



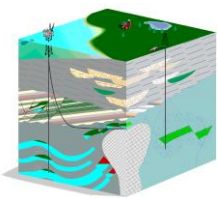
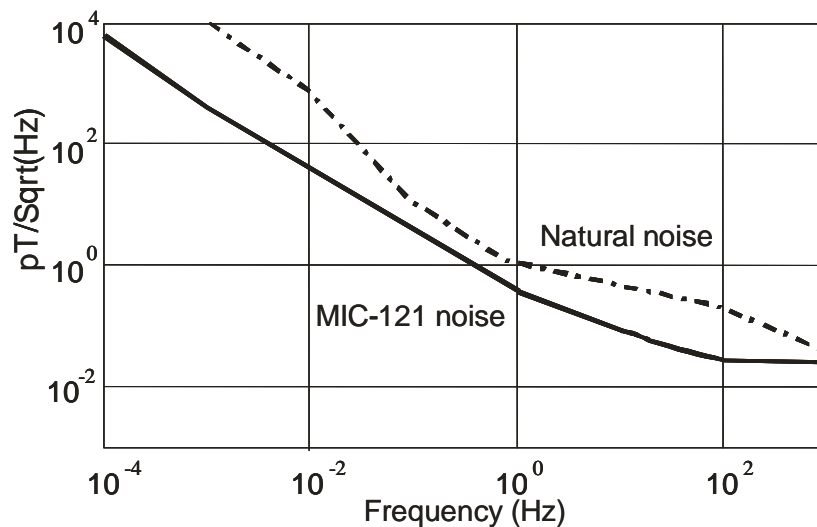
Marine Induction Coil (MIC) 121



KMS Technologies - KJT Enterprises Inc.

The MIC-121 marine induction coil has been developed to measure variations of the Earth's magnetic field. It is intended to be used for the study of magnetic field fluctuations in frequencies ranging between 0.0001 and 500 Hz in marine conditions. The MIC-121 can be used either autonomously with any analog registration unit or as a part of any geophysical system, e.g., magnetotelluric station. Extremely high sensitivity ensures excellent signal-to-noise ratio for exact measurements as shown in the graph below.

MIC-121 induction coil noise level:



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Low power consumption and a wide frequency range allow for long term measurements at remote sites. Strengthened rugged housing and output connectors prolong the sensor's active lifetime and increase overall reliability. The circuit design and magnetometer construction were created to take advantage of several new technological processes which produce the best possible combination of metrological and geophysical parameters. All MIC sensors are experimentally tested and certified in the laboratory and in the field.

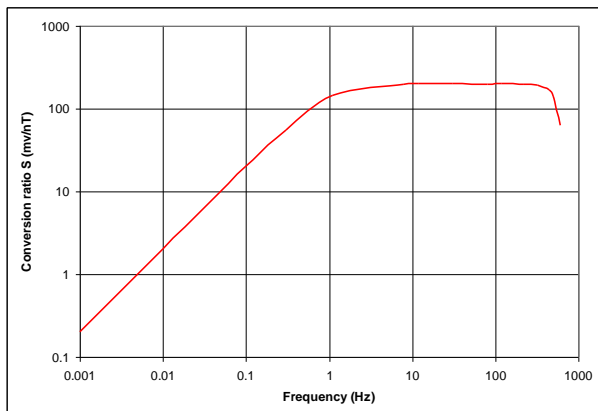
Technical Specs

Frequency range	0.0001 Hz – 500 Hz
Shape of transfer function	Linear - Flat
Transfer function corner frequency	1 Hz
Transformation factor at differential output (pins 1 & 3)	<ul style="list-style-type: none"> at the flat part¹ at the linear part²
Transformation factor error	< 1 dB
Magnetic noise level	<ul style="list-style-type: none"> at 0.0001 Hz at 0.001 Hz at 0.01 Hz at 0.1 Hz at 1 Hz at 100 Hz
Length of connecting cable	≤ 200 m
Supply voltage	± (5 ~ 12) V
Current consumption (nominal)	< +14 mA < -10 mA
Weight	4 kg
External dimensions	Length: 560 mm, Diameter: 85 mm
Operating temperatures	-10 °C ~ +50 °C
Housing	Non-conductive pressure

Notes:

¹ The flat part means frequency band from 1 to 500 Hz. Transformation factor remains the same for the measured signals within this frequency band.

² The linear part means frequency band from 0.0001 to 1 Hz. Transformation factor linearly depends on the frequency f of the measured signal.



Plot of frequency vs. phase:

