

PRODUCT INFORMATION



FEREX[®] 4.034

MAGNETOMETER WITH 4-CHANNEL DATA LOGGER



proof.

Product description

The FEREX is a vertical gradient fluxgate magnetometer that measures the deformation of the earth magnetic field evoked by ferromagnetic objects and soil properties.

The FEREX 4.034 can be used either in the direct meter or data recording mode. Four 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

- Magnetometer with tension band technology - provides sensor alignment for lifetime
- In-built filters for detection in close vicinity to power lines
- 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)
- Option to link alternative sensors (e.g. GEOMETRICS® 824A) via serial interface
- Serial interface to link various DGPS systems or odometer
- Implemented tool to edit customized GPS-drivers
- Comfortable navigation screen and various navigation modes
- 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
- Integrated stake-out function using imported DATA2LINE object and position lists



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 cable
- SD-Card
- DATALOAD 2 software
- User manual

Options

- Multi probe holder
up to 8 fluxgate probes
- Wheel set
- GEOMETRICS® 824 A sensor
- Probe holder for
GEOMETRICS® 824A sensor
- GPS antenna mount
- Borehole detection kit
- Waterproof probe cables
up to 100 m
- Headphone



Technical Specification

Control Unit

Weight	4.1 kg complete detector incl. batteries 12.6 kg complete detector set in case
Dimensions	FEREX® L 1250 mm Case L x W x H 1000 x 415 x 170 mm
Display	3.5" LCD 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 NiMH
Battery size	IEC LR20 - ANSI «D»
Battery lifetime	1 probe, continuous > 8 hrs
Measuring ranges in FEREX mode	8 linear ranges: ± 3 nT up 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
Temperature drift	<1 nT/K
Bandwidth	230 Hz
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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