# DMT

#### Engineering Performance

## **DMT RESECS**

### DC-Resistivity and Electrode Control System

RESECS is a PC controlled DC resistivity meter system for high-resolution research, tomography and monitoring applications. Up to 960 address-able electrodes are connected via one single cable. Any pair of electrodes might be selected as current injector. Up to eight other pairs might serve as potential electrodes for simultaneous geoelectrical measurements (eight channel operation). The software controlled fast switching of electrodes results in a high data acquisition rate - up to a few thousand data points per hour.

- RESECS with its integrated PC is cased in a robust, ruggedised and water proof box. Features of the portable stand-alone system are the flexible usage and convenience for any geometric configuration (Wenner, Schlumberger, Dipole-Dipole, etc. as well as user-defined configurations and 3D configuration).
- RESECS automatically selects all programmed electrode configurations. It optimises input current and preamplification, corrects self-potential and displays online pseudo sections and timing diagrams of input and output voltage.
- RESECS is able to store the complete timing diagrams in the internal data storage and yields DC resistivity as well as IP values.
- RESECS includes continuous monitoring application.



Typical field installation







Graphically results after inversion

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#### **Technical Specifications**

- Input channels:
  - 1 or 8 channel for potential differences +/- 10 V
  - 1 channel for current measurement 2.5 A
- Preamplification: 1, 10, 100, 1000 .
- Sample rate: 500 samples / sec / channel
- Pulse duration: 0.3 8 sec .
- Input impedance: 100 MOhm
- Injection voltage:
  - Internal max 800 Vp-p, 100 W
  - External max 800 Vp-p, 250 W, 2.5 A (option)
- Hard disk: 64 GB
- Display stacking: Automatic or manual
- Display: 12.1" TFT-Module
- Interfaces: USB (2 x), COM, LAN, VGA
- **Operating system: Windows 7 Professional**
- Data display of U, I, Rho, SP, M, Phase, Standard deviation of :
  - Potential channels
  - Pseudo section
  - Pseudo area
  - Display of measuring curves
- Internal memory: > 100000 readings
- Operating temperature: 0° to 40° C
- Power supply: 12 VDC



Extendable up to 960 electrodes



Borehole cable with decoder box

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Disposal information: : Our products are subject to the WEEE directive. DMT has committed itself to take back all electrical and electronic components sold and to dispose of them professionally. Please contact: products@dmt-group.com







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