

## **Wuhan HTDW-5A Ground Network Earth Resistance Tester**



### **I. Introduction**

Currently in the power system, it is mainly used frequency large current three-pole measurements to test the ground network earth resistance. In order to prevent frequency interference generated by the power grid operation, to improve the accuracy of the measurement results, insulation preventive test code states: the test current of frequency large current method shall not be less than 30A. Thus, the test equipment is too heavy; the test process is complex; large work strength, long test time and many other issues.

Ground Network Earth Resistance Tester adopts the new variable frequency AC power, and take advantage of computer processing control and signal processing, to solve the interference problem of testing process, simplifying the test operation process, improve the precision and accuracy of test results, greatly reduce the labor intensity and testing costs.

This device applies to test frequency ground resistance, contact voltage, pace voltage and earth electric resistivity. Can test substation grounding grid ( $4\Omega$ ), fire and water electric power plants, microwave stations ( $10\Omega$ ), lightning rod multi-purpose model ( $10\Omega$ ). It adopts different frequency anti-jamming technique, can get the data under 50Hz in strong interference circumstance. The maximum measured current is 5A , which will not cause the electric potential of the grounding device too high, it with strong anti-interference ability at the mean time, so it does not need power off during the test .

### **II.Features**

1. Good frequency equivalence. The measured current waveform is sine wave, the difference between frequency and power frequency is 5Hz, use 45Hz and 55Hz two frequency to test.
2. Strong anti-jamming ability, use different frequency method , assorted with modern hardware and software filtering techniques, make the device with strong anti-jamming ability, test results stable and reliable.
3. High precision, intrinsic error  $0.005\Omega$ , can test the ground network of small impedance.
4. Powerful . can test current pile, voltage pile, ground resistance, pace voltage, contact voltage.
5. Easy to operate, menu operated, directly display the test results.
6. Do not need high current wire.

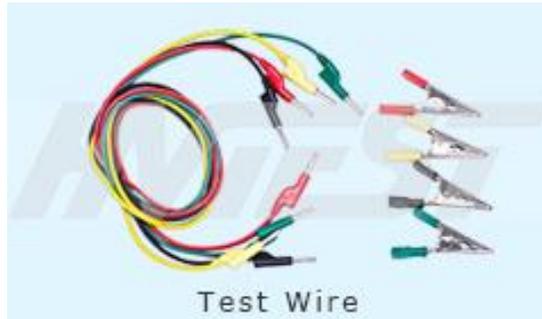
### **III. Parameters**

Impedance measurement range	0~200Ω (Including current pile impedance)
Resolution	0.001Ω
Measurement error	±(reading×2%+0.005Ω)
Maximum output voltage	AC 400V (45Hz、55Hz, double frequency, sine wave)
Maximum output current	5A (45Hz、55Hz, double frequency, sine wave)
Current output gear	5 / 4.5 / 4 / 3.5 / 3 / 2.5 / 2 / 1.5 / 1A, 0.5A/gear, total 9 gears
Anti-jamming capability	Anti- frequency 50Hz voltage 10V
Measured wire required value	Section surface of current wire copper core≥1.5 mm <sup>2</sup>
	Section surface of voltage wire copper core≥1.0 mm <sup>2</sup>
Power supply	AC220V±10%, 50Hz
Dimension	295×340×310mm <sup>3</sup>
Weight	30kg

#### IV. Accessories



Host



Test Wire



Reference Resistor



Power Cord



Ground Anchor



Fuse



manual, report, certificate