FOERSTER

PRODUCT INFORMATION

FEREX 4.034

FERROUS LOCATOR WITH 4-CHANNEL DATA LOGGER

proof.

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 direct meter mode or in data recording mode. Four channels for data recording allow the FEREX 4.034 to be expanded into a multi probe holder system for large area survey. The device offers the possibility to connect alternative sensors and GPS systems via a serial interface. These allow precise navigation and geo-referencing of the recorded data.

Characteristics

- Detection of ferrous material/UXO e.g. bombs, shells, projectiles, sub-ammunitions
- Detection of underground infrastructure, e.g. tunnels
- 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)
- 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
- Integrated stake-out function using imported DATA2LINE object and position lists
- 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 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 operation > 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	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
AEODP-7 Edition B, Annex A-1

CE: European Directive 2014/30/EU, EN 61326-1

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

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