

IRIS INSTRUMENTS

SYSCAL Kid

RESISTIVITY METER FOR ARCHAEOLOGY AND ENGINEERING

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



IRIS Instruments is pleased to introduce its new resistivity meter, SYSCAL Kid, a very compact unit specially designed for shallow electrical surveys. The SYSCAL Kid offers the well-known 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:
 - 200 V maximum voltage,
 - 25 W maximum power,
 - 500 mA maximum current
- Automatic fixing of the output voltage in relation with the level of the measured signal.
- Internal memory for more than 1400 full stations.
- Accuracy on resistivity: 1%.
- Quality control of the measurement through standard deviation and number of stacks.
- Display of measured voltage, intensity of current, apparent resistivity, and self potential.
- Serial link for transfer to PC.



SYSCAL Kid

GENERAL SPECIFICATIONS

- ◆ LCD display: 4 lines of 20 characters
- ◆ Keypad: 6 functions keys
- ◆ Operating temperature range: -10 to +50 °C
- ◆ Internal rechargeable battery: 12 V, 6.5 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 12V 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: 22 M Ω
- ◆ Resistivity range: 10⁻³ to 10⁺⁵ 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)

