

## Introduction

### Specifically Design for DJI M300 RTK and Small Drones

- 55-Min Max Flight Time
- 6 Directional Sensing & RTK Positioning
- Primary Flight Display
- IP45 Rating
- Hot-swappable Battery
- UAV Health Management System
- Self-developed Software Achieved Terrain Following Basing on Customer's DEM
- Rubidium Scalar OPM/ Vector Fluxgate/Compensation
- Multi-Payload in One Platform



## About us

Geodrones System Inc. provides clients with the tools and survey service to carry out mineral exploration projects, specializing in remotely piloted aircraft systems development and operations.

## Applications:

- Mining exploration
- Regional geology
- Utility location
- Archaeology
- Underground coal mine fires
- Unexploded Explosive Ordnance (UXO)



One Platform with Multi-Payload



## Geof-M300 Drone Magnetic Survey System

**Aeromagnetic Compensated  
Magnetometer & Gradiometer  
with 3D Lidar Surveying**

**Geodrones System Inc.**

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## ▶ VTOL Fixed-wing UAV Platform

**CW-25E(MTOW 35KG)**

4H!



**CW-15 (MTOW 17KG)**

3H!



**CW-007 (MTOW 7.8 KG)**

1H!

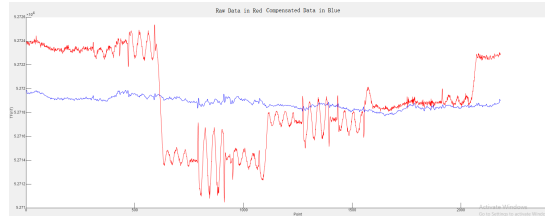


## Turnkey Solution

### Survey Planning/Data Acquisition

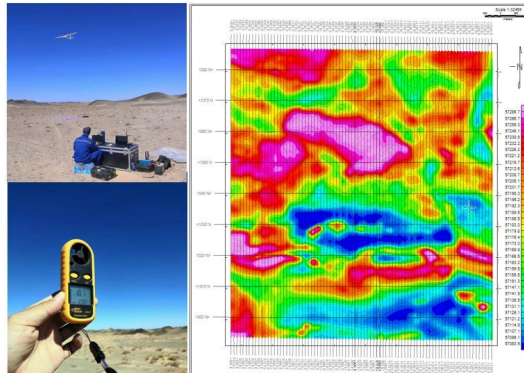


### Aeromagnetic Compensation to Remove Interference

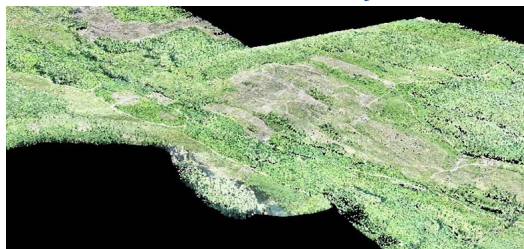


## Services

### Drone Gradiometer & Magnetometer Survey



### Drone Lidar Survey



## ▶ Sensors Specification

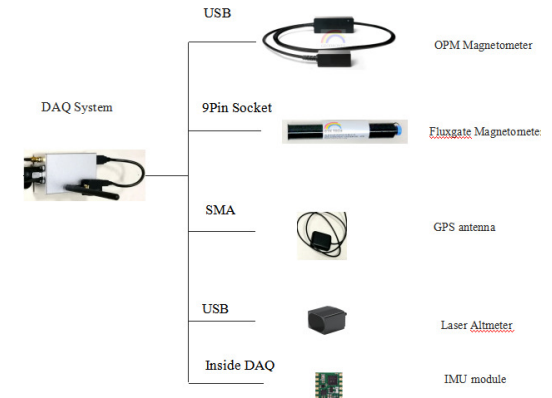
### Compact Rubidium Optical Scalar Magnetometer

- Field Sensitivity:  $<1 \text{ pTrms}/\sqrt{\text{Hz}}$  in 0.1-100 Hz band
- Deadzone single equatorial plane:  $\pm 7 \text{ deg}$
- Dynamic Range :1000 nT to 100000 nT
- Operating temperature range: -30C to +60C
- Slew rate: 10000 nT/s
- Max gradient :100 nT/cm
- Max data rate: 400 samples/s sensor output directly, 20 samples/s for surveying system

### Fluxgate Magnetometer

- Measuring range : $\pm 100000 \text{ nT}$
- Frequency domain noise:  $<10 \text{ pTrms}/\sqrt{\text{Hz}}$  at 1Hz
- Offset error In the zero field:  $\pm 100 \text{ nT}$
- Scale error DC: $\pm 0.5\%$
- Temperature offset error:  $1 \text{ nT}/^\circ\text{C}$
- Orthogonality error Inter-axial error less than  $1^\circ$

## ▶ Main Components



## ▶ Special Features

- DJI MSDK APP for compensation auto-maneuvering
- Max 20Hz output rate PPS synchronized with GPS/Laser Altimeter/IMU/MAG/Fluxgate
- Compensation: OPM IR: 10-20, 0.05nT dynamic noise
- Fluxgate: 0.4nT dynamic noise
- Plug and work, unplug USB storage or 80MB/s WIFI data downloading after landing
- Quick survey plan and terrain following waypoint design
- Weight 0.7kg(w/o installation kit)
- Power: 24V(12-40V),12W
- Solid and Flexible Quick Mounting for DJI M300 RTK and JOUAV VTOL Fixed-wing UAV Platform

**JOUAV**  
Unmanned Aircraft System

Local Agent \* WWW.JOUAV.COM