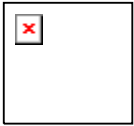


LEMI-118 magnetometer

1 – 70,000 Hz frequency range



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Product description

The LEMI-118 induction coil magnetometer is intended for the study of magnetic field fluctuation in the frequency band 1Hz to 70,000 Hz. It can be used both as a part of magnetic measuring system and autonomously with any state of the art data acquisition unit.



Figure 1: LEMI-118 induction coil magnetometer.

Product applications

The LEMI-118 induction coil is used for passive and active geophysical measurements like CSAMT in a wide frequency range. The band of frequencies the sensor operates in is suited for shallow applications like hydro-geophysics or mining.

Highlights:

- Wide frequency band
- Low power consumption
- Low noise

Product specifications

| | |
|---|--|
| Frequency range | 1 to 70,000 Hz |
| Shape of transfer function | linear—flat |
| Transfer function corner frequency | 20 Hz |
| Typical transformation factors Linear section 1-20 Hz Flat section 20-70,000 Hz | f * (mV/nT) 20 mV/nT |
| Noise level @ 1 Hz @ 10 Hz @ 10,000 Hz @ 50,000 Hz | ≤ 5.000 pT / √Hz ≤ 0.200 pT / √Hz ≤ 0.005 pT / √Hz ≤ 0.010 pT / √Hz |
| vMaximum output voltage | +/- 2.5 V |
| Power consumption @ 9 V | < 240 mW |
| Supply voltage | +/- (6 to 12) V |
| Length | 850 mm |
| Diameter | 46 mm |
| Weight | 1.7 kg |

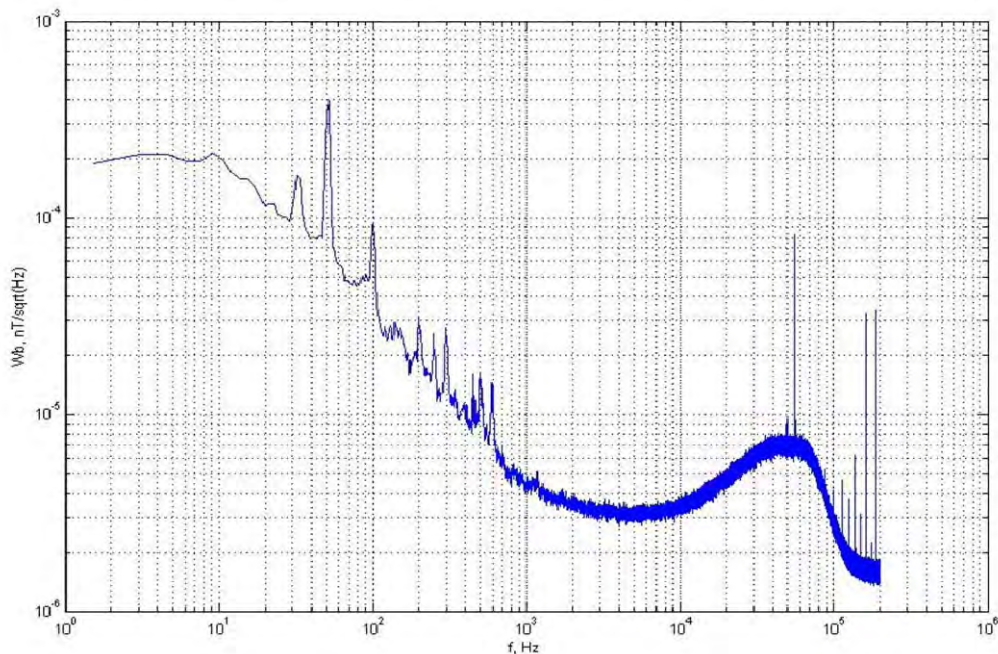


Figure 2: Typical noise spectral density.