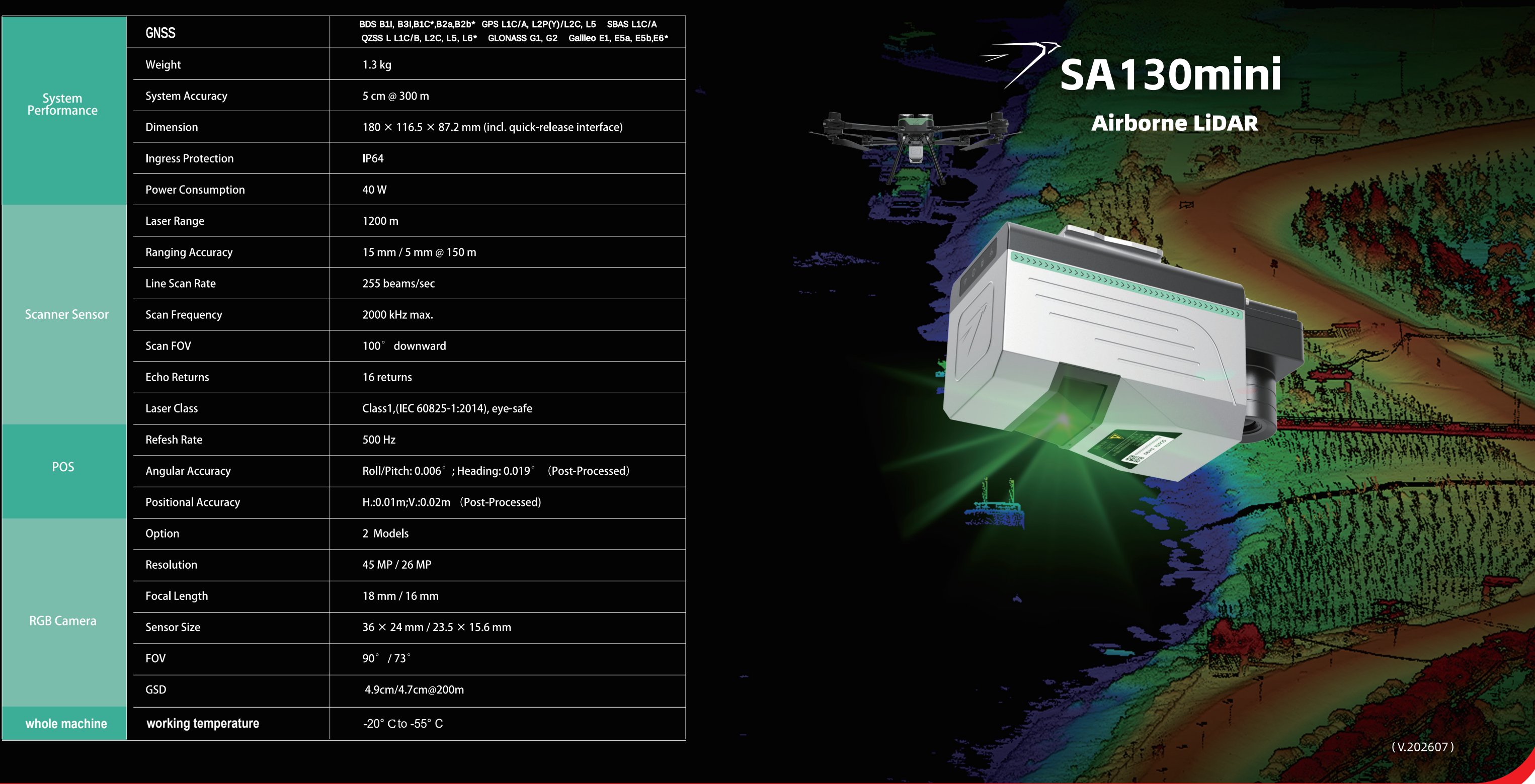


SPECIFICATION

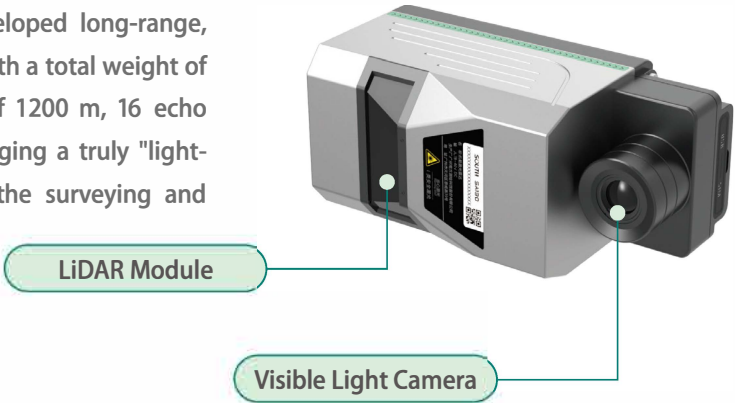
System Performance	GNSS	BDS B1I, B3I,B1C*,B2a,B2b* GPS L1C/A, L2P(Y)/L2C, L5 SBAS L1C/A QZSS L L1C/B, L2C, L5, L6* GLONASS G1, G2 Galileo E1, E5a, E5b,E6*
	Weight	1.3 kg
	System Accuracy	5 cm @ 300 m
	Dimension	180 × 116.5 × 87.2 mm (incl. quick-release interface)
	Ingress Protection	IP64
	Power Consumption	40 W
Scanner Sensor	Laser Range	1200 m
	Ranging Accuracy	15 mm / 5 mm @ 150 m
	Line Scan Rate	255 beams/sec
	Scan Frequency	2000 kHz max.
	Scan FOV	100° downward
	Echo Returns	16 returns
POS	Laser Class	Class1,(IEC 60825-1:2014), eye-safe
	Refresh Rate	500 Hz
	Angular Accuracy	Roll/Pitch: 0.006° ; Heading: 0.019° (Post-Processed)
	Positional Accuracy	H.:0.01m;V.:0.02m (Post-Processed)
RGB Camera	Option	2 Models
	Resolution	45 MP / 26 MP
	Focal Length	18 mm / 16 mm
	Sensor Size	36 × 24 mm / 23.5 × 15.6 mm
	FOV	90° / 73°
	GSD	4.9cm/4.7cm@200m
whole machine	working temperature	-20° C to -55° C



(V.202607)

ILLUSTRATION

