

# SYSCAL Kid

## RESISTIVITY METER

## FOR ARCHAEOLOGY

## AND ENGINEERING

- ◆ Automatic ranging
- ◆ Direct resistivity reading
- ◆ Built in data logger
- ◆ Field proof



The Resistivity Meter, SYSCAL Kid is a very compact unit specially designed for shallow electrical surveys. The SYSCAL Kid offers the well-know reliability and measurement accuracy of the entire SYSCAL range of resistivity meters.

Easy to use, field proof and light weight, SYSCAL Kid is ideal for archaeological, geological mapping and civil engineering applications.

### APPLICATIONS

- Shallow ground resistivity
- Archaeology surveys
- Civil engineering
- Geological mapping

### MAJOR BENEFITS

- Attractive output parameters:
  - 250 V maximum voltage
  - 25 W maximum power
  - 500 mA maximum current
- Automatic fixing of the output voltage in relation with the lever of the measured signal.
- Internal memory for more than 1400 full stations.
- Accuracy on resistivity: 1%
- Quality control fo the measurement thorough standard deviation and number of stacks.
- Display of measured voltage, intensity of current, apparent resistivity, and self potential
- Serial link for transfer to PC

## GENERAL SPECIFICATIONS

- LCD display: 4 lines of 20 characters
- Keypad: 6 function keys
- Operating temperature range: -10 to +50°C
- Internal rechargeable battery: 10 V, 5 Ah
- Autonomy: 3000 readings typical
- Internal memory of 1400 stations with full readings: self-potential, voltage, current resistivity
- Dimensions: 23 x 18 x 17 cm
- Weight: 4.1 kg

### TRANSMITTER

- Automatic current setting
- Output voltage: up to 200 V
- Output current: up to 500 mA
- Output power: up to 25 W
- Optional external 12 V battery input
- Cycle time: 1 or 2 s

### RECEIVER

- Resistivity computation
- Automatic ranging
- SP compensation including linear drift
- Digital stacking for noise reduction
- Input voltage: protection up to 200 V range from -2.5 V to +2.5 V
- Input impedance: 22MΩ
- Resistivity range: 10<sup>-3</sup> to 10<sup>+5</sup> Ω.m
- Resistivity precision: 1% typical

## RESISTIVITY MEASUREMENTS

### Ground resistivity (Wenner)

$$\rho_a = 2\pi a \frac{\Delta V_{P_1-P_2}}{I_{C_1-C_2}}$$

Available arrays:

- Schlumberger
- Wenner
- Gradient
- Dipole-Dipole
- Pole-Dipole
- Pole-Pole
- Other (user defined)

