

RESECS

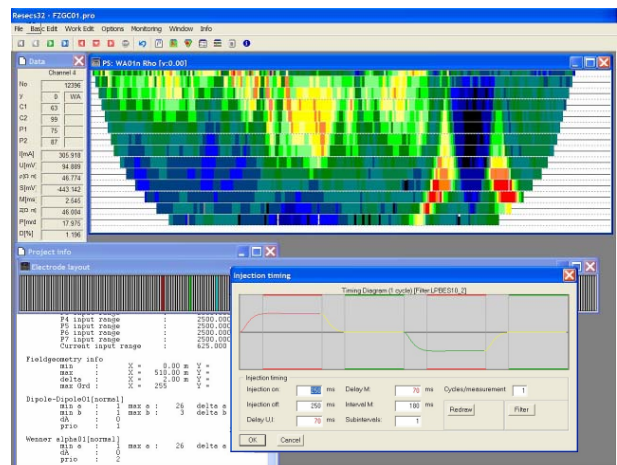
DC-Resistivity and Electrode Control System

RESECS is a PC controlled DC resistivity meter system for high-resolution research, tomography and monitoring applications. Up to 960 addressable electrodes are connected via one single seven-core 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.

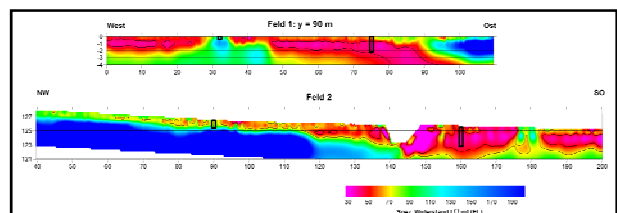
- RESECS with its integrated PC is cased in a robust, ruggedised and water proof box. Features of the portable stand-alone system are the flexible usage and convenience for any geometric configuration (Wenner, Schlumberger, Dipole-Dipole, etc. as well as user-defined configurations).
- RESECS automatically 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



Screen shot of RESECS display



Graphically results after inversion

Technical Specifications

- Input channels: 1 or 8 channel for potential differences +/- 10 V ; 1 channel for current measurement 2.5 A
- Pre-amplification: 1, 10, 100, 1000
- Sample rate: 500 samples / sec / channel
- Pulse duration: 0.3 - 4 Sec
- Resolution: 1 microvolt, 1 microampere
- Input impedance: 30 MOhm
- Injection voltage:
 - Internal max 800 Vp-p, 100 W
 - External max 800 Vp-p, 250 W, 2.5 A (option)
- Processor: PIII, 750 MHz, 256 MB, 20 GB Hard disk
- Display stacking: Automatic or manual
- Display: 12.1" TFT-Module
- Interfaces: USB (2 x), COM, LAN, VGA
- Operating system: Windows XP
- Measuring software: RESECS32.EXE
Data display of U, I, Rho, SP, M, Phase, Standard deviation of
 - Potential channels
 - Pseudo section
 - Pseudo area
 - Display of measuring curves
- Internal memory: > 20000 readings
- Operating temperature: 0° to 40° C
- Power supply: Between 10 VDC and 24 VDC with charger



Up to 960 electrodes

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