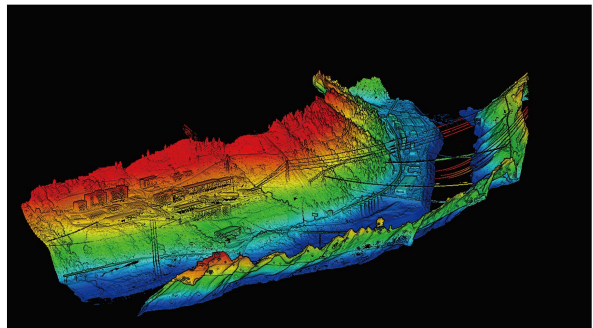
The SA130mini airborne LiDAR is a self-developed long-range, high-precision, lightweight airborne LiDAR. With a total weight of only 1.3 kg, it delivers an ultra-long-range of 1200 m, 16 echo returns, and an ultra-wide 100° FOV — bringing a truly "light-weight and easy-to-carry" new solution to the surveying and mapping industry.



Highlights

1200 m Ultra-Long Range, Unlimited Operation

With a maximum laser range of up to 1200 m and a typical operating distance of 200 – 300 m, whether over rugged mountains or vast plains, a single takeoff and landing covers a wider area, significantly reducing flight frequency and greatly improving large-scale surveying efficiency!



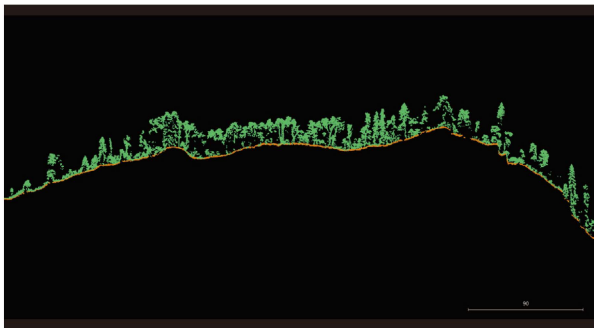
100° Ultra-Wide FOV, Higher Efficiency

With a maximum FOV of up to 100° , a single flight covers a wider area, significantly reducing route planning time and the number of flights. At the same overlap rate, efficiency is improved by 50% compared to similar products in the industry.



