UAV Magnetometer R4-M350

Magnetometer for DJI M350 drone and ground use with uBlox

The **UAV Magnetometer R4-M350** is an ultra-portable magnetometer designed for **integration with drones**, particularly the DJI Matrice 350 RTK (M350), or for **handheld** use. This system is ideal for conducting surveys over large areas, optimizing survey times compared to ground surveys thanks to the PPS function, which can be activated with the uBlox module.

Thanks to the **uBlox GNSS module**, the magnetometer can also be used without a drone, allowing operators to conduct **handheld magnetometric surveys** in complex environments while significantly reducing **survey times with speeds of up to 5 m/s.**

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Contact us for: purchase, rental, quote.

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Sensors
Equipped with five tri-axial Fluxgate sensors arranged horizontally and in parallel, with a spacing of 250 or 500 mm.

Sampling frequency
Operates at 200 Hz, effectively filtering out noise from infrastructure or drone motors.

Internal memory
Comes with 8 GB of internal memory for data recording during survey operations.

User interface
The system is controlled via a single button and an integrated Wi-Fi server, accessible from any Wi-Fi-enabled device (smartphone, tablet, or laptop), facilitating configuration and monitoring.

Weight
Approximately 1,400 g, compatible with drones capable of carrying a payload of at least 1.5 kg.

uBlox GPS module
Thanks to the integrated uBlox GPS module, the UAV Magnetometer R4-M350 can acquire data at high speeds (up to 5 m/s) and be used in handheld ground mode. The operator can detach the magnetometer from the drone and use it on the ground, enabling georeferenced surveys in environments where flying is not possible.

Data Processing Software
Compatible with geophysical analysis software for generating detailed magnetic maps (Oasis or Surfer).

Technical features:

Sensor type	5x triaxial Fluxgate sensors
Sensor spacing	250 mm or 500 mm
Sampling frequency	200 Hz
Internal memory	8 GB
Weight	1,400 g
GPS module	uBlox
Control interface	Wi-Fi with access via smartphone, tablet, or laptop
Drone mounting	DJI Matrice 350 RTK
Manual use	Yes, with uBlox GPS module
Main applications	UXO detection, archaeology, mineral exploration, geophysical surveys

This configuration makes the UAV Magnetometer R4-M350 an **advanced and versatile solution** for magnetic surveys, both aerial and ground-based, ensuring maximum operational flexibility.

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Applications:

Detection of metal masses related to unexploded ordnance (UXO)

Thanks to its high resolution, the integrated UAV Magnetometer R4-M350 is effective in identifying small metallic objects and underground structures.

Archaeology

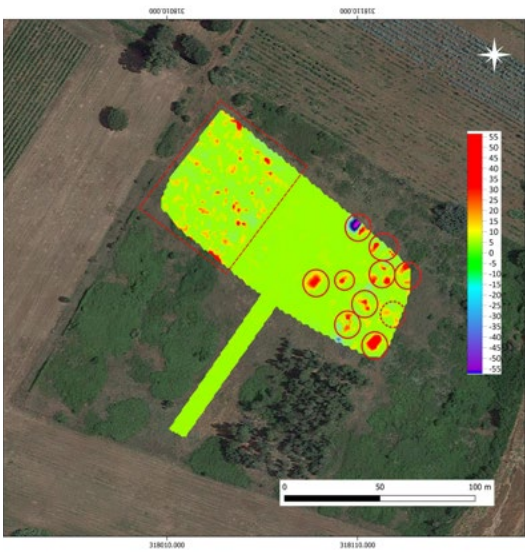
Supports archaeological research by detecting buried metallic objects and features of historical settlements.

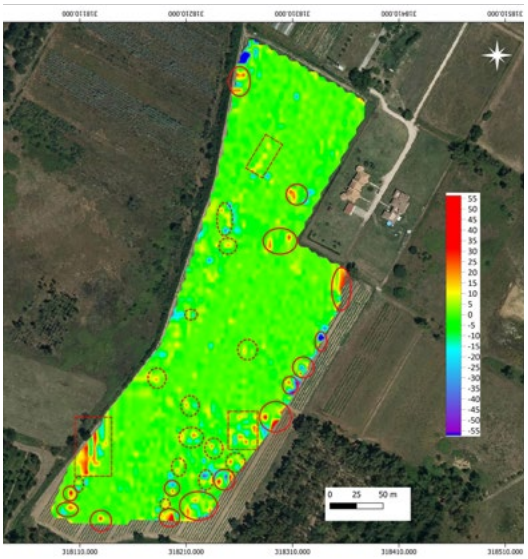
Mining exploration

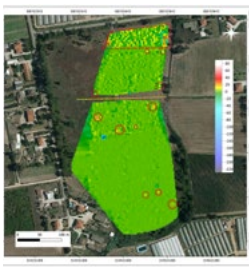
Useful for detecting mineral deposits and geophysical subsurface mapping..

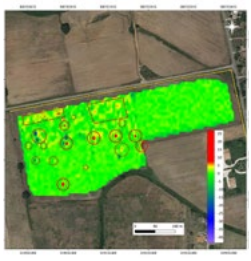
Environmental and geological monitoring

Ideal for magnetometric studies of faults and geological anomalies.









Accessories:

Standard Package

- DJI M350 drone complete with accessories (4 sets of TB65 smart batteries, charging station, radio controller, hard carrying case)
- R4 magnetometer (fluxgate): Carbon frame with 5 integrated sensors, data logger, and hard case
- SkyHUB Data Logger for integrated altitude sensor management with UgCS flight planning software
- SkyHUB Core Software Package
- Terrain following system (TTF) with integrated radar altimeter
- Custom Payload software for TTF
- MagDrone DataTool software
- UgCS Pro expert software
- Landing gear extension
- Documentation: Certificate, manual

Optional accessories

- R3 magnetometer (fluxgate) with 3 integrated sensors (alternative to R4)
- Ground kit for ground use with external uBLOX GNSS receiver
- Magnetic base station for data compensation