GreenValley International

LiAir 250

UAV 3D Mapping System

LiAir 250 is GreenValley International's flagship UAV LiDAR system designed to meet survey-grade project requirements. It is equipped with a highly precise navigation system and can generate point cloud data with an absolute vertical accuracy of 3 cm. Together with its capability of a 250 m range measurement and recording up to 5 returns per pulse, LiAir 250 is an ideal choice for applications such as mapping terrain features beneath the forest canopy, extracting forest structure parameters from individual tree level to forest stand level, inspecting power line corridor, managing and inspecting asset, and so on. Moreover, LiAir 250 also provides an option to be equipped with a high-definition digital camera, which can be used to generate photogrammetry products as well as true color 3D point clouds.

Acquisition & GNSS/INS Processing Software

LiNav is a GNSS/INS post-processing module integrated in our acquisition software-LiAcquire. It provides tools to process GNSS/INS data acquired by the system and generate centimeter-level trajectory data for georeferencing point clouds and images. With a one-button process, it can also provide a system performance report for the operator to examine the reliability of the acquired data.

Specifications

Laser Sensor	Riegl miniVUX-1 UAV
Range Accuracy	±15 mm
Scan Range	250 m@ reflectance ≥ 60%
System Accuracy	±3 cm
POS System Performance	Attitude: 0.006° (1σ)
	Azimuth: 0.019° (1σ)
Onboard Storage	128 GB
Weight	3.78 kg Incl. Camera
Dimensions (Main Unit)	1105*145*148 mm
Max. Flight Time	21 min (M600 Pro)
Camera	SONY A6000 (optional)
Acquisition /POS Software	LiAcquire
Field of View	up to 360°
Scan Rate	100,000 pts/s