Ultra-Strong Penetration, Revealing the True Picture

With a maximum of 16 echo returns, a single laser beam penetrates dense vegetation canopies and captures multi-layer ground object information. The ultra-high laser energy ensures worry-free data acquisition in complex terrains (dense forests, shrubs).



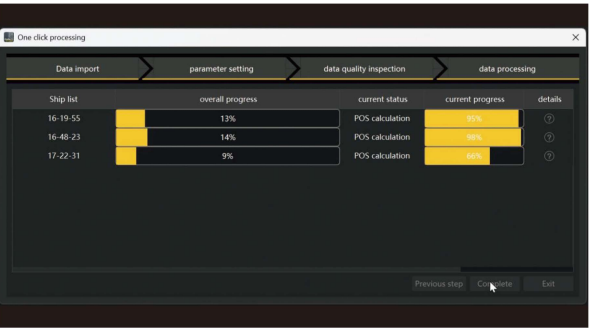
Integrated LiDAR and Camera, Direct True-Color Point Cloud Output

Equipped with a standard 26mp/45mp orthophoto camera, integrated seamlessly with the LiDAR. No repeated calibration required — synchronously acquires LiDAR point cloud and image data to directly generate high-precision true-color point clouds. The results are more intuitive and easier to apply!

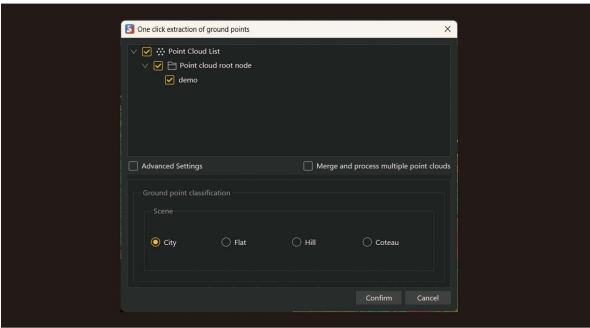


Software

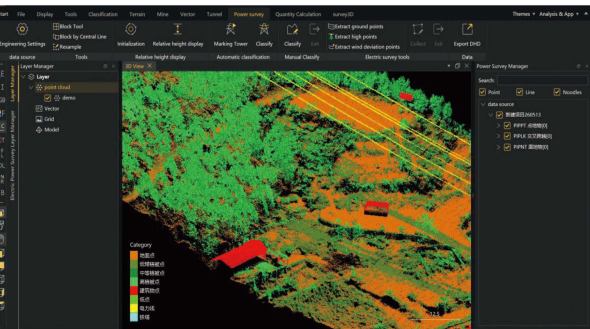
Comes standard with AcuteLas Studio laser point cloud processing software, featuring full-chain processing capabilities from multi-source data input to industry-specific output , efficiently enabling intelligent preprocessing of airborne mobile mapping system data and generating high-quality colored point cloud results. It also includes laser point cloud data processing modules and application analysis modules, such as point cloud classification, power line surveying, DEM contour line generation, and more.



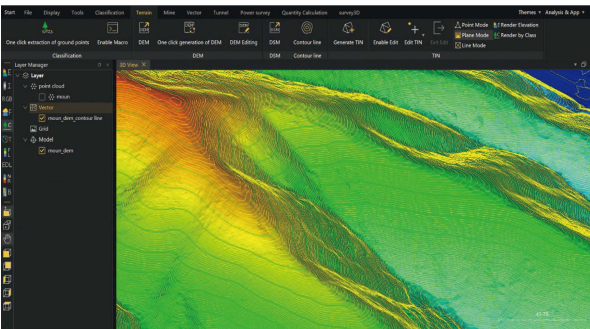
One-Click Processing



One-Click Ground Point Extraction



Power Line Surveying



One-Click Contour Line and DEM Generation

Drone Platform

It is recommended to carry the self-developed SF1200 long-endurance UAV, with a tested single-sortie endurance of up to 70 minutes (level flight), capable of collecting data over approximately 10 km² per sortie.

It can also carry the DJI Matrice 400, with a tested single-sortie endurance of approximately 40 minutes (level flight), capable of collecting data over approximately 6 km² per sortie.



SF1200 UAV:

Tested single-sortie endurance of up to 70 mins



DJI Matrice 400 UAV:

Tested single-sortie endurance of up to 40 mins