

### **GS1200-Map**

### **Professional Mapping Drone System for cm grade survey**



The Geospace GS1200-Map is a complete integrated drone mapping system that provides extended operational air-time with 5 x the efficiency in aerial image capture than a single camera system, capturing 5 x 24Mp images in each shot, total 120Mp per shot.

For UAV based photogrammetry this increased productivity means that a project normally requiring 5 flight sessions of 20 minutes each, requiring multiple battery sets and a full day on site, can be achieved in a single flight of just 20 minutes on a single battery charge.

In addition each single shot acquires 5 different views, Nadir plus 45 degree obliques in forward, reverse, left and right views, all registered to each other, on a single memory card and with cm precision based on the Emlid RTK/PPK system which minimizes the need for pre-surveyed Ground Control Points.

The included lens calibration files allow easy migration for post processing in Pix4D or other 3<sup>rd</sup> party systems.

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The Geospace GS1200 airframe is lightweight Carbon Fiber construction providing the best possible power to weight ratio and includes two 22000mAh 6S batteries for extended airtime operation.

The package is conveniently housed in a robust wheeled flight case for transportation and includes a complete extra set of 2 x 22000mAh batteries and charger unit in a separate flight case.

The triple redundant IMU flight controller provides professional grade robust operation and supports live FPV video streaming to the provided daylight viewable 10" display.

The system can be flown directly by manual controller provided, or on pre-programmed flight path using the provided Ground Control system software, the Pro version UGCS platform which can run on any Win OS laptop.

The UGCS-Pro GCS also provides for downloadable maps for remote operation and supports "terrain follow" mode which maintains constant flying height above the map terrain.

#### GS1200 Airframe



GS1200 5-camera unit



Emlid RTK/PPK



**UGCS Pro** 



10" DV



Flight Controller



GS1200 Flight case



## **Key system features**

120mp images per single frame shot
Up to 40 minutes flight time
Survey grade cm level precision with PPK
Triple redundant flight control systems
Complete integrated package
Manual LOS control or programmed BVLOS mapping

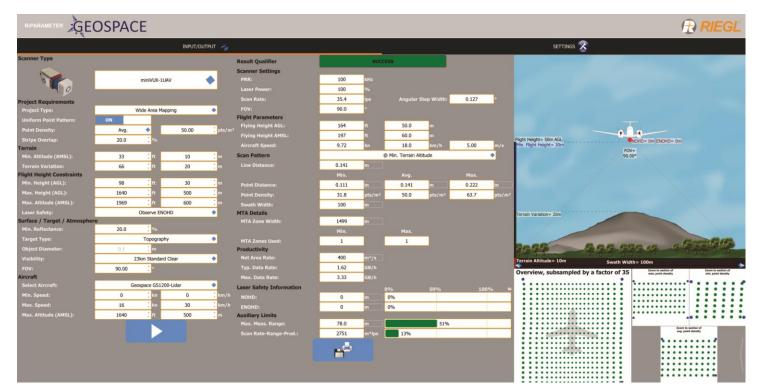
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# **GS1200-Lidar Option**

## **Integration with Riegl MiniVUX-1UAV Lidar**

Data Capture Analysis in typical scenario 15 minutes data capture (20 minute flight time)



#### Key deliverables in this configuration:

•	Total scanned area	40 hectares
•	Total data points captured	20 Million
•	Data Points per square meter	50ppm2
•	Data capture flight path length	4km
•	Swath width	100m
•	Scan overlap allowed	20%