www.geomatrix.co.uk
sales@geomatrix.co.uk
Tel: 01525 383438

OhmMapper Data Sheet

Fast resistivity measurements without probes. The Geometrics OhmMapper is a capacitively coupled resistivity meter that measures the electrical properties of rocks and soil without cumbersome ground stakes used in traditional resistivity surveys.



OhmMapper in operation with Geometrics console (Courtesy of Geolex Inc., Helena, Montana USA)

A simple coaxial-cable array with transmitter and receiver sections is pulled along the ground either by a single person or attached to an all-terrain vehicle. Data collection is many times faster than systems using conventional DC resistivity.

The receivers automatically synchronise to the transmitter cycle, allowing the transmitter/receiver offset to be quickly adjusted in the field for multi depth investigations.

The OhmMapper can be operated using the Geometrics console or a Windows or Android application (OhmLog) via Bluetooth. OhmLog offers the operator additional reliability and flexibility.

The OhmMapper is used predominantly for mapping geological variation, contaminant plumes, hydrological studies, and for precision agriculture.

Geomatrix Earth Science Limited, Unit 20 Eden Way, Pages Industrial Park, Leighton Buzzard, Bedfordshire, LU7 4TZ

www.geomatrix.co.uk
sales@geomatrix.co.uk
Tel: 01525 383438

Technical Specifications

Operating Principle:	Constant-current, capacitively coupled, dipole-dipole resistivity
Operating Range:	Selectable data logging rate up to 2 times per second
Communication:	Bluetooth
Data Storage:	On a Geometrics console or Windows/ android tablet.
Audio Output:	Metronome, signal amplitude, error alarm
Visual Output:	1. Data display: up to 5 line profiles of resistivity 2. All system setup functions 3. All survey functions: survey profile number and direction, station or GPS number, test line number 4. Survey monitor functions 5. Survey diagnostics
Transmitter Specifications:	Frequency: approx. 16.5 kHz Output power: up to 2 Watts Output current maximum: 16 mA Output current minimum: 0.125 mA
Receiver Specifications:	Cable lengths: 5m standard (x4) Input impedance: >5 M Ohm Measured voltage accuracy: Better than 3% Input voltage range: 0-2 V RMS Power line rejections: >100 dB
Battery:	1. Transmitter/Receiver - 2x6 VDC (12 VDC) 2. Console - 28 VDC 3. Internal battery backup for clock and non-volatile RAM
Environmental:	Temperature: -25 C to +50C Note: At less than -10 C the LCD screen must be kept warm
Internal Clock:	

Videos

OhmMapper Field Setup - part 1
https://www.youtube.com/watch?v=uuQ3UBS1uhc

Geometrics OhmMapper - part 2
https://www.youtube.com/watch?v=GT6YwI5A2gE

OhmMapper Data - part 1
https://www.youtube.com/watch?v=d9n7N2hS1yY

Geomatrix Earth Science Limited, Unit 20 Eden Way, Pages Industrial Park, Leighton Buzzard, Bedfordshire, LU7 4TZ

www.geomatrix.co.uk
sales@geomatrix.co.uk
Tel: 01525 383438

OhmMapper Data - part 3
https://www.youtube.com/watch?v=TWONyBeNo10

OhmMapper Data - part 4
https://www.youtube.com/watch?v=yZ2nFoU6eb4

Geometrics OhmMapper
https://www.youtube.com/watch?v=L7YhZPiburg

Geomatrix Earth Science Limited, Unit 20 Eden Way, Pages Industrial Park, Leighton Buzzard, Bedfordshire, LU7 4TZ