



AUTONOMOUS VECTOR MAGNETOMETER LEMI-026

Main Features

- Operating in movement
- High resolution and precision
- Low noise
- Low temperature drift
- Two tilt measurement channels
- Temperature measurement channel
- Low power consumption
- 3 years operational guarantee



An autonomous fluxgate magnetometer LEMI-026 is intended for precise 3-component measurements of Earth magnetic field both in motion and as a reference base. Its external view is given above in housing (right) and without (left). It may be used for autonomous measurements using moving carriers (drones) or being included in sea/land station. There are two-component tiltmeter inside and GPS antenna allowing obtaining precise measurement timing, magnetometer coordinates and attitude during movement. These data are stored in the SD memory card.

Main Technical Parameters

Measured range of magnetic field	± 70000 nT
Frequency range	DC...100 Hz
Sample rate of measurements	250 Hz
Noise level at 1 Hz	<0.1 nT/ $\sqrt{\text{Hz}}$
ADC	32 bits
Tiltmeter range	$\pm 30^\circ$
Tiltmeter resolution	0.01°
Operating temperature range	$-20... + 60^\circ\text{C}$
Power supply voltage	$5 + 0.25$ V
Maximal power consumption	< 1.2 W
Recording time with 1900 mAh internal battery	5h
GPS Receiver	
Time accuracy	<100 ns
Maximal data rate	10 Hz
Auxiliary digital interface	USB
Volume of SD memory card	8 GB
Weight (with internal battery):	1.25 kg
Dimensions of electronic unit	$\varnothing 96\text{mm} \times 270\text{mm}$
Note: In this version the magnetometer is not protected against moisture!	