



GS-100D

UAV Lidar Scanning System GS-100D
With Integrated Multispectral Camera



Wuhan Geosun Navigation Technology Co.,Ltd

Web: www.geosunlidar.com

Tel: +86(0)27-87504895

Email add: sales@geosun-gnss.com.cn

Add: 4F, Building D, Maker plaza No.8 West Maodianshan Road, East Lake Hi-tech Zone Wuhan City, China



GS-100D

UAV Lidar Scanning System GS-100D
With Integrated Multispectral Camera

Highly
Integrated

High
Precision

450m
Ranging

High
Efficiency

Multi
Platforms

Easy
Operation

GS-100D lidar scanning system is a UAV measurement system independently developed by international navigation. It highly integrates laser scanner, GNSS satellite positioning system, INS inertial navigation system and multispectral camera, and can quickly obtain high-precision laser point cloud number. It can be widely used in Forestry and Agriculture.

System Parameter

Accuracy	≤10cm@110m	Dimension	197*115*110mm
Weight	< 1.6kg	Storage	64 GB Max support 128GB TF card
Working Temperature	-20° ~ +55°	Carrying Platform	Multi Rotor/VTOL

Laser Unit

Measuring Range	190m@10%	FOV	70° the circular view
Laser Class	905nm Class1 (IEC 60825-1:2014)	Range Accuracy (1σ @ 20m)	2cm
Laser Line Number	Equivalent to 64-beam	Data	Triple echo, 720,000 Points/Sec

POS Unit

Update Frequency	200HZ	Position Accuracy	≤0.05m
Pitch /Roll Accuracy	0.015°	GNSS Signal Type	GPS L1/L2/L5, GLONASS L1/L2 BDS B1/B2/B3, GAL E1/E5a/E5b
Heading Accuracy	0.040°		

Pre-Processing Software

POS (Trajectory) Software	Shuttle	Point Cloud Software	gAirHawk
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Camera

FOV	HFOV: 49.6° VFOV: 38°
Weight	275g
Focal Length (mm)	5.2
Typical Width	110m*83m@AGL=120M
Resolution	1280*960
Ground Pixel Resolution	GSD: 8.65 cm/pix, AGL:120



Operation Efficiency Table

Flight Height (m)	Accuracy	Single Flight Operation(km ²)
50	≤5cm	0.88
70	≤7cm	1.28
110	≤10cm	1.92

Mission Planning Software (optional)

Mission Planning Software	Customized Route Planning Software – WayPoint Master
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Application Case



Model:GS-100D
 Flight speed: 10m / s
 Flight altitude: 70m
 Application:Forestry Survey
 Project location:Wuhan, China

