

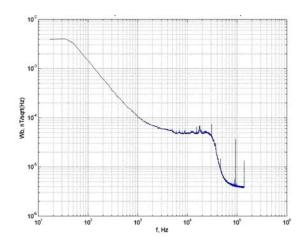
LVIV CENTRE of INSTITUTE for SPACE RESEARCH

INDUCTION MAGNETOMETER LEMI-151

Main features:

- Wide frequency and dynamic range
- Low noise
- Small dimensions
- Three-component structure
- Low power consumption
- Very low weight





Mass of sensor

The LEMI-151 search-coil magnetometer is intended for measurements of 3 components of AC magnetic field vector. It is a new design specifically developed for the SEAM space mission to achieve optimal performance within the volume constraints. As the result a miniature search-coil magnetometer with best combination of parameters was created and tested. Its parameters and external view are given below.

72 g

TECHNICAL SPECIFICATION

Frequency range	20 – 20000 Hz
Frequency response shape	flat
Transformation factor:	10 mV/nT
Noise level:	
at 10 Hz	15 pT/sqrt(Hz)
at 100 Hz	1,5 pT/sqrt(Hz)
at 1 kHz	0,12 pT/sqrt(Hz)
Power consumption	210 mW
Supply voltage	$\pm 5V$
Dimensions of sensor	38x38x38 mm