

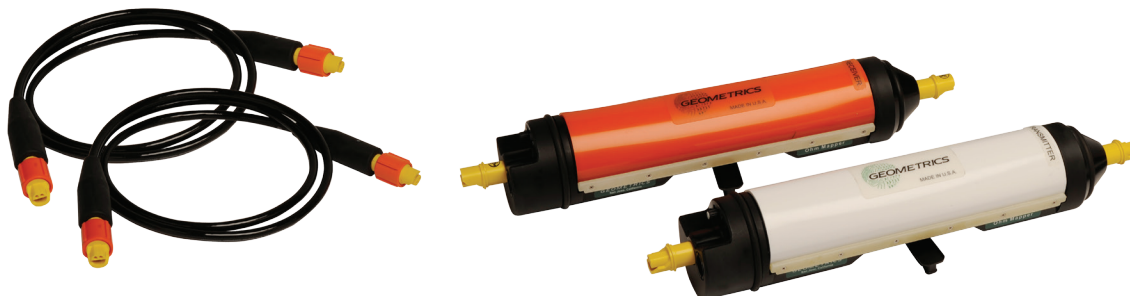
# OhmMapper

## Resistivity Mapper



# GEOMETRICS

Innovation • Experience • Results



The Geometrics OhmMapper is a capacitively-coupled resistivity meter that measures the electrical properties of rock and soil without cumbersome galvanic electrodes used in traditional resistivity surveys. A simple coaxial cable array with transmitter and receiver sections is pulled along the ground either by a single person or by a small all-terrain vehicle. Data acquisition is many times faster than DC resistivity.

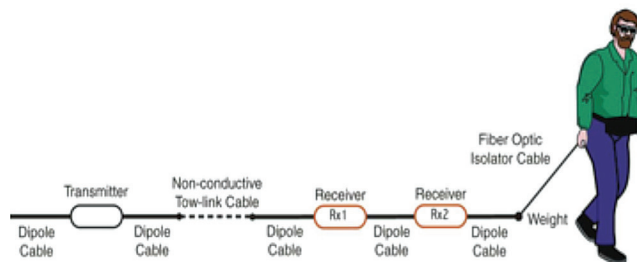
Multiple passes with the OhmMapper, or a single pass with multiple receivers at different transmitter-receiver spacings, permit 2D and even 3D electrical surveying at a fraction of the time of resistivity or electromagnetic methods. Data acquisition is near-continuous, providing maximum resolution.

The console provides graphical display of both position and data. View the last five profiles or scroll a window through the entire data set right in the field.

Data can be exported in ASCII-columnar format for plotting with Surfer or Geosoft software.

## FEATURES & BENEFITS

- **Capacitively-coupled** – No metal electrodes to drive into the ground.
- **Light and compact** – Single-person operation.
- **Low power consumption** – Small battery.
- **Easy to set up** – Rapid deployment.
- **Fast Data Acquisition** – Highest resolution possible.



