GDRK-5A Earth Resistance Tester for Ground Grid

General Information

GDRK-5A is applicable for testing power frequency characteristic parameters such as the power frequency earth impedance, contact voltage, step voltage, transfer potential and electric potential gradient of the site ground surface etc.; and the soil resistivity of all kinds of earthing devices.

With the technique of anti-interference, this instrument can accurately obtain data under 50Hz power frequency in strong interference environment. The test current is relatively low (maximum 5A) and will not cause the over-potential of earthing devices during the testing. Meanwhile, as the tester has strong anti-interference ability, so that the measurement can be done with power.

Features

- The measured power frequency has fine equivalency. And the waveform of test current is sine wave. Difference between the test frequency and power frequency is only 5Hz. Measurement shall be done by adopting 45Hz and 55Hz frequencies.
- The interference capacity of voltage to ground is much strong. This instrument measures by adopting the non-power-frequency method. Combining with the modern technique of wave filtering by software and hardware, it has strong anti-interference ability. Tested data is stable and reliable. Error caused by 30V power-interference voltage shall only be 0.002Ω.
- High accuracy. It can be used to measure large scale ground grid with small earth impedance.
- It can measure all characteristic parameters of earthing devices stipulated by relevant standards. It can not only measure the ground impedance, but also the resistive and reactive components.
- Site interference can be measured, which is convenient to estimate measurement error.
- Disconnection alarm function, to avoid inaccurate measurement.
- Easy operation. Directly display measurement result on LCD screen.
- 50 groups of measuring data can be saved, with mini printer.
- No need to use high current cable.
- Small size, easy to carry.

Specification

Measurement range of the impedance	0-200Ω
Resolution	0.001Ω

Measurement error	± (reading ×1% +0.002Ω)
Interference capacity of voltage to ground	error caused by 30V power-interference voltage shall be no more than 0.002Ω (when the test current is no less than 3A).
Waveform of test current	sine wave
Frequency of test current	45Hz and 55Hz
Maximum output current	5A
Maximum output voltage	200V
Requirement of measurement wire	sectional area of copper core for the current wire ≥ 2.5mm^2 sectional area of copper core for the voltage wire ≥ 1.0mm^2
Power supply	AC220V±10%, 50Hz
Environment to use	Temperature: -10℃~40℃; relative humidity: <90%
Overall dimension	440*350*310mm
Weight of the instrument	10.5kg