

LiAIR X3C-H

Compact UAV LiDAR System



The LiAir X3C-H is a new compact high-performance UAV LiDAR system and is the upgraded version of the LiAir300 by GreenValley International. It adopts a new integrated design style and built-in high-resolution mapping camera,, providing higher performance and convenient operation for power-line inspection, topographic surveying, agricultural and forest monitoring, and more.

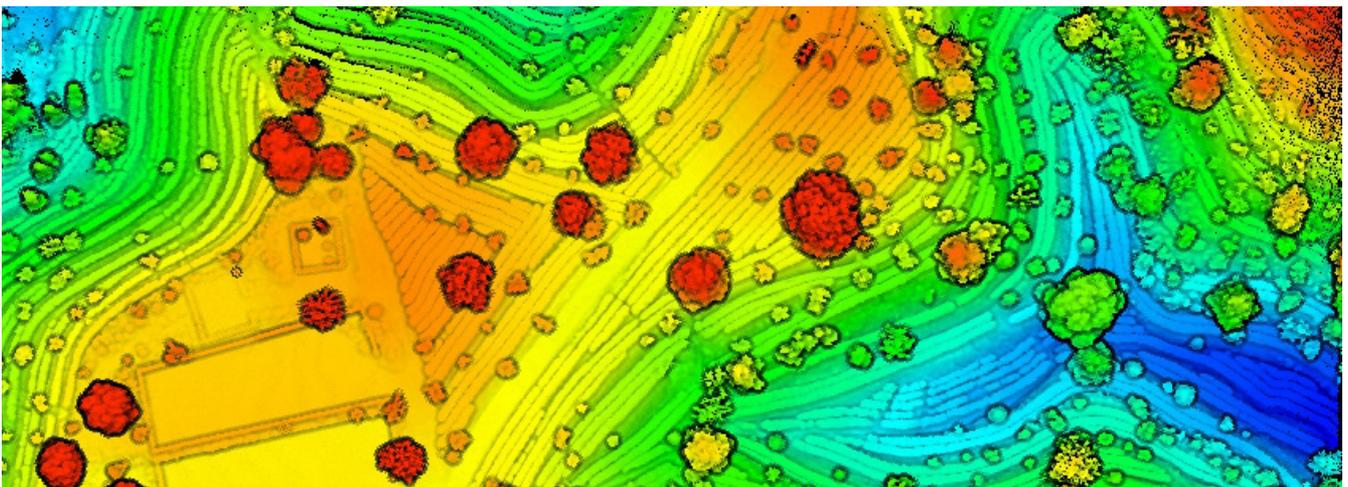
Advantages

I Integrated Design

The operation interface is compact and convenient, with an unpluggable TF Card and engineered data storage model that allows for one-touch operation and copying of laser and camera data.

I New Camera, providing ultra-clear picture quality

The built-in high-resolution mapping camera has been upgraded to 26 megapixels, providing ultra-clear picture quality and enabling the creation of high-quality true-color point clouds and orthophotos for Photogrammetry. Additionally, the external camera interface allows for simultaneous mounting of infrared cameras and other camera types, making the LiAir X3C-H a versatile tool for a wide range of applications.



Specifications

System Parameters

Detection Range	80m (reflectance \geq 10%) 200m (reflectance \geq 54%) 300m (reflectance \geq 90%)	Accuracy (Vertical)	5cm@70m
		Typical rec. Collection Speed	5-10m/s
Weight	1.12kg	Memory	256G TF Card
Voltage	12~24V	Power Consumption	24W
Operating Temperature	-20~50°C	Storage Temperature	-30~60°C
Communication	WIFI		

LiDAR Unit

Wavelength	905nm	Number of Channels	32
Laser Frequency	First Return: 640,000 points/s Dual Return: 1,280,000 points/s Triple Return: 1,920,000 points/s	FOV	360° (Horizontal) \times 40.3° (Vertical)
		Number of Returns	3

Inertial Navigation System

GNSS	GPS, GLONASS, BeiDou	Azimuth Accuracy	0.038°
Attitude Accuracy	0.008°	Data Frequency	200HZ

Camera

Pixels	26 MP	Image Size	6252x4168
Focal Length	16mm/24mm (Equiv. Focal Length)		

Software

Pre-processing	LiGeoreference	Post-processing	LiDAR360/LiPowerline (Optional)
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