

LVIV CENTRE of INSTITUTE for SPACE RESEARCH

THREE-COMPONENT FLUX-GATE MAGNETOMETER LEMI-024

Main features

- Wide frequency dynamic range
- Super low noise
- Low power consumption
- Dual output



Three-component flux-gate magnetometer LEMI-024 is intended for the measurement of three components of the magnetic field vector. The instrument has two set of outputs: low-sensitivity unfiltered output for rough estimating of magnetic field intensity and high-sensitivity filtered output for its weak fluctuations measuring in the frequency band 0.01- 10 Hz.

We are flexible to adopt every parameter to your needs.

TECHNICAL SPECIFICATION

Number of components	3
Measurement range at outputs:	
Unfiltered	± 80000 nT
Filtered	± 200 nT
Frequency band at outputs:	
Unfiltered	DC15 Hz
Filtered	0.0110 Hz
Transformation coefficient at outputs:	
Unfiltered	0.056 mV/nT
Filtered	22.4 mV/nT
Transformation coefficient error	$\pm 3\%$
Magnetic noise density at 5.0 Hz	≤ 12 pT/√Hz
Noise rejection at 50 Hz (filtered output, a Low Pass filter	> 60 dB
used)	
Analog output voltages	±4.5 V min
Non-orthogonality	<1 deg
Power supply voltage	12±1 V
Power consumption	< 350 mW
Operating temperature range	-20 + 70°C
Dimension	
Electronic Unit (without cable gland and connector)	120 x 80 x 60 mm
Sensor (without cable)	62 x 40 x 40 mm
Sensor cable length	1.5 m
Mass	< 1.1 kg
Output connector	D-sub DB9M
A cable permanently connects the Electronic Unit and the Sensor.	

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