

LVIV CENTRE of INSTITUTE for SPACE RESEARCH

INDUCTION MAGNETOMETER FOR GEOPHYSICAL APPLICATIONS LEMI-152

Main features

- Wide frequency range: 0.001 - 10000 Hz
- Very low noise
- Low power consumption

The induction coil magnetometer LEMI-152 is intended to be used for the study of magnetic field fluctuations in land conditions in the frequency band 0.001-10000 Hz. It can be used both autonomously with any analog registration unit and as a part of a magnetotelluric station. Extremely high sensitivity ensures excellent signal-to-noise ratio for ground measurements.

Low power consumption and wide power supply range allow for long period measurements at remote sites. A rugged and waterproof housing combined with a waterproof output connector prolong the sensor's active lifetime and ensure overall reliability.



TECHNICAL SPECIFICATION

Frequency band of received signals	0.001 - 10000 Hz
Transfer function corner frequency	1 Hz
Transformation factor:	
at frequencies 0.0001 – 1 Hz at frequencies 1 – 10 000 Hz	100 mV/nT 100* f mV/nT
Magnetic noise level	
at 0.01 Hz,	\leq 30 pT/ $\sqrt{\text{Hz}}$
at 1 Hz,	$\leq 0.3 \text{ pT}/\sqrt{\text{Hz}}$
at 1000 Hz	$\leq 0.003 \text{pT}/\sqrt{\text{Hz}}$
Current consumption	± 15 mA
Outer dimensions	1 = 1310 mm, d = 70 mm
Weight	4,0 kg

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