

ES3030 Digital Large Ground Network Tester



I. Characteristic

ES3030 digital large-scale ground grid grounding resistance tester, also known as power frequency grounding resistance tester, grounding resistance meter, etc., is a common instrument for testing commonly used instruments for measuring grounding resistance. It adopts new frequency conversion AC power supply, dual-frequency measurement technology, large touchable color screen and microprocessor technology to meet the requirements of two-wire, three-wire and four-wire test impedance, and can measure soil resistivity, step voltage, distributed potential, touch voltage, current phase angle and other parameters. It is suitable for telecommunications, electric power, meteorology, computer room, oil field, power distribution lines, tower transmission lines, gas stations, factory grounding grids, lightning rods, etc. It meets the standards of power substations and lightning protection devices. The instrument test is accurate, fast, simple, stable and reliable.

The ES3030 digital large-scale grounding resistance tester can output a maximum open-circuit voltage of 400V and a maximum short-circuit current of 5A. Microprocessor control and automatic dual-frequency technology can accurately measure and calculate the grounding impedance value under the 50Hz power frequency state under the strong interference state, and the large-screen display is clear at a glance. Store 100 groups of data at the same time, resistance measurement range: $0.000\Omega \sim 2000\Omega$. Measurement data can be printed out via thermal printer.

ES3030 digital large-scale grounding grid grounding resistance tester is composed of host, test wire, grounding rod, etc. It has the functions of reading, viewing, saving, and printing historical data.

II. Range&Technical Specification

Features	Ground resistance measurement, soil resistivity measurement, step voltage
	measurement, distributed potential measurement, touch voltage measurement
Ground impedance	0.000~2000Ω Accuracy: ±0.5%FS±5dgt Minimum Resolution: 0.001Ω
Soil Resistivity	0.000~999KΩm Minimum resolution: 0.001Ωm
Measurement	
Step voltage	0~400V Minimum resolution: 0.001V

measurement,	
distributed	
potential	
measurement,	
touch voltage	
measurement	
Impedance angle	
measurement	0~360.0° Resolution: 0.1°
(radians)	
Rated measuring	annow.
power	2000W
Anti-interference	
ability	Anti-power frequency 50Hz voltage 50V
Baseline	23℃±5℃, below 70%rh (auxiliary grounding resistance 20Ω±10%, voltage to ground
conditions	<10V)
Power supply	AC 220V 10A (50Hz)
Backlight	Adjustable backlight brightness
Measurement	Four-wire test, three-wire test, two-wire test
method	
Measurement	Earth impedance: rated current method,
methods	, , , , , , , , , , , , , , , , , , ,
Short circuit test	1A, 2A, 3A, 4A, 5A (5 settings)
current	, , , , , , , , , , , , , , , , , , ,
Soil Resistivity	
Electrode Spacing	Can be set from 1m to 100m
Range	
Test frequency	45Hz, 55Hz, automatic dual frequency optional
Short circuit	AC 5A±10% sine wave
maximum current	
No-load maximum	AC 400V±10% sine wave
voltage	
Display mode	7 inch touch color screen
Touch screen	Yes
Measurement instructions	Measurement progress display, measurement prompt animation display
Meter size	Length, width and height: 540mm×440mm×210mm
Standard test lead	15m for red, 15m for black, 10m for yellow, 10m for green, 1.5m for yellow, 1.5m for
length	green
Auxiliary ground	800mm 2 200mm 2
rod	
Measure time	Ground impedance: about 1 minute/time
Print	Built-in thermal printer
Paper	F7*40
Specifications	57*40mm
Data storage	100 groups, "save successfully!" storage indication, display "save failed, the space is

	full!" The characters indicate that the storage is full
Data access	Have
Overflow display	Overrange overflow function: "OL" symbol display
Automatic shut-down	none
Power consumption	Standby: <110W
	Measurement: 2000W
Quality	Gauge: 27 kg
	Test lead, auxiliary ground rod, instrument bag: 5.5kg
Working temperature and humidity	-10℃~40℃; below 80%rh
Storage temperature and humidity	-20℃~60℃; below 70%rh
Insulation resistance	10M Ω or more (500V between circuit and case)
Pressure resistance	AC 3700V/rms (between circuit and case)
Electromagnetic properties	IEC61010-4-3, radio frequency electromagnetic field≤1V/m
Suitable for safety regulations	IEC61010-1, IEC1010-2-31, IEC61557-1, 5, IEC60529 (IP54), pollution, etc. 2, CAT III 300V

Ⅲ. Packing List

Meter	1 set
Instrument bag	1
Auxiliary ground rod	4 sticks
Test line	4 strips (15m for red, 15m for black, 10m for yellow, 10m for green)
Simple test lead	2 (yellow 1.5m, green 1.5m each)
220V power cord	1
Manual, Warranty	1 set

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