

RDER2100C+ Multi-Function Clamp Earth Resistance Tester

RDER2100C+ Multi-Function Clamp Earth Resistance Tester is widely used in the grounding resistance measurement of the power, telecommunications, meteorology, oilfield, construction and the industrial and electrical equipment. In the measurement of a grounding system with loop, does not require breaking down the grounding down lead, and no need the auxiliary electrode. It is safe, fast and simple in use. The tester can measure ground faults which cannot be measured by traditional methods. It can be used in applications where traditional methods cannot be measured, because the RDER series clamp grounding resistance meter measures the combined value of grounding body resistance and grounding lead resistance. The equipment can also measure the leakage current and neutral current of the grounding system.



Product features

1. Self-test quickly, start immediately into the test.
2. Using the most advanced processing algorithms and digital integration technology.
3. The product is light weight, more in line with characteristics of hand-held devices.
4. New design, panel operation with 6 buttons, better performance.
5. Increase sound and light alarm function, with "beep-beep-beep" alarm sound.
6. Increase the interference signal recognition indicator function, with "beep-beep-beep" indicator.
7. Measurement range: resistance $0.01\Omega \sim 1200\Omega$, current $0.00\text{mA} \sim 20.0\text{A}$.
8. Stored data 99 Units. Lower power consumption, Maximum operating current less than 50mA .



Product specifications and technical parameters

1. Measurement Range & Accuracy

Measurement	Range	Resolution	Accuracy
Resistance	$0.010\Omega \sim 0.099\Omega$	0.001Ω	$\pm(1\%rdg+0.01\Omega)$
	$0.10\Omega \sim 0.99\Omega$	0.01Ω	$\pm(1\%rdg+0.01\Omega)$
	$1.0\Omega \sim 49.9\Omega$	0.1Ω	$\pm(1\%rdg+0.1\Omega)$
	$50.0\Omega \sim 99.5\Omega$	0.5Ω	$\pm(2\%rdg+0.5\Omega)$

	100Ω ~ 199Ω	1Ω	±(3%rdg+1Ω)
	200 Ω ~ 395 Ω	5 Ω	±(6%rdg+5 Ω)
	400 Ω ~ 590 Ω	10 Ω	±(10%rdg+10 Ω)
	600 Ω ~ 880 Ω	20 Ω	±(20%rdg+20 Ω)
	900 Ω ~ 1200 Ω	30 Ω	±(25%rdg+30 Ω)
Current	0.00mA~9.95mA	0.05mA	±(2.5%rdg+1mA)
	10.0mA~99.0mA	0.1mA	±(2.5%rdg+5mA)
	100mA~299mA	1mA	±(2.5%rdg+10mA)
	0.30A~2.99A	0.01A	±(2.5%rdg+0.1A)
	3.0A~9.9A	0.1 A	±(2.5%rdg+0.3A)
	10.0A~19.9A	0.1 A	±(2.5%rdg+0.5A)

2. Technical Parameters

Function	Description
Power Supply	6VDC 4 PCS LR6 lkaline batteries
Clamp Size	Φ32mm
LCD Size	4 Digits LCD display, Screen: 47mm×28.5mm
Range	Resistance 0.01Ω-1200Ω, current 0.00mA~20.0A.
Resolution	Resistance 0.001Ω, current 0.05mA
Accuracy	Resistance ±1%±0.01Ω, current ±2.5%rdg±1mA
Data Storage	99 sets
Data Upload Function	RS232 Interface (Optional)
Auto Shutdown	Automatically power off after 5 minutes without any operate
Power Consumption	≤50mA, Continuously working for 30 hours
Working Environment	-20°C~55°C 20%~80%RH
Store Environment	-20°C~60°C; below 90%RH
Alarm Threshold Setting Range	Resistance: 1~199Ω, current 1~499mA.
Audible and VisibleAlarm	"Beep-beep-beep" alarm sound, alarm symbol flashing, pressALkey to turn on/off and setting
Interference Signal Recognition	"Beep-beep-beep" indicator,NOISE symbol blinking
Protection Level	Double insulation
Structural Feature	Clamp CT
Shift	Automatic shift
External Magnetic Field	<40A/m
External Electrical Field	<1V/m
Single Measurement Time	0.5 second
Resistance Measurement Frequency	>1KHz
Measured Current Frequency	50/60Hz Automatic
Low Battery Voltage Indicator	When the battery voltage is lower than 5.3V, the low battery voltage symbol is displayed

Storage Full Indication	Storage data full of 99 sets, flashed display "MEM" symbol
Over Range Indication	Exceed range indication "OLΩ", "L0.01" or "OL A"
Tester Weight	1160g
Tester Dimension	285mm×85mm×56mm