

# SM-20 MAGNETIC SUSCEPTIBILITY METER



**Sensitivity  $1 \times 10^{-6}$  SI units**

**Measuring time 1s per sample**

**Shirt pocket size**

**Weight 127g only**

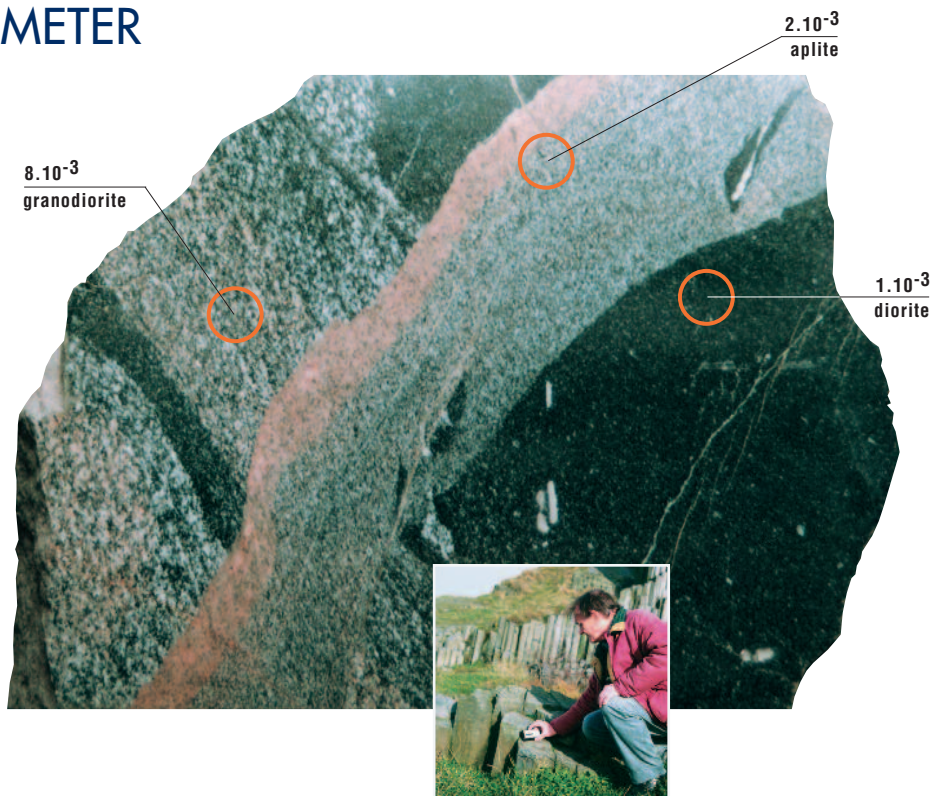


## **Applications:**

Instrument for fast and sensitive measurements of magnetic susceptibility of rocks for geological mapping, mineralogical studies, ore and raw material prospecting, volcanology, drill core sampling, laboratory rock analysis.

# SM-20

## MAGNETIC SUSCEPTIBILITY METER



The SM-20 magnetic susceptibility meter is useful for a number of geological and geophysical applications where the unique sensitivity of  $10^{-6}$  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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## Technical Specifications

### SENSITIVITY:

- $1 \times 10^{-6}$  SI units

### MEASURING RANGE:

- 0.000 to  $999 \times 10^{-3}$  SI units
- auto-range

### MEASURING TIME:

- 1s per sample

### MEASURING MODES:

- simple
- driftless
- continuous (rough scanning)

### 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
- USB converter (optional)

### DISPLAY:

- 3 1/2 character LCD

### DATA MEMORY:

- 120 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