GS1200-Map/Lidar

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 3rd party systems.

Geospace NZ Ltd
29G Peters Way
Silverdale
Auckland 0932

www.geospace.co.nz
sales@geospace.co.nz
Ph. 0212135518

GEOSPACE

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.

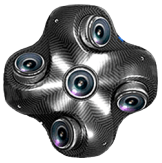
GS1200 Airframe

Lightbridge 2 FPV

Dual Battery Charger

1000 Nits Rugged Laptop

GS1200 5-camera unit



Emlid RTK/PPK

UGCS Pro

PRO

10” DV tablet

A3-Pro 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

Geospace NZ Ltd
29G Peters Way
Silverdale
Auckland 0932

www.geospace.co.nz
sales@geospace.co.nz
Ph. 0212135518

GS1200-Lidar Option

Integration sample data analysis with Riegl MiniVUX-1UAV Lidar

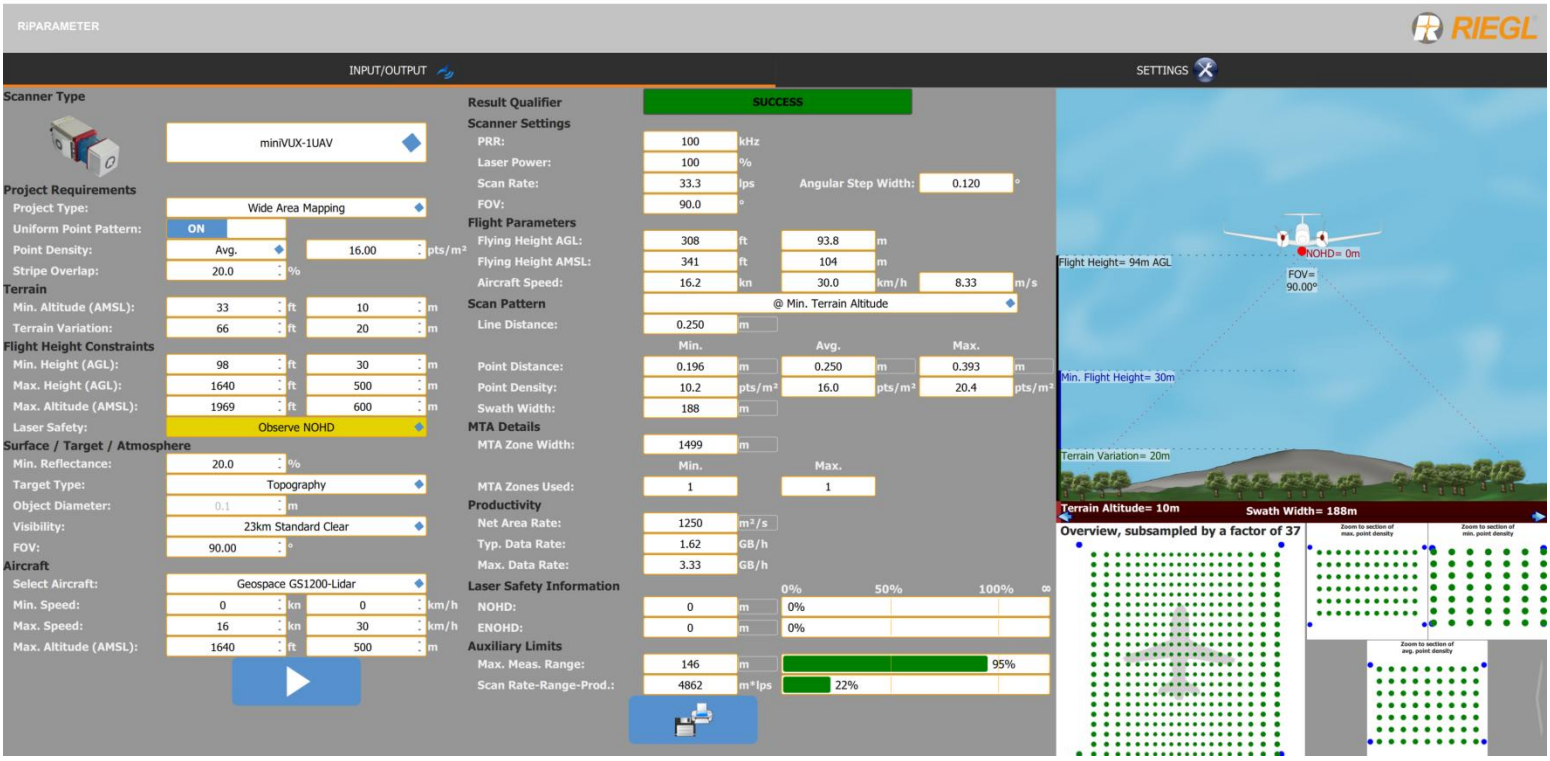
(MiniVUX-2UAV Lidar doubles the scan data rate)

Data Capture Analysis in typical scenario 10 minute data capture flight time

GEOSPACE

Lidar Productivity assessment

This data for the MiniVUX-1UAV Lidar on a Geospace **MAP-1200 airframe (Sub- 25kG total mass configuration)**
When upgrading to the MiniVUX-2UAV Lidar unit the data rate is doubled so 32 points/M^2 avge. can be achieved over the same area at the same speed
On the basis of a 10 minute data capture the net area coverage is 75Ha (however the MAP-1200 can provide 25 minutes endurance with this payload and so cover up to 187Ha in one flight)



Geospace NZ Ltd
29G Peters Way
Silverdale
Auckland 0932

www.geospace.co.nz
sales@geospace.co.nz
Ph. 0212135518