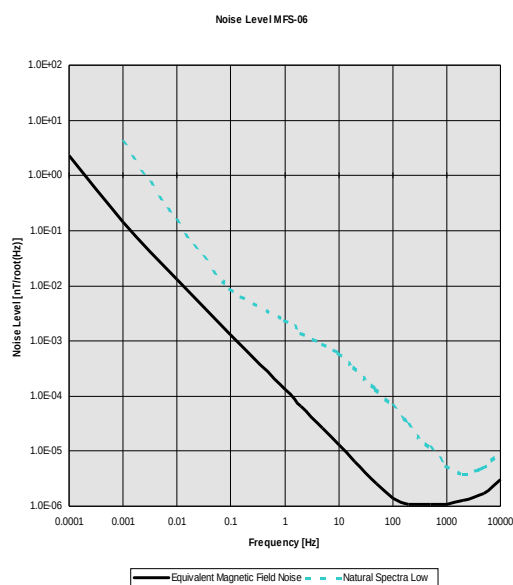


## MFS-06e

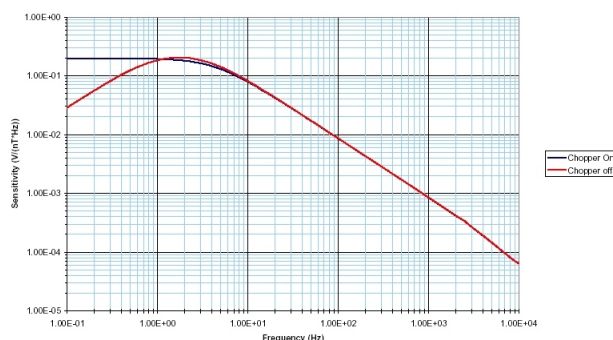
### Broad Band Induction Coil Magnetometer

The broadband induction coil magnetometer *MFS-06e* has been developed to measure variations of the Earth's magnetic field, particularly for applications in Magnetotellurics (MT) and Controlled Source Audio Magnetotellurics (CSAMT). It covers a wide frequency range from 0.0001 Hz up to 10 kHz. In spite of its wide bandwidth, the *MFS-06e* shows outstanding low-noise characteristics, extremely low temperature drift of input offset voltage and offset current and a very stable transfer function over temperature and time. The *MFS-06e* is the result of many years of experience of metronix in the design, manufacture and application of induction coil magnetometers.



Metronix takes special care of the initial calibration of all *MFS-06e* magnetometers as part of the ISO9001 certified production process. Tests have demonstrated an excellent long time stability of the transfer function.

The integrated calibration facility makes it easy for the user to perform an online calibration or test of the magnetometer's transfer function. A differential test signal can simply be injected into the CAL input of the sensor



Sensitivity

## Technical data:

Frequency range	0.0001 Hz .. 10 kHz
Frequency bands	0.0001 Hz 500 Hz (chopper on) 10 Hz 10 kHz (chopper off)
Sensor noise	1.1*10 <sup>-2</sup> nT/√Hz @ 0.01 Hz 1.1*10 <sup>-4</sup> nT/√Hz @ 1 Hz 1.0*10 <sup>-6</sup> nT/√Hz @ 1000 Hz (chopper off)
Output sensitivity	0.2 V/(nT*Hz) f << 4 Hz 0.8 V/nT f >> 4 Hz for exact values refer to individual calibration file
Output voltage range	+/- 10 V
Function	Induction coil with magnetic field feed back
Connector	ODU G32KON-T10QJ00-000 (coil socket) ODU S22KON-T10MJG0-7000 (cable plug)
Calibration input sensitivity	4 nT / V
Feedback cut-off frequency	4 Hz
Supply voltage	+/- 12 V to +/- 15 V stabilized and filtered
Supply current	+/- 25 mA
Case	ruggedized, waterproof case
Weight	appr. 8.0 kg
External dimensions	length 1140 mm, diameter 75 mm
Operating temperature range	-25°C ..... + 70°C

HS Code 90158020, EU Dual Use Regulation 6A006 a) 4. a) b) c)

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