

# LiAIR 220

## UAV-Mounted LiDAR Scanning System



The LiAIR 220 is an all-new upgrade based on the LiAIR series product LiAIR220N. It features an integrated design that combines a 40-line circular scanning LiDAR, an inertial navigation system, and a built-in high-resolution mapping camera. It can be used in various fields, such as powerline inspections, emergency mapping, and forestry resource surveys. The new hardware design enables more efficient large-scale 3D laser data collection.

### Advantages

#### I Highly Integrated Design

Simplifies equipment operation with indicator lights, making it more user-friendly. The system uses a pluggable TF card for storage and adopts an engineering data storage mode, allowing for one-time copying of laser and camera data and one-click processing.

#### I Mapping Camera with Ultra-HD Quality

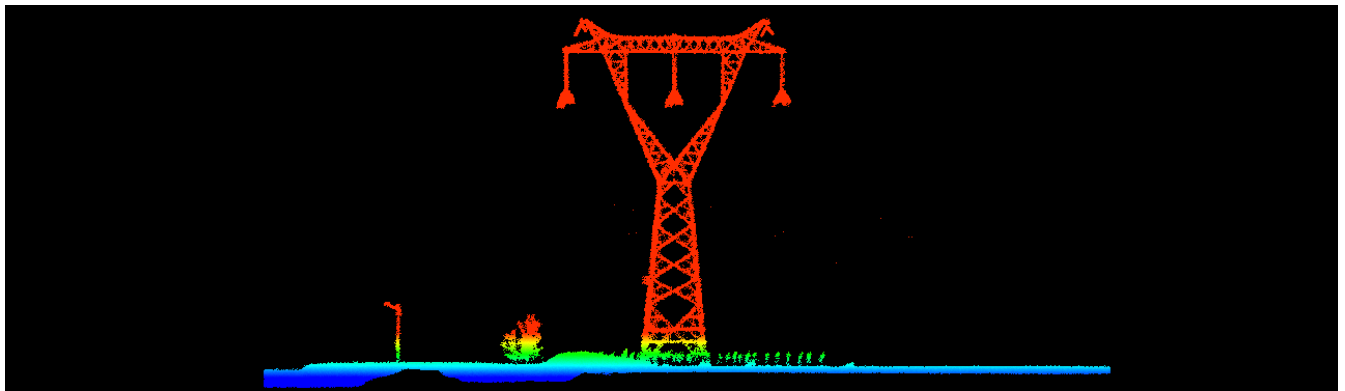
The system includes a built-in 26MP high-resolution mapping camera and reserves an external camera interface, supporting multiple camera types, such as infrared cameras, to meet various mapping product requirements.

#### I Supports LiPlan Flight Assistant

Enables operation status monitoring, device parameter configuration, and real-time 3D point cloud display. The new interface design offers a more user-friendly flight operation experience.

#### I Virtual Base Station Support

With LiPlan connected to the internet, you can enable virtual base station data recording with one click, eliminating the need for physical base stations and CORS base station data while achieving high-precision base station data at a very low cost.



# Specifications

## System Parameters

Detection Range	200 m @ 10% reflectivity	Accuracy (Vertical)	±5cm
Recommended Working Altitude	150m	Typical Flight Speed	5-10m/s
Weight	2.1kg	Internal Storage	256G TF card
Voltage	12~24V	Power Consumption	24W
Working Temperature	-20~50°C	Storage temperature	-30~60°C
Communication	WIFI		

## LiDAR Sensor Technical Parameters

Wavelength	905nm	Channels	40
Scan Rate	720,000 pts/s (Single Return) 1,440,000 pts/s (Dual Return)	FOV	360° (Horizontal) × 40.3° (Vertical)
Ranging accuracy	±2cm	Returns	2

## Inertial Navigation System

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

## Camera

Pixels	26MP	Image Size	6252x4168
Focal Length	16mm/24mm equivalent		

## Software

Control	LiPlan	Pre-Processing	LiGeoreference
Post-Processing	LiDAR360/LiPowerline (Optional)		

