

STEK CLAMP EARTH TESTER CET 09 / 27 / 36

STEK CET 09 / 27 / 37 Clamp Earth Resistance Tester Starts immediately into the test. Large Jaw Size for Conductors and Bus Bars used for Earthing.

Breakthrough relay self-test mode, using the most advanced processing algorithms and digital integration technology.

Traditional product were too heavy to use, STEK Clamp Earth testers are more in line with characteristics of hand-held devices.

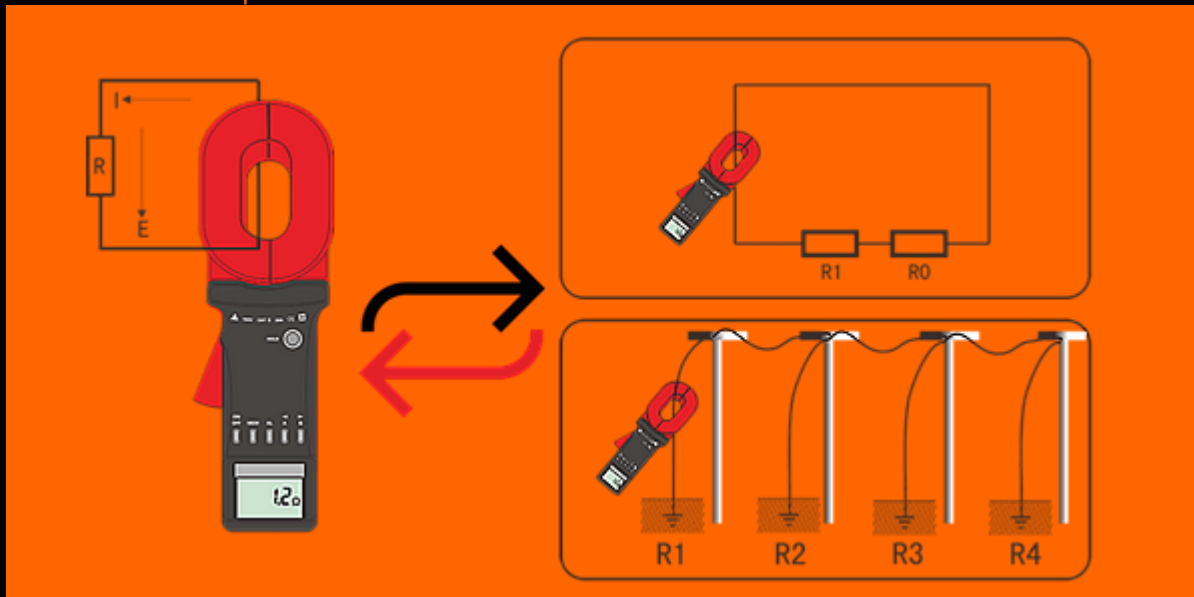
- New design, panel operation with 6 buttons, better performance .
- Increase sound and light alarm function, with "beep-beep-beep" alarm sound.
- Increase the interference signal recognition indicator function, with "beep-beep-beep" indicator.
- Measurement range: 0.01Ω - 1200Ω
- Stored data 99 Units.
- Lower power consumption, Maximum operating current less than 50mA.

STEK 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 ETCR series clamp grounding resistance meter measures the combined value of grounding body resistance and grounding lead resistance.



STEK Clamp Earth Tester
CET 09





Measure the loop resistance

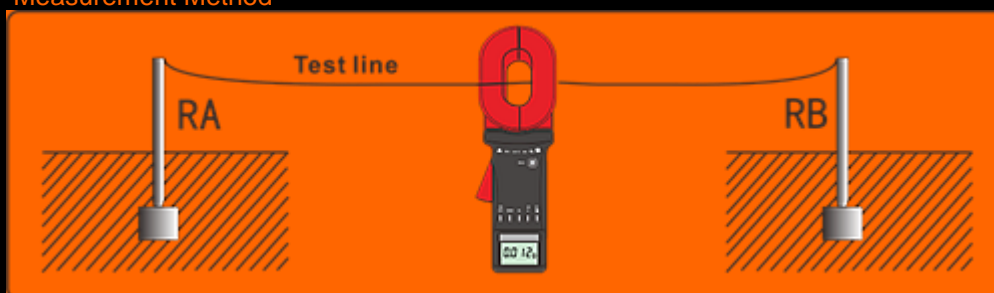
(Base on the formula: $R=E/I$)

Measure the grounding loop resistance system

(R1 is the measured earth resistance;

R0 is the equivalent resistance of the grounding resistor in parallel)

