

μ MAG[®] Series Handheld Fluxgate Magnetometers



Portable Battery Powered Magnetometer

The μ MAG[®] series is the premiere, handheld instrument for the precision measurement of the vector components of weak static and low frequency magnetic fields. The superior stability, linearity and accuracy of the μ MAG[®], compared with Hall Effect or Magnetoresistance based instruments, make it the only choice for high quality low magnetic field measurements and the best choice for general purpose magnetometer applications.

Features

- 1 nanotesla (0.01 milligauss) Resolution
- 0.5% Basic Accuracy Traceable to NIST
- Three Full Scale Ranges: ± 2000 , ± 200 , ± 20 milligauss
- 3 ½ Digit LCD Display
- Analog Output Available for Data Recording
- 400 Hz Bandwidth

Applications

- Package Inspection
- Materials Screening
- Shielding Effectiveness Measurements
- Field Mapping
- Magnetic Signature Determination
- Magnetic Environment Monitoring
- Magnetic Environment Control

The Original Handheld Fluxgate Magnetometer

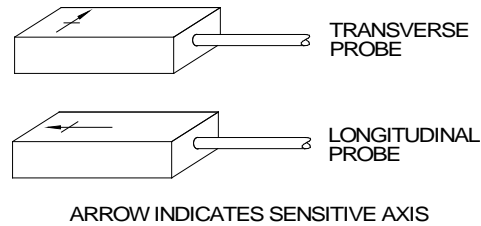
The **μMAG®** series includes an electronics unit and a fluxgate probe with a six-foot cable that connects the probe to the electronics unit.

The electronics unit provides the control signals for driving the probe and processing the probe's output. It also includes a switch for turning the unit on and setting its range, a 3 ½ digit LCD that displays the value of the measured field and a dual banana plug connector that outputs an analog representation of the measured field.

There are two types of probes. The longitudinal axis probe measures the vector component of the magnetic field along the length of the probe. The transverse axis probe measures the vector component across the width of the probe. Both probes can be used to measure the three vector components of the magnetic field by measuring the field along three mutually orthogonal axes.

Four Different Models

- ❑ The **μMAG®-01** has a dedicated longitudinal probe.
- ❑ The **μMAG®-02** has a dedicated transverse probe.
- ❑ The **μMAG®-01N** and **μMAG®-02N** include controls for canceling the ambient field so that small changes in the field can be detected and accurately measured.



Specifications	μMAG®-01/02	μMAG®-01N/02N
Ranges	±2000, ±200, ±20 mG	
Resolution	1 part in 2000 (0.05% FS)	*
Accuracy	±0.5% of FS ±1 count	*
Power	150 mW nominal	200 mW
Power Source	9 Volt Alkaline Battery	*
Analog Output	±2 Volts FS	*
Bandwidth	DC to 400 Hz	*
Linearity	0.02% of FS	*
Weight	15 oz. (0.425 Kg) including probe	*
Temperature Range	0° C to 50° C	*
Display	3 ½ Digit LCD	*
Neutralizing Range	N/A	±700 mG
Sensor Dimensions	1.2"Wx2.75"Lx0.6"H	*
Meter Dimensions	3.8"Wx7.5"Lx1.3"H	*

* - Same as **μMAG®-01** FS – Full Scale

