

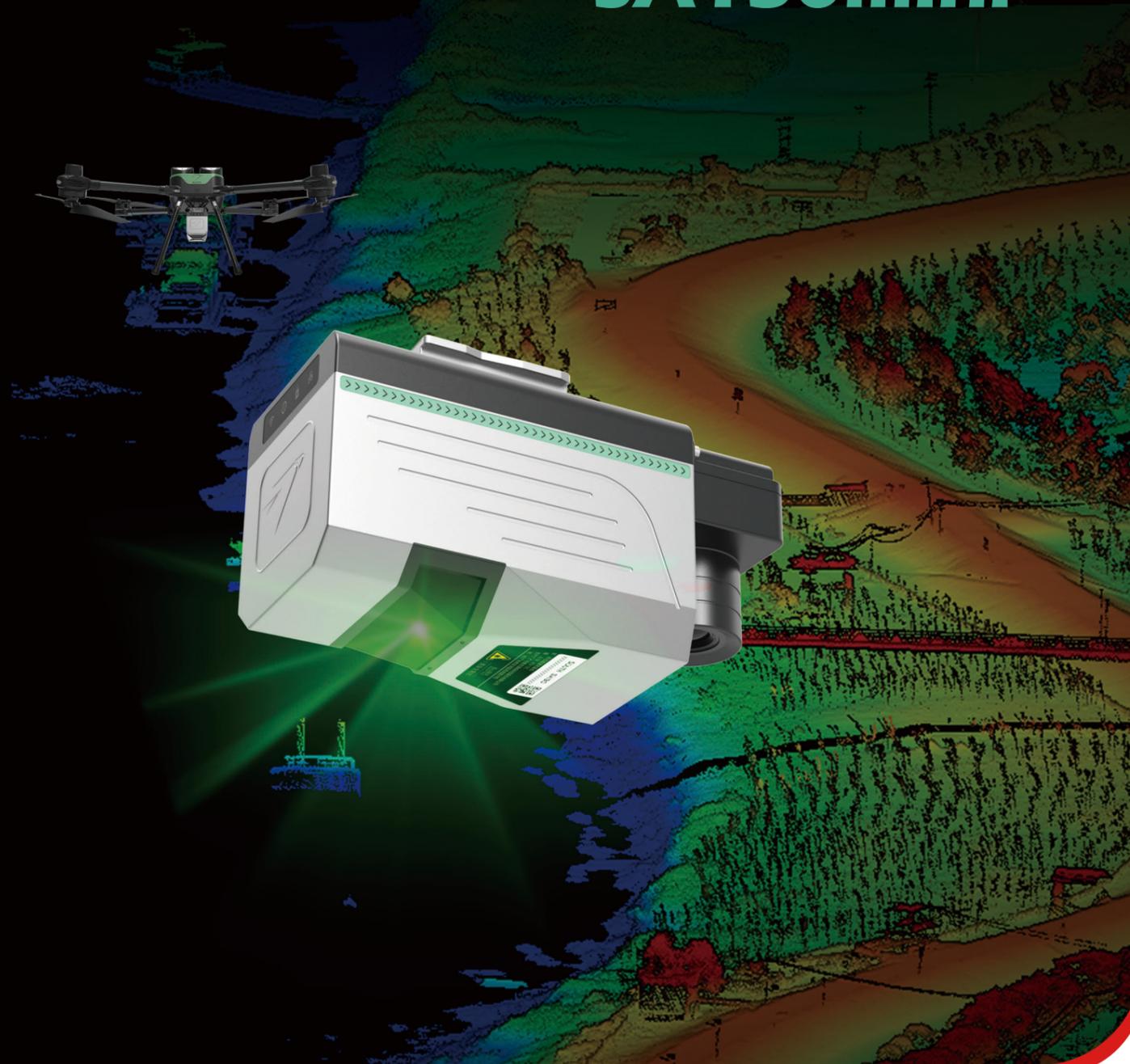
High-Precision Aerial LiDAR System

SA130mini

Specification

General		LiDAR	
Weight	1.3kg	Maximum measuring range	1200m
Absolute accuracy	5cm@300m	Measuring accuracy	15mm/5mm@150m
Dimensions	180X116.5X87.2mm	Maximum scan speed	255 lines/sec
IP rating	IP64	Scanning FOV	100°
Power	40W	Number of Returns	12
		Laser Safety Classification	CLASS I

