

Modular Large Area Magnetometer Survey System

MAGNETO[®] MX V4



Features

- Modular trailer to host 1 to 16 probes; to be carried, pushed or pulled
- Up to 16 analogue highly sensitive fluxgate gradiometers
- Sensor spacing 25 cm
- 24Bit digitizer with LAN interface
- Sample rate as high as 200Hz
- Rugged Panasonic tablet PC for recording and navigation
- RTK GNSS interface for position accuracy of ± 1 cm
- Integrated PPS generator
- Odometer interface
- Maximum daily coverage of 25 ha, maximum survey speed 15 km/h, 9 mph

The MAGNETO[®] MX V4 is a area magnetometer survey system. It can host up to 16 fluxgate gradiometers on our unique modular metal-free and non-magnetic cart that can be set up as a push-cart or as a towed rig. This allows for rapid non-invasive cartography on land and even in shallow water in order to search for UXO or archaeological structures as well as doing large scale soil evaluations.

Due to its modularity it meets the requirement of nearly any survey task. The cart can be converted into anything between a 1m wide push-cart and a 4m wide vehicle towed device.

The compact data acquisition unit offers high sampling rates, 24Bit digitizing. It is prepared to host 16 probes. You can start with a lower number and extend the system over time just by getting a license and additional probes – no hardware change is needed.

By using wired connections only we avoid transmission delays and external interference.

At the maximum survey speed the spacing between two data points is 20mm.

To increase the accuracy of positioning a PPS generator is integrated.

Technical Data MAGNETO[®] MX V4

General Technical Data	
Power Supply	12 V battery pack (lead gel)
Data acquisition	
Analog input	16 channels max.
Output	Proprietary protocol
Position accuracy	±1 cm (with RTK GNSS)
PC interface	LAN, 100Mbit/s
Carrier	
Length	min. 1.2 m (pushed) / max. 5.50 m (towed)
Width	min. 1.25 m, max. 3.85 m
Height (incl. GPS antenna)	ca. 1.3 m
Weight (net)	19 (5-channel push-cart), 45kg (16-channel towed)
Sensors	
FGM650/10	±10,000 nT meas. range / 0.5V/μT sensitivity (see sensor spec sheet)
FGM650/3	±8,000 nT meas. range / 0.6V/μT sensitivity (see sensor spec sheet)
Measurement configuration	
Distance between probes	25 cm min.
Sensor above ground level	10 cm to 40 cm
Maximum survey speed	15 km/h; 9 mph
Data density (y) at max survey speed	20 mm

