

# MAGNETIC SUSCEPTIBILITY METER

## SM-20



The SM-20 magnetic susceptibility meter is useful for a number of geological and geophysical applications where the unique sensitivity of 10<sup>-6</sup> SI units together with its small, shirt-pocket size and light weight are appreciated.

The SM-20 is designed especially for field geologists and for fast laboratory assays for analysis and classification of rock types or drill core samples. Those measurements allow basic differentiation of rocks (diamagnetic, paramagnetic and ferromagnetic) and their precise susceptibility quantification.

The original sensor and the new method of signal processing guarantee advanced features of this new kappameter.

The SM-20 is simply operated using two buttons (the first one for measurement and the second one for data storage). More comfortable operation including point labels, comments and data storage for next processing is available using PC handling. The Li cells supply and the automatic power off function provide a long working time without battery change.



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REPRESENTED BY:

## Technical Specifications

### SENSITIVITY:

- 1 x 10<sup>-6</sup> SI units

### MEASURING RANGE:

- 0.000 to 999 x 10<sup>-3</sup> SI units  
- auto-range

### MEASURING TIME:

- less than 3 s per sample

### SENSOR:

- air-cored coil with diameter of 50 mm  
- getting 90% of measuring signal from the first 20 mm of the rock

### OPERATING FREQUENCY:

- 10 kHz

### WEIGHT:

- 127 g

### DIMENSIONS:

- 100 x 65 x 25 mm

### PC INTERFACE:

- RS 232C

### DISPLAY:

- 3 1/2 character LCD

### DATA MEMORY:

- internal storage of 120 or 29 measurements  
- advanced data management under PC control

### BATTERY:

- 2 pc of lithium 3 V cells CR 2032 (life of 100 hours typically)

### OPERATING TEMPERATURE RANGE:

- -10 to +60 °C

### AMBIENT OPERATING CONDITIONS:

- air humidity to 100%  
- weatherproof



## Standard Accessories:

- leather case  
- operating manual  
- PC connecting RS 232C cable  
- PC software for external control and data storage



# SM-20

## MAGNETIC SUSCEPTIBILITY METER

Geological mapping  
Ore and other raw material prospection  
Mineralogical studies  
Volcanology  
Drill cores logging  
Laboratory rock analysis



The SM-20 is designed for fast and sensitive measurements of magnetic susceptibility of rocks.