

BartingtonNews

the Newsletter from Bartington Instruments

New products announced

Mag690 Three-axis Magnetic Field Sensor

This low cost fluxgate sensor is ideal for a wide variety of applications, including detection of magnetic materials, surveillance, navigation and traffic monitoring. It is available with measuring ranges of $\pm 100\mu\text{T}$, $\pm 500\mu\text{T}$ and $\pm 1000\mu\text{T}$.

Visit www.Mag690.com for further information



Magmeter Power Supply and Display Unit

The Magmeter houses a rechargeable battery pack and provides a portable power supply for Bartington magnetic field sensors. The unit also incorporates three LCD displays, which provide simple access to the real-time outputs from a connected sensor as an RMS value. Low-pass filtering (9kHz) is applied to all sensor outputs and a high-pass (0.1Hz) filter is selectable via a front panel switch.

The Magmeter operates with the widely used Mag-03 range and most other single and three-axis sensors. For more information, including price and availability email: sales@bartington.com

Mag679 and Mag649 Low Power Magnetic Field Sensors

Versions of the Mag678 Single Axis and Mag648 Three-Axis Sensors are now available with a bandwidth of 1kHz.

For further details of the new sensors, including price and availability, email sales@bartington.com.

Visit www.Mag649.com or www.Mag679.com for further information



Mag800 Space Magnetometer



The Mag800 is the first fluxgate magnetometer designed by Bartington Instruments specifically to work in space. Using grant funding from the Technology Strategy Board (TSB), we adapted an existing aerospace sensor and worked with Rutherford Appleton Laboratories (RAL Space) to complete testing.

The Mag800 has been designed to be lightweight and compact, with low power demands and minimal heat output. Components are specified for 100krad allowing long-term operation in high or low Earth orbits. With a range of 75 μ T and a noise level below 20pTrms/VHz at 1Hz this space magnetometer is ideal for attitude control systems of spacecraft.

A comprehensive datasheet for the product will be released later this year.

New releases of Bartsoft for the MS3

Since its launch in 2009, the MS3 Magnetic Susceptibility Meter has been sold in countries around the world for a wide variety of applications. We would like to thank customers for their helpful feedback, including comments on how to improve Bartsoft. From this information, we have been able to release updated versions of this software for PCs and PDAs.

These new releases include enhanced management and display of GPS information, improved management

of record names and multiple minor improvements to the stability of the software and the "Help" information. Bartsoft is also now compatible with 32/64 bit Windows[®] 7 and Windows[®] Vista operating systems. We have also released a Bartsoft Operation Manual that can be downloaded from www.bartington.com. This document includes installation information, a quick-start guide and all the content that appears in the software "Help" files.



ISO 9001 Certification Announcement



Bartington Instruments is now certified as an ISO9001:2008 compliant organisation.

This certification recognises that Bartington's policies and procedures ensure consistent quality in the products and services we provide.

We believe that our decision to become ISO9001 certified is a proactive one that demonstrates our commitment to a programme of continuous improvement.

MS2/MS3 System facilitates Environmental Sciences

Accurate and precise frequency-dependent susceptibility measurements can be of exceptional value in environmental research. One of the key features of the MS2/MS3 Magnetic Susceptibility System is the unique ability to measure at two frequencies a decade apart with the MS2B sensor. The difference between the two readings, the frequency dependent susceptibility records the presence of magnetic grains, usually magnetite or maghemite, with diameters around 20-25nm. In most contexts of interest in Environmental Magnetism, these arise from either weathering and soil formation, or burning. They are therefore often diagnostic of processes and sources otherwise difficult to characterise.

In studies of erosion history, these measurements can distinguish between sediments derived from eroding soil

surfaces and those derived from deeper gully formation. In analyses of particulate pollution, they can differentiate between urban particulates and dust blown in from the surrounding area. In research on loess sequences, for example on the Chinese Loess Plateau, they securely identify those horizons where soil formation, under warmer, more humid conditions has occurred. They are therefore, vital to the reconstruction of past climatic conditions. In North Africa they help to differentiate dust arising from arid areas in the Sahara from that coming from the more moist Sahel regions.

*Courtesy of
Frank Oldfield*



Photographic Competition results

Earlier this year we held a competition to inspire customers to send us photographs of our instruments in use. We had an excellent response. By the closing date, we received more than 60 images from an impressive number of locations around the world. Our thanks go to everyone who took the time to submit their photos, all of which were of a high quality and made the judging process less than easy.

The image ultimately judged to be 'the best and most interesting photograph of a Bartington product in action' is shown here, submitted by our customer Stephen Kay, Geophysical Researcher at the British School at Rome. Mr Kay provided four superb photographs relating to the geophysics work of the School (www.bsr.ac.uk). His prize of an Apple iPad has been despatched, which he says, "will be of much use for us in the field as a recording method for our geophysics work."



Prize winner: The Bartington Grad601 Gradiometer System pictured hard at work in Sai Island, Sudan

If you have any interesting images of our products in use that you would like to submit for possible inclusion in our promotional materials, kindly visit www.bartington.com/customer-input.html for more information.

New staff

Our Research & Development team has recently been expanded with the appointment of Richard Andrews as R&D Manager and James Salisbury as Electronics Design Engineer.



Richard Andrews

Richard's role is to ensure the on-time completion of new designs that meet customer expectations for performance and reliability. Having gained more than 30 years of electronic product development experience, he brings analogue and digital design expertise together with a process approach to design management.

James Salisbury

James is a graduate of Swansea University with an MSc in Electronics Technology for Sustainable Energy, in which he gained a Distinction. James will be specialising in the area of digital electronics design.



Jan Morton

Jan Morton joined the Company in June 2011 as our Accountant. Jan is an associate member of the Chartered Institute of Management Accountants and has over 25 years experience working in accountancy in a variety of industries. Her previous role was working for a company providing hardware for the health service.

New improved website



Have you visited **bartington.com** recently? We have launched a new website designed for easy navigation and fast access to the information you need. If you have any sales or other enquiries, simply click 'Contact Us' on the main menu and complete the online form.

Did you know?



In their sounding rocket program, NASA uses Mag-03MS sensors from Bartington Instruments in the NMACS magnetic attitude control system.

Details: http://sites.wff.nasa.gov/code810/download_archive.html (NASA Sounding Rocket Program Handbook, section 5.3, p.45)

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