

- GCP Free Photogrammetry
- Rotating Mounting for Horizontal/Vertical Mapping
- Image Time-tagging and Geotagging
- Exterior Orientation Parameters (Omega, Phi, Kappa)
- Reduced Overlap
- Increase Mapping Coverage
- Single Crew Operation
- Survey Grade Dual-Antenna Inertial Navigation
- Upgradeable to Integrate with the LiDAR



“One Click” Data Processing

Geo-Photomap™ GCP-Free Drone Photogrammetry System

Geo-Photomap integrates GPS/IMU with RGB imagery enabling GCP-free direct-georeferencing with significantly reduced side lap, resulting in more coverage in less time.



Vertical Structure Inspection



Corridor Mapping



Upgradeable to LiDAR



Ready-to-Fly Package

Parameter	
Size / Weight / Power	44 in ³ (5.5x4.0x2.0) 3.5 lbs.* / 10 – 30 VDC @ 2 Amps min.
Real-Time Data Output	Navigation solutions at up-to 125 Hz. available via Ethernet or RS-232
Data Recording/Logging	Navigation solutions, raw GPS, IMU and LiDAR point clouds

For more information about the Geo-MMS inertial unit, please check our website: <http://geodetics.com/product/geo-inav-tactical/>

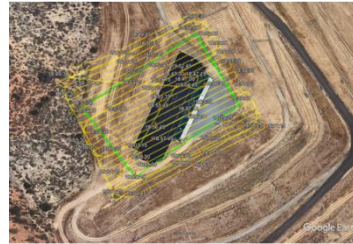
*Weight without mounting assembly. Total weight depends on system options and setup configuration.

Processing options	Typical Position, Velocity, Acceleration, Attitude Accuracy (RMS)*					
	Position		Velocity, Acceleration	Roll, Pitch	Heading (boom separation)	
	Horizontal	Vertical			1m	2m
L1/L2 SBAS	0.5m	1.5m	0.1 m/s, 0.15 m/s ²	0.1°	±0.26°	±0.08°
L1/L2 PPK	3cm	5cm	0.02 m/s, 0.1 m/s ²	0.05°		

*Accuracy is dependent upon GPS satellite system performance, ionospheric conditions, GPS blockage, data link and other factors



Classic UAV Photogrammetry with GCP; high overlap/sidelap



Geo-Photomap GCP-free; Low sidelap



Classic UAV Photogrammetry*	Geo-Photomap Photogrammetry*
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- | | |
|----------------------------|----------------------------|
| • Number of images: 1100 | • Number of images: 200 |
| • Processing time: 35 Hr | • Processing time: 3 Hr |
| • Overlap/Sidelap: 85%/90% | • Overlap/Sidelap: 85%/40% |

Average RMS on more than 20 check point[m]

East	North	Up	East	North	Up
-0.02	-0.06	-0.08	0.01	-0.06	-0.07

*Sony A6000 camera (focal length: 16mm), AGL: 55m

