggable hard drive, DMI, USB 3.0, LAN.

Multi-industry Applications

Widely used in areas such as road asset survey, urban power distribution line analysis, urban landscaping, smart transportation, and more.



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Specifications

System Parameters			
Dimensions	645 ×289 ×571 mm	Battery Capacity	5875 mAh×5
Storage	512 GB SSD+2 TB pluggable hard drive	Weight	12.68 kg
Operating Time	≥ 4 h	Port	HDMI, USB, ODO, LAN
System Control and Data Display	Wireless Mode	The tablet is connected to the WIFI of the device for operation control and data synchronization display.	
	Wired Mode	Tablet connection via a data cable for data transmission and control.	
Applicable Environment	Outdoor	Processor	4 Cores and 8 Threads
LiDAR Sensor Parameters			
Sensor Model	XT32	Range Accuracy	±1 cm
FOV (Vertical)	31° (-16° ~ +15°)	FOV (Horizontal)	360°
Scan Rate	1,280,000 pts/s (Dual Return)	Detection Range	0.05 to 120 m
Positioning and Orientation System Parameters			
GNSS System	GPS; GLONASS; GALILEO; BEIDOU; QZSS; SBAS	IMU Data Frequency	Standard: 100 Hz
Position Accuracy (RMS 1σ)[1]	Horizontal: 0.01 m	Roll / Pitch Accuracy (RMS 1σ)[1]	0.01°
	Vertical: 0.02 m	Heading Accuracy (RMS 1σ)[1]	0.04°
Wide Angle Camera Parameters			
Pixels	8.9 MP	Sensor Type	CMOS
Frame Rate	13 FPS	Sensor Size	1"
Image Resolution	4096×2160	Power Consumption	3.8 W
Ladybug5+ Panoramic Camera Parameters			
Pixels	30 MP (5 MP×6 Sensors)	Sensor Type	CMOS
Frame Rate	30 FPS (JPEG Compressed)	Sensor Size	2/3"
Image Resolution	8192×4096	Power Consumption	Maximum 13 W
Data Output			
Relative Accuracy[2]	≤2 cm	Absolute Accuracy[2]	≤5 cm
Point Cloud Data Format	LAS, LAZ, LiData		
Software			
Pre-processing Software	LiDAR360MLS-Geo Module	Post-processing Software	LiDAR360MLS (Optional)

[1] PPK performance in open-sky GNSS environment.
[2] The accuracy is measured in a specific calibration field of GVI, with a vehicle speed of 40 km/h and LiDAR360MLS software. The accuracy may vary in different operating environments, so please refer to actual use.