

# LI AIR V

## UAV 3D Mapping System



# LiAir V

The LiAir V is a light-weighted UAV- or sUAS-mouanted LiDAR survey instrument designed and produced by GreenValley International (GVI). This system features a Livox Mid-40 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 210 ,210 RTK and 600 Series platforms in mind. LiAir V 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.



## Acquisition & GNSS/INS Post-Processing Software

LiAcquire web version 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 an quality report for performance evaluation.

## Mission Planning Software

LiPlan is a UAV ground station application designed for LiAir series. LiPlan automates flight route generation following user-defined Region of Interest and surveying parameters, and with the one-button take-off design, LiPlan auto-pilots through the calibration figure-8 maneuvers and data acquisition flight routes.

Specifications	
Laser Sensor	Livox Mid-40
Range Accuracy	± 2 cm
Scan Range	90 m @ 10% reflectance
	130 m @ 20% reflectance
	260 m @ 80% reflectance
System Accuracy	± 5 cm
POS System Performance	Attitude: 0.008° (1σ)
	Azimuth: 0.038° (1σ)
Onboard Storage	128 GB
Ports Available	Ethernet
Weight (excl. battery )	1.0 kg
Dimensions (Main Unit)	125*70*116 mm
Route Planning Software	LiPlan (proprietary)
Acquisition / PP POS Software	LiAcquire web & LiGeoreference
Field of View	38.4°
Scan Rate	100,000 pts/s