

# 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

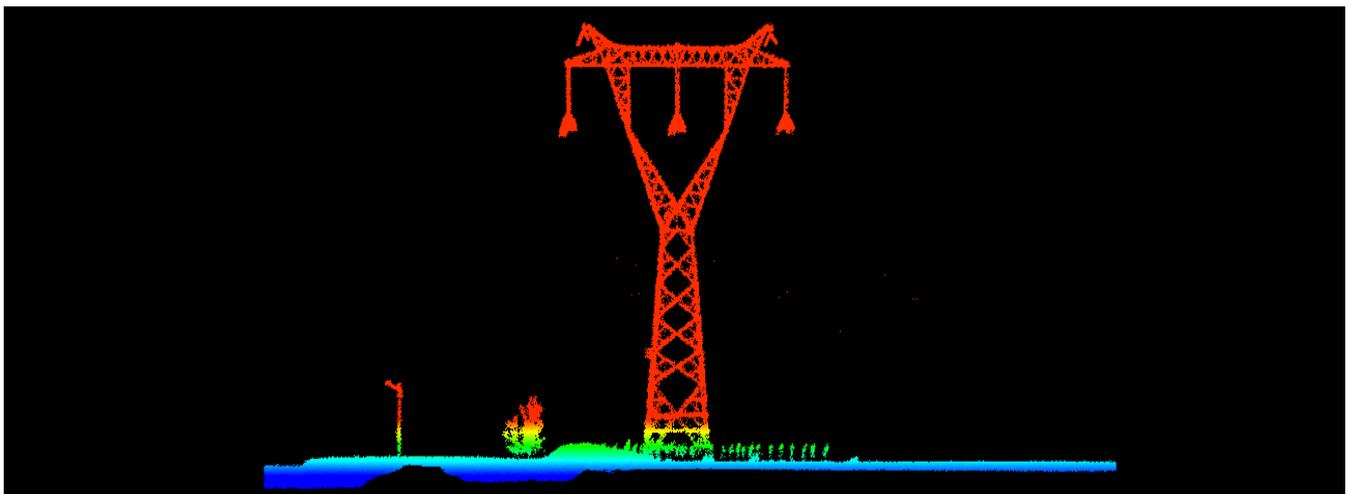
Simplifies equipment operation with indicator lights, making it more user-friendly. The system uses a pluggable TF card for storage and adopts an engineering data storage mode, allowing for one-time copying of laser and camera data and one-click processing.

#### 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.



# 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	256GB 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
Point Rate	720,000 pts/s (Single Return) 1,440,000 pts/s (Dual Return)	FOV	360° (Horizontal) × 40° (Vertical)
Ranging accuracy	±2cm	Returns	2

## Inertial Navigation System

GNSS	GPS, GLONASS, Galileo, BD	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)		

