## SM-105 PORTABLE MAGNETIC SUSCEPTIBILITY METER

adjustable field intensity and operating frequency in pick-up coil for measurement of one inch cores or fragments

### **GENERAL**

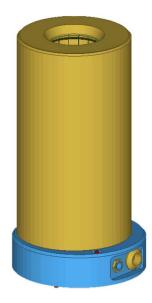
The SM-105 Portable Magnetic Susceptibility Meter is designed for laboratory or field use to measure susceptibility of cylindrical samples 25,4x22 mm. Small sample fragments can be measured in the pot with inner volume 25 cm<sup>3</sup>. The SM-105 design reflects the latest in electronic advances and offers unrivalled features:

- adjustable field intensity and operating frequency in several steps by user
- built-in scale with resolution 0.01g for measuring the weight of the sample and determining mass susceptibility of the sample.
- · simple operation without any control knobs.

Operation of the SM-105 is straightforward. Typically a small sample in a plastic pot is placed into the measuring coil for analysis which is carried out under instructions from a personal computer. The SM-105 is connected to a PC with a cable to USB port. Results are available in several seconds and are conventionally stored and displayed on this PC. Flexibility and user friendliness have been the key criteria in the design of the SM-105 software. Calibration samples are supplied. Checking the calibration takes only a few minutes.

### **WARRANTY**

We provide standard support and warranty repair service for the instrument sent back from any location worldwide.



SM-105 drawing

### **FEATURES**

- >HIGH SENSITIVITY 1xE-6 SI UNITS
- ➤ MEASUREMENT NOT SENSITIVE TO SPECIMEN SHAPE
- >ADJUSTABLE FIELD INTENSITY
  AND OPERATING FREQUENCY
- ➤ MEASURING OF BOTH VOLUME AND MASS SUSCEPTIBILITY OF THE SAMPLE
- **>BATTERY OPERATED**
- >SINGLE INTEGRATED HOUSING CONNECTED TO PC
- >BUILT-IN SCALE FOR MEASURING WEIGHT OF THE SAMPLE

### **TO ORDER**

**SM-100 PORTABLE MAGNETIC SUSCEPTIBILITY METER** comprising of:

- 1 SM-105 Unit
- 1 Set Specimen pot
- 1 SM-105 Software Package
- 1 Calibration Standard
- 1 Set Interconnecting Cables
- 1 Instruction Manual
- 1 12V accumulator charger
- 1 12V rechargeable accumulator

### **SPECIFICATION**

SENSITIVITY

1 x E-6 SI units

OPERATING FREQ. 16, 32, 64, 128, 256, 500 kHz

FIELD INTENSITY

10, 20, 40 or 80 A/m

FIELD HOMOGENEITY

<1 %

INNER DIAMETER OF COIL

40 mm

CONTROLS

no push buttons

SCALE

built-in scale, resolution 0.01g

MEASUREMENT TIME

< 8 s

PC INTERFACE

USB

OPERATING TEMPERATURE

-20°C to 50°C

**BATTERY** 

12V rechargeable accumulator

**DIMENSIONS** 

**♦ 90 x 200 mm** 

Specifications are a subject to be changed in connection with the instrument's improvement.

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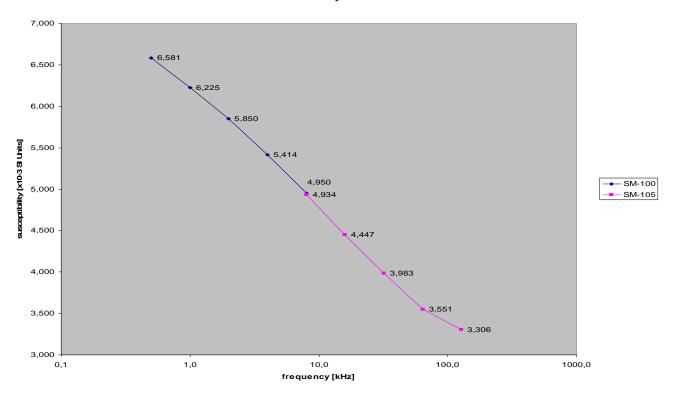
e-mail: zhinstruments@gmail.com web: http://www.zhinstruments.com

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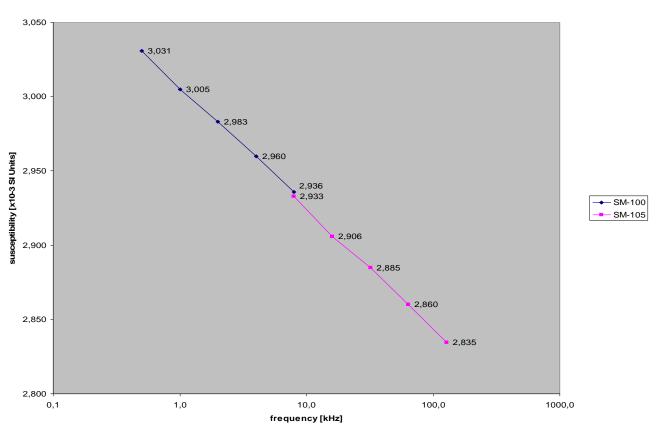
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### SM-100 AND SM-105 MEASUREMENT - FREQ. RANGE FROM 0.5 to 128 kHz

#### Tiva Canyon Tuff



### Pozzolano cement



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