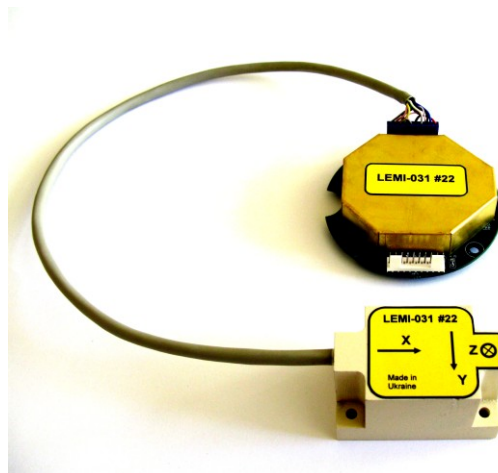




LOW POWER FLUX-GATE MAGNETOMETER LEMI-031

Main features:

- High resolution and precision
- Low noise
- Convenience of installation and service
- Super low power consumption
- Low weight
- Compact size



Low power flux-gate magnetometer LEMI-031 is intended for the monitoring of three components of the magnetic field vector in land conditions. The instrument is specially designed for battery powered applications and has differential outputs for easy coupling with analogue to digital converter. Several know-hows are used to keep the power consumption of LEMI-031 magnetometer at world lowest level.

Number of measuring channels	3
Transformation coefficient value	
single ended outputs	30 $\mu\text{V/nT}$
differential outputs	60 $\mu\text{V/nT}$
Frequency band of received signals:	DC – 10 Hz
Transformation coefficient error	$\leq 5\%$
Components orthogonality error	$\leq 2^\circ$
Magnetic noise level at 1.0 Hz	$\leq 20 \text{ pT}/\sqrt{\text{Hz}}$
Power supply voltage*	(3.3 - 3.7) V
Power consumption	$\leq 10 \text{ mW}$
Temperature range of operation	0 ... + 70°C
Temperature drift	$< 1,5 \text{ nT}/^\circ\text{C}$
Dimensions:	
sensor (without the cable)	62 x 38 x38 mm
electronics board	D=84 mm, H= 22 mm
Mass:	
sensor (with the cable)	$\leq 100 \text{ g}$
electronic board	$\leq 100 \text{ g}$

***The absolute maximum of the power supply voltage is equal to 4.2 V!!!**