# GEOMETRICS

Innovation • Experience • Results

# SPECIFICATIONS | OhmMapper Resistivity Mapper

**Operating Principle:** Constant-current capacitively-coupled, dipole-dipole resistivity.

**Operating Range:** 1-100,000  $\Omega$  m.

**Cycle Rate:** 2 Hz.

**Data Storage:** 2 Mbytes of nonvolatile RAM.

**Audio Output:** Metronome, signal amplitude, disconnect.

**Visual Output:** 320 x 200 LCD.

**Data Display:** 5 line-profiles of resistivity.

**Output:** ASCII columnar.

**Clock Resolution:** 0.1 sec; drift <1 sec/day.

**Transmitter Frequency:** <18 kHz.

**Transmitter Output Current:** Variable from 16 mA to 0.25 mA.

**Dipole lengths:** 5, 10, 15, 20 m; longer lengths optional.

**Receiver Input:** 5 Mhos.

**Voltage Accuracy:** 1%.

**Receiver Input:** 0-2  $V_{rms}$ .

**Power Line Rejection:** >100 dB.

**Transmitter/receiver Power:** 12 VDC (supplied by console).

**Console Power:** 28 VDC (Internal battery backup for clock and nonvolatile RAM).

**Array Type:** Dipole-dipole.

**Console Weight:** 1.6 kg (3.5 lb).

**Transmitter Weight:** 2 kg (4.4 lb).

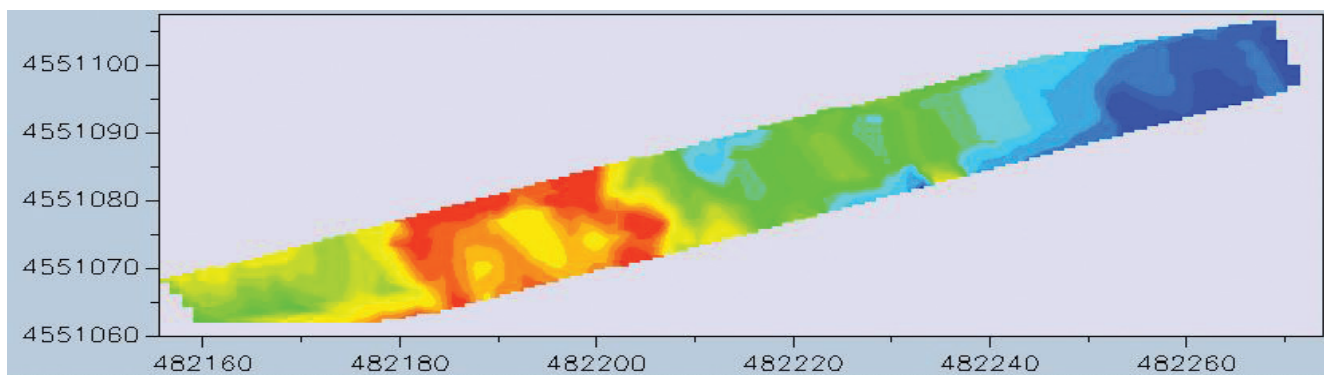
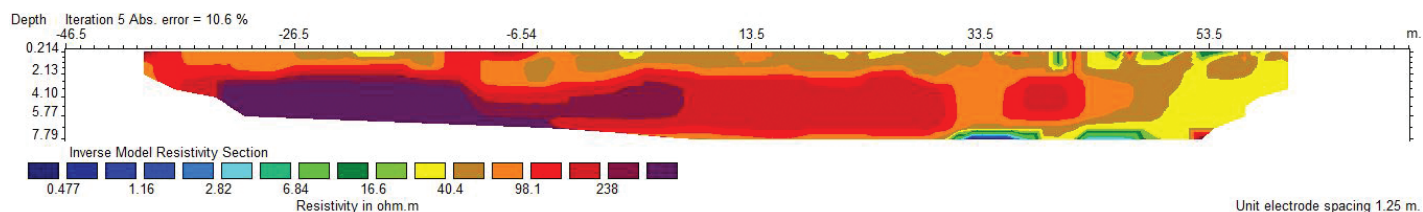
**Receiver Weight:** 2 kg (4.4 lb).

**Battery Pack and Harness:** 1.6 kg (3.5 lb).

**Array Depressor Weight:** 3 kg (6.6 lb).

**Console Dimensions:** L: 15 cm; W: 8 cm; H: 28 cm (5.9x3.1x11 in).

**Battery Dimensions:** L: 8 cm; W: 14 cm; H: 20 cm (3.1x5.5x7.9 in).



Plan and cross-sectional views of karst feature in Italy.

Specifications subject to change without notice. OhmMapper\_v1 (0217)



**GEOMETRICS**  
Innovation • Experience • Results

**GEOMETRICS INC.** 2190 Fortune Drive, San Jose, California 95131, USA  
Tel: 408-954-0522 • Fax: 408-954-0902 • Email: sales@geometrics.com

**GEOMETRICS EUROPE** 20 Eden Way, Pages Industrial Park, Leighton Buzzard LU7 4TZ, UK  
Tel: 44-1525-383438 • Fax: 44-1525-382200 • Email: chris@georentals.co.uk

**GEOMETRICS CHINA** Laurel Geophysical Instruments Limited  
8F. Building 1, Damei Plaza, 7 Qingnian Road, Chaoyang District, Beijing, 100025 China  
Tel: +86-10-85850099 • Fax: +86-10-85850991 • laurel@laurelgeophysics.com.cn