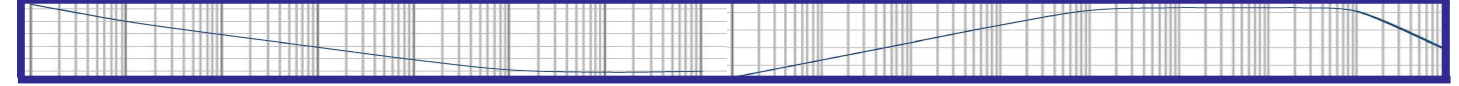


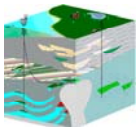
LEMI Sensors:

Induction coil magnetometer



LEMI-120 magnetometer

0.0001 – 1000 Hz frequency range



KMS Technologies

KJT Enterprises Inc.
6420 Richmond Ave., Suite 610
Houston, TX, 77057
USA

Tel.: +1.713.532.8144

Fax: +1.713.532.7776

Email:

info@KMSTechnologies.com

www.KMSTechnologies.com

Product description

- Extremely low noise and wide frequency range LEMI-120 is the perfect choice for an assortment of geophysical applications.
- A state of the art modulator-demodulator, a preamplifier with low power consumption, and differential output ensures that the sensor can be used with any acquisition station provided that the distance is less than 200 meters.
- Waterproof and rugged, the LEMI-120 is ready for use right after switching on.



Figure 1: LEMI-120 induction coil magnetometer.

Product applications

LEMI-120 induction coil magnetometers are used for measurements of magnetic field variations in the frequency range from 0.0001 Hz to 1000 Hz. Their wide bandwidth and low noise make them the ideal sensor for magnetotelluric measurements.

Highlights:

- Lowest noise in class
- Wide range of power supply voltage +/-6 V to +/-15 V
- Low power consumption. More than twice the battery life of other commercial coils.
- Wide bandwidth 0.0001 to 1000 Hz
- Lightweight 5.7 kg

Product specifications

Frequency range:	0.0001 to 1000 Hz
Noise level @ 0.001 Hz @ 0.01 Hz @ 1 Hz @ 100 Hz	$\leq 100 \text{ pT} / \sqrt{\text{Hz}}$ $\leq 10 \text{ pT} / \sqrt{\text{Hz}}$ $\leq 0.1 \text{ pT} / \sqrt{\text{Hz}}$ $\leq 0.01 \text{ pT} / \sqrt{\text{Hz}}$
Output sensitivity: Transformation factor @ 0.0001-1 Hz Transformation factor @ 1-1000 Hz	$200 \cdot f \text{ mV/nT}$ 200 mV/nT
3 dB points of frequency band	1 Hz, 1000 Hz
Power consumption @ 9 V	225 mW
Supply voltage	+/- 6 V to +/-15 V
Connector	Standard 8 pin MS3112E12-8S
Operating temperature range	-10° to 50° C
Construction material	Waterproof fiberglass housing
Length	1340 mm
Diameter	85 mm
Weight	5.7 kg

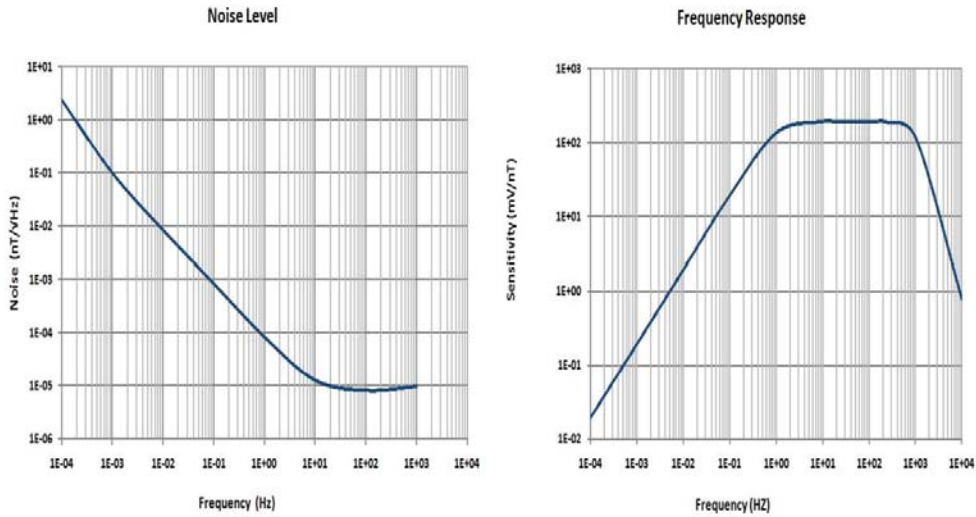


Figure 2: Typical noise spectral density.