

Large Area Magnetometer Survey System

MAGNETO[®] MX V3



Features

- Modular trailer to host 1 to 16 probes; to be carried, pushed or pulled
- Analogue highly sensitive fluxgate gradiometers
- 24Bit digitizer with LAN output wired or wireless (optional)
- Sample rate as high as 200Hz
- Rugged tablet PC for storage and processing of measurement data
- RTK DGPS for position accuracy of ± 1 cm
- SENSYS software suitable to record and process all measurement data
- Maximum daily coverage of 20 ha, maximum survey speed 15 km/h, 9 mph

The MAGNETO[®] MX V3 is a large area magnetometer survey system. It can host up to 16 fluxgate gradiometers on a trailer having a width of 3.85m. This allows a rapid non-invasive cartography on land in order to search for UXO or archaeological structures as well as doing large scale soil evaluations.

One of the unique features is the modular trailer that can be set up in various configurations to be carried, pushed or pulled. The survey width can be adjusted from 1m to 4m. Furthermore, the compact data acquisition unit offers high sampling rates, 24Bit digitizing of all measurement data and an Ethernet interface to output the data. Thus, the survey system is very flexible to interconnect with third party components and systems. A wireless option is available. At the maximum survey speed the

system is capturing data every 20 mm.

In order to reach a positioning accuracy of ± 1 cm for every measurement point, the MX V3 is equipped with a RTK DGPS. The GPS rover station is mounted to the car while the GPS base station (reference point) is set next to the measurement area.

Additional Equipment

- closed and lockable trailer for transporting the measurement system
- DGPS back pack
- Adaptation of trailer to customer requirements
- Adaptation of system components for under water applications

Technical Data MAGNETO[®] MX V3

General Technical Data

Power Supply 12 V battery pack (lead gel)

Dimension of Carrier

Length min. 1.2 m (pushed)
max. 4.50 m (towed)

Width min. 1,25 , max. 3.85 m

Height (incl. GPS antenna) ca. 1.3 m

Weight (net) 45kg

Data acquisition

Analog input 16 channel max

Output Proprietary MonMX protocol

Position accuracy ± 1 cm (with RTK DGPS)

PC interface LAN, 100Mbit/s

Measurement configuration

Distance between probes 0.25m min

Sensor above ground level 0.1 m to 0.4 m

Maximum survey speed 15 km/h; 9 mph

Data density (y) at max survey speed 20 mm

Sensor System

FGM650/10

Sensitivity 0.5V/ μ T

Measurement range $\pm 10,000$ nT

FGM650/3

Sensitivity 0.6V/ μ T

Measurement range $\pm 8,000$ nT

Area coverage

Maximum daily coverage 20 ha

