

# BOREHOLE SYSTEM BM-2



## Features

- Universal electronic to be used with various probes
- PDA for project planning, surveying and data export
- 24 Bit digitization
- 200 Hz data acquisition
- Wireless connection between borehole box and PDA
- To be used with cable lengths from 5 to 150m
- Connection of cable length counter via integrated extension port

## BOREHOLE SYSTEM BM-2

The universal borehole system MAGNETO® BM2 can be used with various SENSYS borehole probes : 3-axis (FGM3AS), DISTLOG and vertical gradiometer (FGM650/10).

By using the integrated extension port, additional equipment like the SENSYS KWE (cable length counter) can be connected to the system.

The borehole box is connected via Bluetooth to a PDA which serves for planning and surveying. The borehole box as well as the systems power supply, which consists of a 12V battery, are placed in a special carrying belt.

When being used with the 3-axis sensor probe, this system is the perfect solution for standard and special tasks due to the fact that the measured values from two triaxial sensors and one acceleration sensor are stored separately.

These values can thus be evaluated for each project in MAGNETO software either individually or as gradients. Special systems features such as calibration for noise reduction, measurement range of +/-250µT and data acquisition at 200Hz allow for surveys closed to steel pilings or in urban areas.



### TECHNICAL DATA

#### General Technical Data

Power Supply : Led Gel Battery 12V 7Ah  
Current Consumption : approx. 390 mA

#### Borehole Box

Digitalization / Data Acquisition : 24 Bit / 200 Hz  
Connectors : 1x analogue, 1x 3axis, 1x power supply, 1x extension port, 1x Bluetooth

#### Data Acquisition

User device : Windows Mobile Rugged Bluetooth PDA  
Functions : Planning / Surveying / Data Storage / Data Export

#### Sensor Probe FGM650/101

Dynamic Range (per sensor and axis) : ±75,000 nT  
Measurement Range (per sensor and axis) : ±10,000 nT  
Sensor Separation : 650 mm  
Declination : ±5 nT  
Resolution : <0.2 nT  
Noise @ 1Hz per axis : <40 pT rms /√Hz  
Cut off frequency : 20 Hz (DC...20 Hz)  
Temperature Drift : <0.3 nT/K

#### Offset

Relative error of measurement : 1%  
Stability : <1 nT  
Linearity : <0.1%  
IP Protection : IP68