GreenValley International

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 costeffective 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)

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