www.geomatrix.co.uk
sales@geomatrix.co.uk
Tel: 01525 383438

MagElement Data Sheet

A new line of Geometrics Magnetometers which have incorporated the MFAM (Micro Fabricated Magnetometer) sensor technology to provide a more streamlined multifaceted solution (Fig 1) to marine surveying.

Using the MFAM laser pumped total field caesium sensors (physics packages and module) similar technology as featured in the Magarrow airborne magnetometer. The new Marine system is lightweight with high sensitivity and low power consumption. The compact streamlined design of the system is ideal for mounting on to Autonomous and Unmanned surface vessels (ASV's/ UAV's) with standardised subconn connectors which allow the units to be deployed on any platform.

In addition to the standard features of previous G882 magnetometers, the MagElement has a more modern user-friendly interface and adaptable, ideal for any marine magnetic survey such as UXO detection. The Data obtained from the MagElement is comparable if not better than the G882 Magnetometer (Fig.2). This new magnetometer ultimately provides a cost-effective solution to most projects providing high resolution data in shallow or deep-water environments.

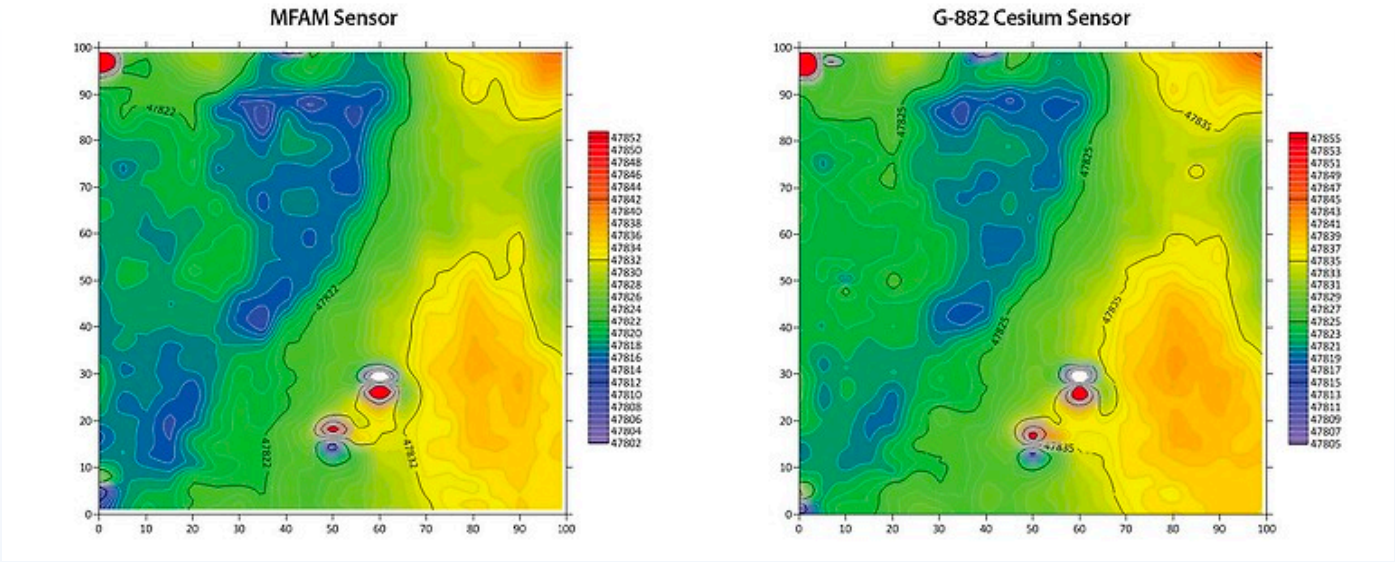


Fig 2 Showing comparable datasets from the MagElement (Marine MFAM) system and the G882 Magnetometer

Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	70 cm x 6 cm x 6 cm	2 kg

Technical Specifications

Operation::	Laser Pumped caesium vapor (Cs133 non-radioactive) total field scalar

Geomatrix Earth Science Limited, Unit 20 Eden Way, Pages Industrial Park, Leighton Buzzard, Bedfordshire, LU7 4TZ

www.geomatrix.co.uk
sales@geomatrix.co.uk
Tel: 01525 383438

	magnetometer
Operating Range::	20,000 to 100,000 nT
Operating Zones::	Configurable for operation anywhere in the world (must be Sx version for certain countries which do not have any sanctions)
Noise::	5pT/ root Hzrms typical; 7pT root Hzrms Guaranteed
Gradient Tolerance::	10,000 nT/m
Sample Rate::	1 Hz, 2Hz, 5Hz, 10Hz, 20Hz, 25Hz and 1000Hz
Heading Effect::	Typical +/- 0.5nT*
Connectors::	SubConn 8-pin
Data Output::	Ethernet
External Sensor Input::	RS232, Analog
Voltage Input::	12-48 VDC
Power::	7W at 25°C
Operating Temperature::	-20°C to 40°C
Storage Temperature::	-45°C to 70°C
Depth Rating::	750m

Geomatrix Earth Science Limited, Unit 20 Eden Way, Pages Industrial Park, Leighton Buzzard, Bedfordshire, LU7 4TZ