

RAILJET



CLAMP EARTH RESISTANCE TESTER

MODEL NO : R1+

INTRODUCTION

Clamp earth resistance tester, also known as loop resistance tester, is used to test ground resistance. This instrument uses a new black luxury screen design, the resistance current is displayed on the same screen, and it also has functions such as data storage, data review, alarm, and automatic shutdown. The whole machine is beautiful and high-grade, with a wide range, high resolution, convenient operation, convenient carrying, accurate, reliable, stable performance and strong anti-interference ability. Moreover, it has a shock-proof, ust-proof and moisture-proof structure. It is a common and indispensable instrument for telecommunications, electricity, meteorology, computer rooms, oil fields, electromechanical installation and maintenance, and industrial enterprises that use electricity as industrial power or energy. It is suitable for measuring grounding resistance of various telecommunications, electric power, meteorology, computer room, oil field, power distribution lines, tower transmission lines, gas stations, factory grounding grids, lightning rods, etc.

The clamp ground resistance tester is controlled by a microprocessor and can accurately detect ground resistance. It uses fast filtering techniques to minimize interference. Simultaneous data storage and data upload functions.

Range and Accuracy			
Measurement Mode	Measuring Range	Resolution	Accuracy
Resistance	0.010 Ω -0.099 Ω	0.001 Ω	± (1%+0.01 Ω)
	0.10 Ω -0.99 Ω	0.01 Ω	± (1%+0.01 Ω)
	1.0 Ω -49.9 Ω	0.1 Ω	± (1%+0.1 Ω)
	50.0 Ω -99.5 Ω	0.5 Ω	± (1.5%+0.5 Ω)
	100 Ω -199 Ω	1 Ω	± (2%+1 Ω)
	200 Ω -395 Ω	5 Ω	± (5%+5 Ω)
	400-590 Ω	10 Ω	± (10%+10 Ω)
	600 Ω -880 Ω	20 Ω	± (20%+20 Ω)
	900 Ω -1200 Ω	30 Ω	± (25%+30 Ω)
*Current	0.00mA -9.95mA	0.01mA	± (2.5%+1mA)
	10.0mA -99.0mA	0.1mA	± (2.5%+5mA)
	100mA -300mA	1mA	± (2.5%+10mA)
	0.30A-2.99A	0.01A	± (2.5%+0.1A)
	3.0A-9.9A	0.1A	± (2.5%+0.3A)
	10.0A-20.0A	0.1 A	± (2.5%+0.5A)

*Only available for instruments with current function

V. Technical Specifications

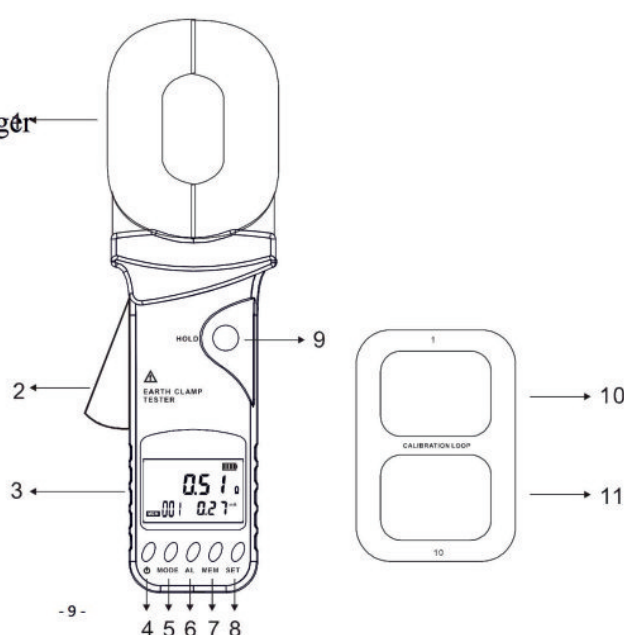
Function	Ground resistance test, loop resistance test, leakage current test
Ambient Temperature and Humidity	23°C±5°C, below 75%rh
Power Supply	DC 6V (4 AA dry batteries)
Measurement Method	mutual inductance
Resistor Resolution	0.001 Ω
*Current resolution	0.01mA
Jaw size	55mm×32mm
*Ω + A sync display	Ω + A sync display
Ground voltage measurement function	None
Display Mode	4-digit LCD display, black screen design
LCD size	46mm×29mm
Meter size	Length, width and height:285mm×85mm×58mm
Measure Time	2 times/sec
Data Storage	300 groups, "MEM" storage indication, displaying "FULL" symbol means the storage is full
Data Access	"MR" symbol indication when viewing data
Overflow Display	"OL" symbol indication when overrange overflow
Interference Test	Automatically identify interference signals, and the "NOISE" symbol indicates when the interference current is large
Alarm Function	When the measured value exceeds the alarm setting value, an alarm prompt will be issued
Battery Voltage	Real-time display of battery power, reminding to charge in time when the battery voltage is low
Automatic shut-down	Automatic shutdown after 5 minutes of startup
Power consumption	50mA Max
Quality	Meter: 1180g (including battery)
Working temperature and humidity	-10°C~40°C; below 80%rh
Storage temperature and humidity	-20°C~60°C; below 70%rh

Insulation resistance	Above 20M Ω (500V between circuit and case)
Pressure resistance	AC 3700V/rms (between circuit and case)
External Magnetic Field	<40A/m
External Electric Field	<1V/m
Suitable for safety regulations	IEC61010-1 (CAT III 300V, CAT IV 150V, pollution degree 2); IEC61010-031; IEC61557-1 (grounding resistance);

*Only available for instruments with current function

VI. Instrument structure

1. Pliers
2. Jaw open and close trigger
3. LCD display
4. Power key
5. MODE key
6. AL alarm key
7. MEM memory key
8. SET key
9. HOLD key



Packing List

Meter	1pc
Battery	Number 5 dry battery with 4 sections
Check Ring	1pc
Manual, Warranty	1 set
Instrument box	1pc