

SM150H

Portable magnetic susceptibility meter

GENERAL

SM150H magnetic susceptibility meter is designed to measure sample with volume up to 25 cm³. It is calibrated for cylinder with diameter 25.4 x 22 mm. Adjusting frequency and field intensity broaden information of measured sample. Thanks to built-in scales we can measure mass susceptibility too.

Operation is straightforward. Sample in the plastic pot is placed into measuring coil for analysis, which is carried out under instruction from personal computer. The SM150H is connected to PC with cable to USB port. The result is available in several seconds and is conventionally stored and displayed on this PC. Flexibility and user friendliness have been the main criteria in the design of the SM150H software.

The instrument is calibrated in the factory on 16 kHz range by means of coil. Then auxiliary standard with 16 g Gd₂O₃ is measured on all ranges. Value from 16 kHz range is then used for adjusting remaining ranges to display 16 kHz value too. Gd₂O₃ standard is supplied with the instrument.

FEATURES

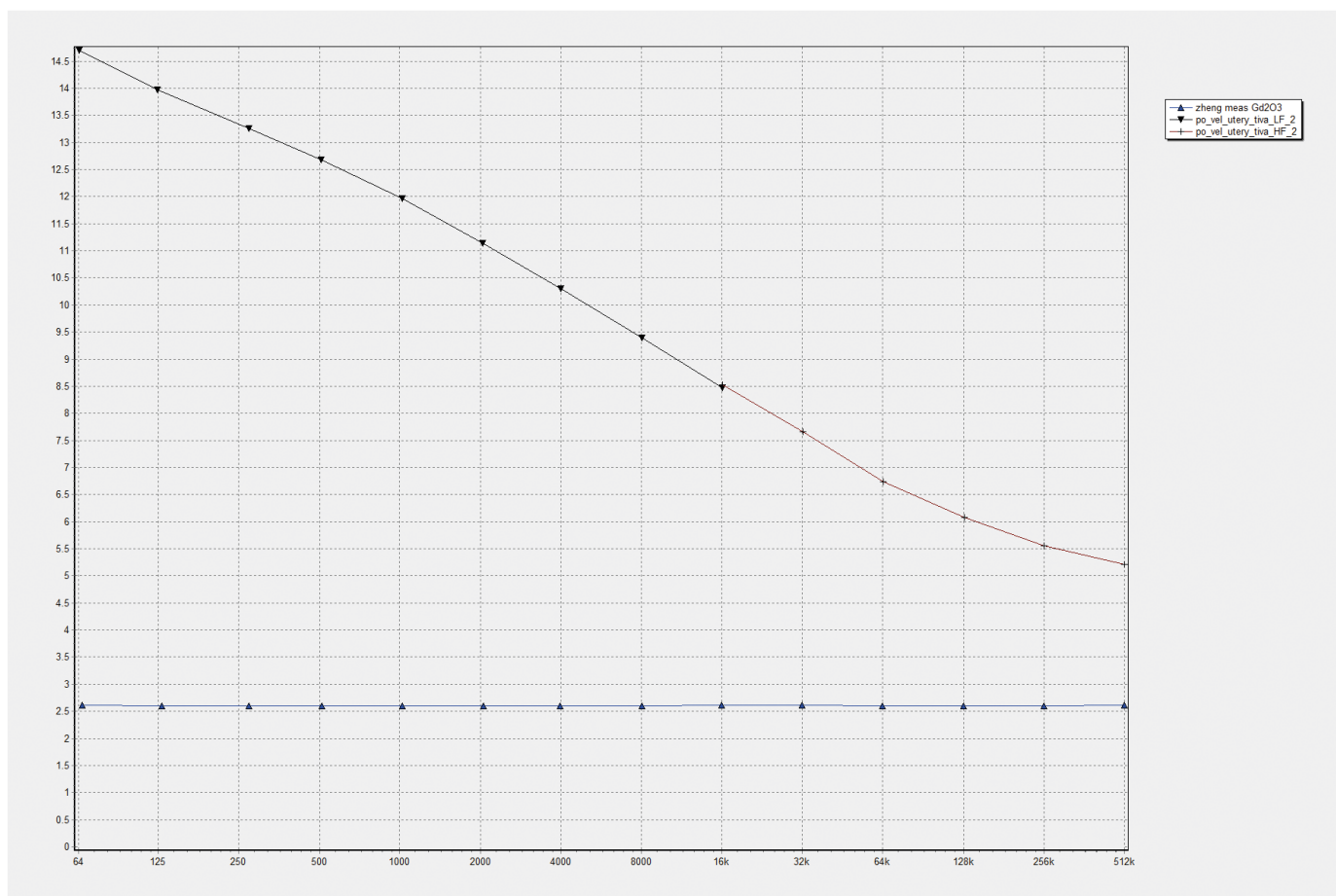
- **ADJUSTABLE FREQUENCY AND FIELD INTENSITY**
16 kHz - 512 kHz, 10 A/m - 80 A/m, effective value
- **HIGH HOMOGENEITY OF MAGNETIC FIELD**
measurement not sensitive on shape of the sample
- **BUILT-IN SCALE FOR MEASURING SAMPLE WEIGHT**
Scale is used to initiate measurement
- **HIGH SENSITIVITY 1×10^{-6} SI**



SPECIFICATION

Operating frequency	16 kHz, 32 kHz, 64 kHz, 128 kHz, 256 kHz, 512 kHz
Sensitivity	1×10^{-6} SI Units for sample 11.148 cm ³
Field intensity	10 A/m, 20 A/m, 40 A/m, 80 A/m
Measurement time	8 s
Inner diameter of the pick-up	38 mm
PC interface	USB
Power	12V accu + charger, 4 W
Dimensions	Ø90 mm × 200 mm

Picture attached depicts graph measured with SM150L and SM150H instruments.



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