RGB Camera		IMU update rate	
Resolution	45MP/26MP	IMU update rate	500Hz
Focal length	18mm/16mm	IMU Accuracy	0.006 Roll/ Pitch 0.019 Heading
Sensor size	36X24mm/23.5X15.6mm	Position Accuracy	0.01m horizontal 0.02m vertical
FOV	90°/73°		
200 meters resolution	4.9cm/4.7cm		



High-Precision Aerial LiDAR System

SA130mini

- Ultra-high Integration: Integrates multiple sensors in one; only 1.3kg.
- Ultra-high Precision: 1535nm survey-grade LiDAR (1200m range), paired with a high-precision integrated navigation system for ultra-accurate multi-source fused data.
- Intelligent Operation: One-click takeoff & automated field data collection; one-click indoor processing.

Hardware



LiDAR Module

1535nm survey-grade LiDAR with 1200m range, 12-time multi-echo. Captures precise 3D surface point cloud data (longer range & more echoes than peers, higher accuracy).

RGB Camera

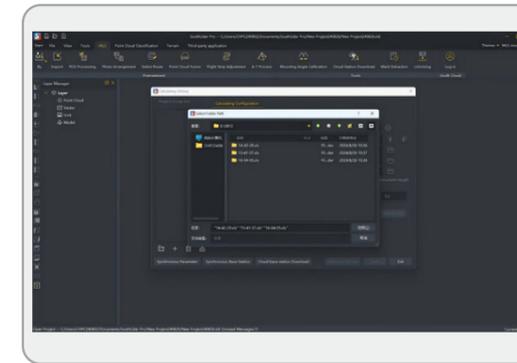
Delivers high-resolution orthophotos.

High-Precision Integrated Navigation System

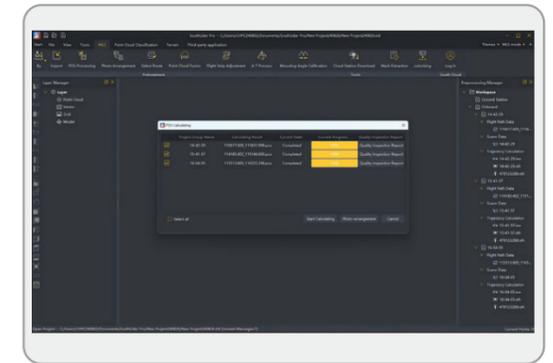
Integrates GNSS/IMU modules; post-processing accuracy: 0.01m (horizontal), 0.02m (vertical). Ensures high-precision spatial synchronization of point clouds and image data via self-developed system & algorithms.

Software

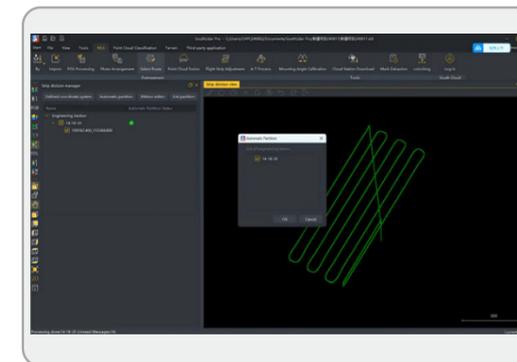
AcuteLas studio is capable to process terrestrial scanner data, aerial lidar data, and it can process data in batches, that means several groups data can be imported at the same time and process together.



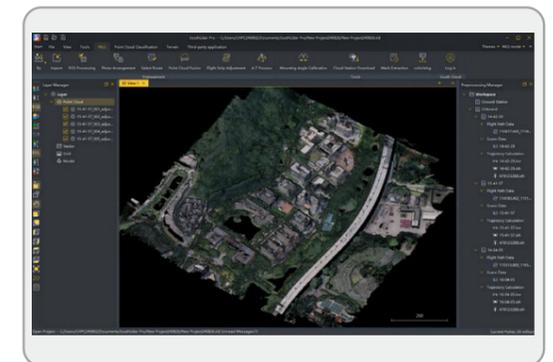
Import several flights data



Several flights POS data processing



Flight strips division



Serval flight data fusion

Platform



Compatible with South SF1200 Drone
Flight time: ≥60 mins (level flight)



Compatible with DJI M350 RTK Drone
Flight time: ≥30 mins (level flight)