

**PRODUCT INFORMATION** 

# **FEREX<sup>®</sup> 4.034** FERROUS LOCATOR WITH 4-CHANNEL DATA LOGGER





## **Product description**

The FEREX is a vertical gradient fluxgate magnetometer that measures the deformation of the earth's magnetic field evoked by ferromagnetic objects. Magnetometers are suitable for the detection of ferromagnetic metals like iron, steel or nickel. Normally the detection depth of magnetometers is larger compared to active EMI detectors but it varies and depends on the object's mass and its magnetic properties.

The FEREX 4.034 can be used either in the direct indicating FEREX or data logging mode. Four data logging channels allow the expansion of the FEREX 4.034 to a multi probe system for large area detection. A serial interface provides the option to link alternative sensors and a GPS for precise navigation during the field survey and geo-referenced positioning of the recorded data.

## **Characteristics**

- Detection of ferrous material/UXO e.g. bombs, shells, projectiles, sub-ammunitions
- Magnetometer with tension band technology provides sensor alignment for lifetime
- In-built filters for detection in close vicinity to power lines
- Special mode for search along fences, pipelines and railway tracks
- Special mode for filtering small objects
- Precise handling, light weight, compact design
- High detection sensitivity, improved signal to noise ratio
- 3.5" color sunlight readable display
- Data logging of up to 4 FOERSTER fluxgate sensor channels (differential and absolute values)
- Serial interface to link various DGPS systems and odometer
- Implemented tool to edit customized GPS-drivers
- Comfortable navigation screen and various navigation modes
- Integrated stake-out function using imported DATA2LINE object and position lists
- Option to link alternative sensors (e.g. GEOMETRICS<sup>®</sup> 824A) via serial interface
- Managing large survey areas consisting of multiple survey grids
- Definition of various survey grid layouts by defining or importing polygon positioning data
- Software DATA2LINE for project definition, post processing and evaluation of recorded data



### **Product Packages**

#### **FEREX 4.034**

- Control unit
- FEREX probe MG-10-550
- Probe cable
- Carrying rod with battery pack
- Probe mount
- Carrying belt
- Rugged case
- Batteries
- Start/Stop-Handgrip
- Data transfer cabl
- SD-Card
- DATALOAD 2 software
- User manual

## Options

- Variable 3 / 4-probe holder kit
- Wheel set
- GPS antenna mount
- Borehole detection kit
- Waterproof probe cables up to 100 m
- Headphone









### **Technical Specification**

#### **Control Unit**

Weight	<ul><li>4.1 kg complete detector incl. batteries</li><li>12.6 kg complete detector set in case</li></ul>
Dimensions	FEREX <sup>®</sup> L 1250 mm   Case L x W x H 1000 x 415 x 170 mm
Display	3.5" LED with adjustable backlight, sunlight readable
Memory	32 GB SD-Card
Interfaces	4x analogue fluxgate gradiometer, 1x serial
Temperature ranges	Operation -37°C to +71°C   Stock -57°C to +71°C
Power supply	4 x 1.5 V batteries or 4 x 1.2 V rechargeable batteries
Battery size	D - cells, ANSI STD. Size «D» (IEC LR 20)
Battery lifetime	1 probe, intermittent operation >10 hrs
Measuring ranges in FEREX mode	8 linear ranges: 0 to 3 nT up to 0 to 10.000 nT and 1 logarithmic range
Sampling rate	900 Hz (each channel)
Resolution	24 bit ADC
Protection grade	IP 65

#### Probe

Design	Fluxgate gradiometer with 550 mm sensor spacing, tension band technology, sensor alignment for lifetime
Temperature drift	<1 nT/K
Bandwidth	230Hz
Measuring range	±10.000 nT gradient, 62.000 nT absolute
Noise	< 1 nT p-p
Protection grade	IP 68, 100m with optional sealing plug

#### Qualifications

MIL-STD 810G 514. Random Vibration MIL-STD 810G 516. Mechanical Shock MIL-STD 810G 516. Transit Drop Test MIL-STD 810G 501. High Temperature MIL-STD 810G 502. Low Temperature MIL-STD 810G 503. Temperature Shock MIL-STD 810G 506. Blowing Rain CE: European Directive 2004/108/EC, EN 61326-1

Brand name:

GEOMETRICS® is a registered trademark of Geometrics Inc., San Jose U.S.A.

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