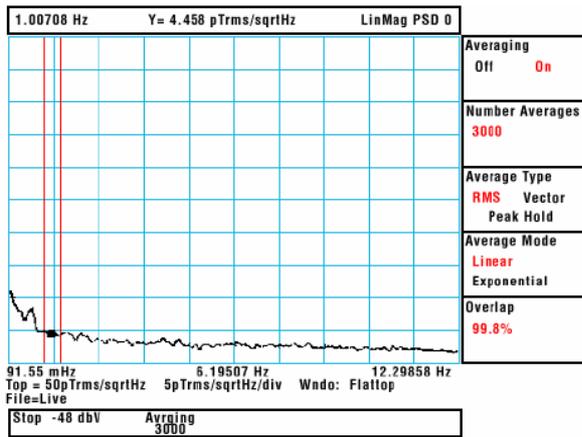


FGS-03e

Low Noise Fluxgate

The FGS-03e is a low noise 3-axis fluxgate sensor. It extends the frequency range for MT measurements down to DC. The FGS-03e provides automatic sensor detection with ADU-07e systems. The sensor core unit is a Bartington Mag-03



Mag-03 Noise Plot Low Noise Version

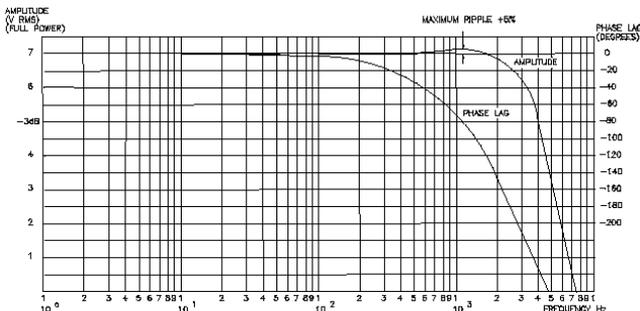
Sensor Noise Plot

For lower frequencies all transfer functions are linear.

This sensor is designed for crustal studies where periods of 10,000 seconds and more are needed.

Recording time for those periods are three to eight weeks depending on the data quality (magnetic activity and external interferences by man made noise).

Typical frequency dependent amplitude:



FGS-03 Fluxgate



Technical data, models L100 and L70:

Frequency range	DC 3 kHz DC – 30 sec for MT measurements
Sensor noise	< 0.006 nT $\sqrt{\text{Hz}}$ @ 1Hz
Output sensitivity	0.1 mV/nT (model L100) 0.143 mV/nT (model L70)
Orthogonality error	< 0.5°
Output voltage range	$\pm 10\text{V}$
Measuring range	$\pm 100,000$ nT (model L100), $\pm 70,000$ nT (model L70)
Connector	ODU G32KON-T10QJ00-000 (FluxGate socket) ODU S22KON-T10MJG0-7000 (cable plug)
Offset temperature coefficient	± 0.1 nT / °C
Offset error	± 5 nT
Supply voltage	$\pm 12\text{V}$ to $\pm 15\text{V}$ stabilized and filtered
Supply current	+26mA, -6mA (+1.4mA per 100 μT for each axis)
Case	ruggedized, waterproof case
Weight	approx. 3 kg
External dimensions	length 300 mm, \varnothing 75mm
Operating temperature range	-40°C + 70°C

Metronix Messgeraete und Elektronik GmbH
Kocherstrasse 3
38120 Braunschweig, Germany

Phone: +49 531 8668 0
Fax: +49 531 8668 555
E-mail: geo@metronix.de
www.metronix.de