



3-COMPONENT FLUX-GATE MAGNETOMETER LEMI-044

Main features:

- High resolution and precision
- Temperature measurement channel
- 32 GB SD memory card
- Low power consumption
- Relatively low cost
- 3 years operational guarantee



An autonomous fluxgate magnetometer LEMI-044 is intended for 3-component measurements of Earth magnetic field in field conditions; it can be also used like reference base station. A special destination of this magnetometer is a record of magnetic field values under high voltage power lines to detect geomagnetically induced currents. It may also be used for magnetovariational research of underground structures, e.g. for mapping ore bodies. Three components of the measured Earth's magnetic field data are stored in the SD card gridded to coordinates and time.

MAIN TECHNICAL PARAMETERS

Measured range of every component of the magnetic field	± 70000 nT
Frequency range	DC...0.3 Hz
Sample rate of measurements	1 Hz
Noise level at 1 Hz	< 0.05 nT/ $\sqrt{\text{Hz}}$
Temperature drift	< 0.6 nT/ $^{\circ}\text{C}$
ADC (4 channels)	32 bits
Attenuation at 50 Hz	100 dB
Operating temperature range	Minus 20... + 50 $^{\circ}$ C
Power supply voltage	5 -18 V
Maximal power consumption	< 1 W
Data synchronized with GPS	Module UBLOX
Auxiliary digital interface (115200 kbit/sec)	RS232
Volume of SD memory card	32 GB
Weight	< 2.3 kg
Dimensions: electronic unit with sensor	D 90 x h 550 mm