SPECIFICATION

Scanner Performance			
Laser Pulse Repetition Rate (PRR)	600kHz	400kHz	300kHz
Max.Measuring Range@ ρ > 20% 1)	250	350	450
Max.Measuring Range@ ρ > 80%1)	300	450	600
Typ. flying height	120m	200m	250m
Measurement rate	max.800,000 pts/sec		
Scanning FOV	up to 360° 2)		
Max. Number of return pulses Max.	8		
Measuring Range, natural targets ρ > 80%	800m		
Measuring accuracy 3)	15 mm (single)/ 10 mm (repeat)		
Laser safety class	Class 1 (IEC 60825-1:2014) eye-safe		
Laser wavelength	1550nm		
IMU & GNSS			
IMU Accuracy	0.006° Roll/ Pitch 0.019° Heading		
IMU update rate	500HZ		
Position Accuracy	0.01m horizontal 0.02m vertical		
General			
Absolute accuracy	±5cm (H/V) 4)		
Storage	256 G Flash Drive		
Dimensions	234mm x 112mm x 120mm (without camera)		
Weight	2kg		
Working temperature	-20°~ +55°		
IP rating	IP64		
Power consumption	40W		
RGB Camera			
Resolution	26MP		
Focal length	16mm		
Sensor size	23.5*15.6mm		
Pixel size	3.76um		
FOV	73°		
200 meters high resolution	4.7cm		

1)Typical values for average conditions.
2)Selectable. Consider limitations when integrated in kinemtatic systems
3)Accuracy is the degree of conformity of a measured quantity
to its actual (true) value.
4)According to SANDING test condition :150 m AGL with 8m/s speed.

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Powerful & Lightweight

SG130 Lite is a multi-platform LiDAR system that combines high-resolution laser scanning and precise positional data to collect geo-referenced point cloud, which is particularly designed for geospatial survey scanning from air to ground.

SKYSOLUTIONS
(V. 202509)

Introduce

SG130 Lite is a new generation of multi-platform LiDAR launched by SANDING. It has a smaller volume and lighter weight. With a measurement range of 900 meters, it can easily handle large-scale mapping tasks in complex scenarios. The cable-free design and integrated slider design allow for quick switching between multiple platforms such as unmanned aerial vehicles and vehicles.

Advantages

Multi-platform

With this LiDAR solution, more mission scenarios can be completed. Based on a 360-degree field of view and lightweight design, it can be easily installed on various drone platforms or vehicles.

Penetrability

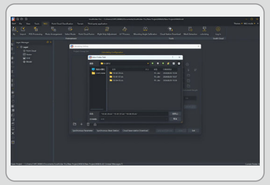
Its detection and processing of multiple target echoes per laser pulse will provide you with effective ground points.

High accuracy

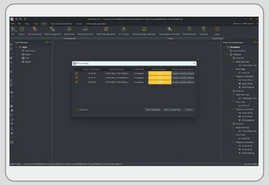
The high-precision integrated navigation algorithm combined with the scanner that can provide 5 mm repeated ranging accuracy can achieve an absolute accuracy within 5 cm.

Software

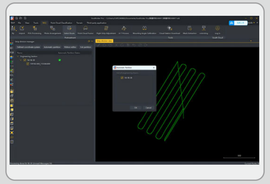
AcuteLas studio is capable to process terrestrial scanner data, aerial lidar data, and it can process data in batches, that means several groups data can be imported at the same time and process together.



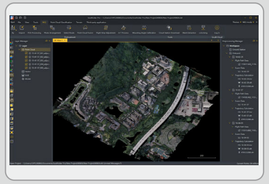
Import several flights data



Several flights POS data processing

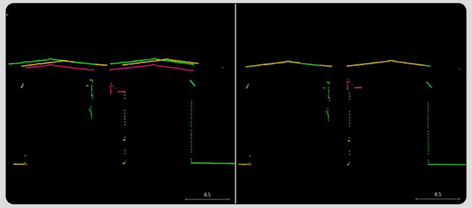


Flight strips division



Serval flight data fusion

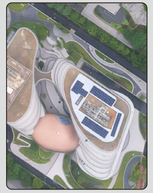
Point cloud optimization



Before After

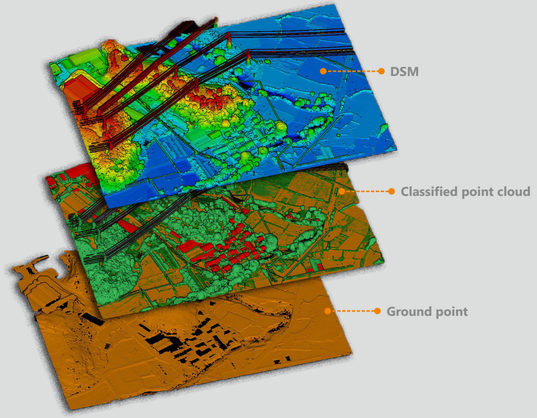
Refine laser, navigation and orientation data to obtain seamless point cloud, with or without GCPs

Orthophoto generation



While processing point cloud data, orthophotos can be generated.

Point cloud classification



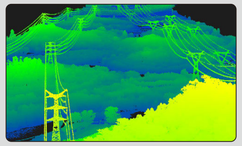
Platform

SANDING Quadcopter SF1200

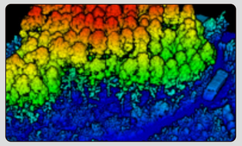
SANDING VTOL UAV

DJI M300/M350 RTK

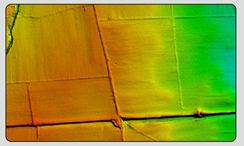
Applications



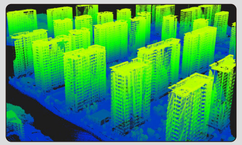
Energy & Utilities



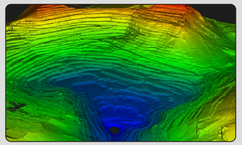
Forestry



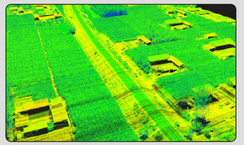
Archeology



Construction & Engineering



Mine



Railway