

# RT-1 Magnetic Susceptibility Meter



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## High-Sensitivity and Portable

The RT-1 is a high sensitivity, portable, hand-held Magnetic Susceptibility Meter with both digital and analog readout. The unit is microprocessor (flash ROM) controlled, allowing flexibility in display, auto ranging, auto calibration in free air, and serial output.

## Applications

- Geological mapping in mineral & petroleum exploration industries
- Core logging via application of volumetric correction factor for drill-core
- Follow-up magnetic surveys
- Laboratory measurements

## Bluetooth Interface

The RT-1 has a bluetooth interface to transfer and store readings on a PC from the unit memory. The data outputs as an ASCII file and includes both the magnetic susceptibility reading and any event flags.

## Display

The RT-1 meter offers both a numeric readout as well as a moving bar graph display, which when combined with the variable pitch audio tone makes it the most functional meter on the market.

## Memory

The RT-1 allows for the storage of over 9800 readings and subsequent recalling through the display or PC interface. Flags can be used to identify individual or group readings.

## Readings Mode

RT-1 readings can be made in both continuous or single (step) modes.

## SI or CGS Units

Susceptibility is a dimensionless unit and can either be expressed using SI or CGS units. The RT-1 can be toggled to display values in either SI or CGS, including data already stored in the memory.

## Auto-Ranging

The RT-1 automatically adjusts ranges for maximum reading precision.

## Magnetic Susceptibility Test Pad

The RT-1 comes with its very own Magnetic Susceptibility Test Pad, build directly into the box. On-the-spot calibration checks can now be performed easily, anywhere, anytime.



RT-1 in Pelican case

## FEATURES

- Analog & digital display of readings in SI & CGS
- Internal memory for over 9800 readings
- Rugged, high visibility, water resistant case
- Audio signal
- Wireless Bluetooth Data Download
- External Sensor Attachment
- **\*NEW\*** Magnetic Susceptibility Test Pad Test Pad!
- **NO SPECIAL SOFTWARE REQUIRED!!**

Some of the many features of the RT-1

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## Magnetic Susceptibility

Magnetic Susceptibility is the intrinsic property that determines the amount of magnetism a rock can have in a given magnetic field.

Rocks are composed of minerals which vary in their magnetic susceptibility and magnetite accounts for most of the susceptibility observed. The measurement of susceptibility can be used before magnetic surveys take place to determine which rocks will be detectable magnetically and to what extent. This can be performed in the field on outcrop or on samples in the laboratory.

It is also used after drilling to measure drill-core to determine from what rock types and at what depths the observed magnetic responses have originated. In general, rocks and minerals have a typical value of susceptibility. Values can also be related directly to the equivalent percentage volume of magnetite which would produce that value.

## Specifications

Sensitivity (SI)	1 X 10 <sup>-5</sup>
Operating Range	1 X 10 <sup>-5</sup> to 1 SI
Units	SI or GCS
Operating Frequency	750 Hz
Response Time	Less than 1 second
Operating Mode	Single or Continuous readings
Memory	More than 9800 readings & flags!
Display Type & Rate	LCD, with backlight (55 mm x 28 mm) Displays analog & digital readings
Audio Output	Audio output on key touch Selectable continuous audio indication or relative reading values
Power Source	3 x 1.5V AA alkaline batteries Power down feature with auto shut-off Low battery is indicated
Battery Life	Better than 50 hours continuous use
Water Resistance Rating	IP65
Coil Type	Ferrite
Temperature Range (°C)	Operating: 0°C to +50°C Storage: -40°C to +60°C
Relative Humidity	10 to 90% (non condensing)
Data Input / Output	Bluetooth
Warranty	1 year

## “What’s in the Box”

The RT-1 standard system is supplied with:

- RT-1 Console with Wrist Strap
- Three Alkaline AA Batteries
- Operations Manual & Quick Start Guide
- 1GB USB with PDF manuals
- Bluetooth USB, software & lanyard
- Mini-Philips screwdriver
- 1 year warranty
- Calibration Certificate
- Magnetic Susceptibility Test Pad
- Sturdy Pelican® case with foam insert



## Weight & Dimesions

Length	155 mm
Wigth	84 mm
Height	34 mm
Weight	0.35 kg

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Made in Australia