

LiAIR V70

UAV 3D Mapping System



The LiAir V70 is a lightweight drone-mounted LiDAR survey instrument designed and produced by GreenValley International (GVI). This system features a Livox AVIA laser scanner and it is one of the most cost-effective LiDAR system in GVI's LiAir Series. This lightweight 3D surveying and mapping payload was designed with DJI's Matrice 600 Pro & DJI M300 RTK & DJI's Matrice 210 series platforms. LiAir V70 is able to provide highly accurate 3D point cloud data and is a great fit for applications in a wide variety of industries including forestry. And it 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

LiAcquire Web is used for system parameters setting, working status monitoring, system activation, etc. LiGeoreference processes GNSS/INS data to generate scanning trajectory in cm level accuracy, uses it to georeference point clouds and images, and outputs the quality report for performance evaluation.

Specifications

Laser Sensor	Livox AVIA
Range Accuracy	± 2 cm
Detection Range (@100 klx)	190 m @ 10% reflectance
	450 m @ 80% reflectance
System Accuracy	± 5 cm
POS System Performance	Attitude: 0.008° (1σ)
	Azimuth: 0.038° (1σ)
Onboard Storage	128 GB
Mounting Platform	DJI's Matrice 600 Pro, M300 RTK & M210
Camera (Optional)	Sony A5100
Weight(excl. battery)	0.9 kg (Excl. Camera)
	1.1 kg (Incl. Camera)
Dimensions (Incl. Camera)	178 * 81.6 * 140.2 mm
Acquisition/PP POS Software	LiAcquire Web & LiGeoreference
Field of View	70.4° (Horizontal) × 4.5° (Vertical)
Scan Rate	240,000 pts/s
MAX Points Per Second	720,000 points/s (triple return)