

LiAir 50N

UAV 3D Mapping System



The LiAir 50N is a lightweight UAV or sUAS-mounted LiDAR survey instrument designed and produced by GreenValley International (GVI). This system features a Velodyne's Puck laser scanner and it is one of the most cost-effective LiDAR systems in GVI's LiAir Series. This lightweight 3D surveying and mapping payload was designed with DJI's Matrice 600 Pro & DJI M300 RTK series platforms. LiAir 50N is able to provide highly accurate 3D point cloud data and is a great fit for applications in a wide variety of industries. And it is also 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	Velodyne's Puck
Range Accuracy	±3 cm
Detection Range	100 m @ 20% reflectance
Channels	16
Power Consumption	17 W
System Accuracy	± 5 cm
POS System Performance	Attitude: 0.008° (1σ)
	Azimuth: 0.038° (1σ)
Working Temperature	-20 °C ~ 40°C
Mounting Platform	DJI's Matrice 600 Pro, M300 RTK
Camera (Optional)	Sony A5100
Weight	1.4 kg (Incl. Camera)
Dimensions (Incl. Camera)	200* 105* 160 mm
Acquisition/PP POS Software	LiAcquire Web & LiGeoreference
Field of View	360° (Horizontal) 30° (Vertical)
Scan Rate	300,000 pts (Single Return) 600,000 pts (Dual Return)