Measurement Method



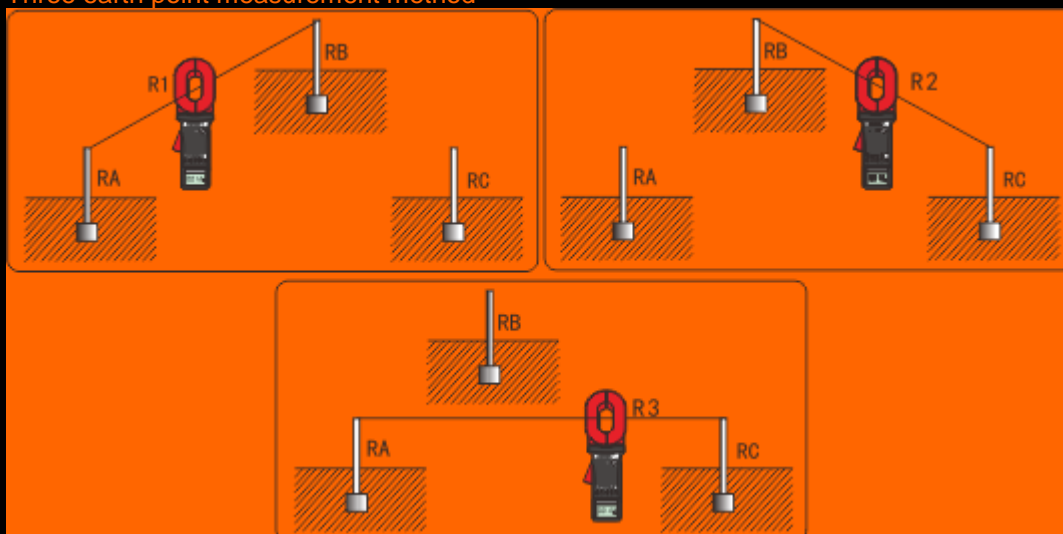
Two earth point measurement method

The RA is the measured grounding object, connecting RA and RB (which is the nearly grounding object like as water pipe or building) with one wire, the tester will test and indicate the concatenation resistance value of the ground resistance and the test line resistance.

$$R_T = R_A + R_B + R_L$$

(R_T is the tested value, R_L is the test line resistance value)

Three earth point measurement method

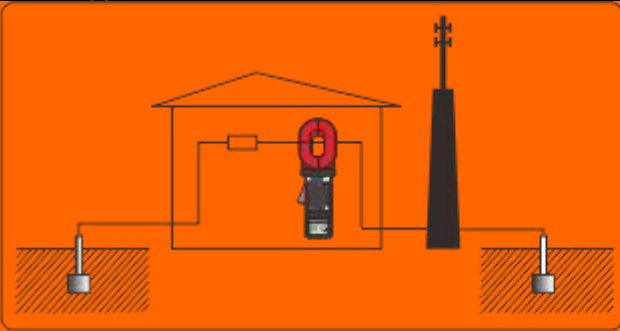


(1). Connect the RA and RB with a test line; use the Meter to get the first reading R_1 ;

(2). Connect the RB and RC with a test line; use the Meter to get the first reading R_2 ;

(3). Connect the RA and RC with a test line; use the Meter to get the first reading R_3 .

In the above three steps, the reading measured in each step is the value of the two series grounding resistance. In this way, we can easily calculate the value of each grounding resistance. According to the reading value of R_1, R_2, R_3 : $R_1 = R_A + R_B$; $R_2 = R_B + R_C$; $R_3 = R_A + R_C$, Then: $R_A = (R_1 + R_3 - R_2)/2$. As the reference points, the grounding resistance values of the other two grounding bodies. RB and RC are: $R_B = R_1 - R_A$; $R_C = R_3 - R_A$



The application of machine room earth resistance measurement

The machine room of telecommunication system normally in the upper deck of the building. It is hard to use the megohm meter to measure. However, STEK Clamp Eartg meters are very convenient to test.

The application of substation earth resistance measurement



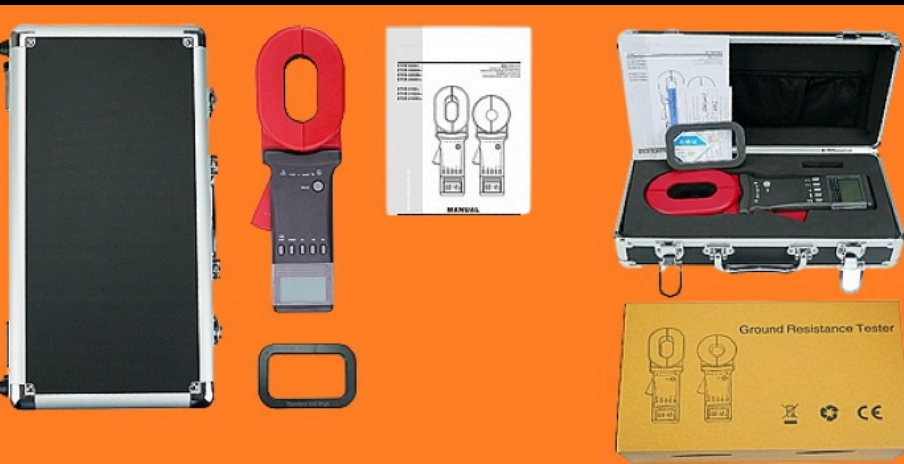
STEK series clamp meter can use to test the situation of contact and connect of circuit. With the help of one test line, it can be used to test the connect situation of equipment in station and the grounding system. Single point grounding measurement is allowed for the measurement of grounding resistance.

The application of building lightning protection grounding system measurement



If the earth poles of the building are independent of each other, the earth resistance can be measured by clamp to testing any of the earth poles, and the earth resistance can also be measured by clamp the building roof lightning arrester. When the measured value is less than the allowable value, the earth electrode is qualified .If the measurement value of the clamp meter is larger than the allowable value, please use single earth point method to measurement.

Scope Of Supply: Earth tester , Calibrated Resistance Test ring, Manual, Warranty card/Qualification card
Aluminum Case and Calibration Certificate



Measurement Range & Accuracy

Measurement	Range	Resolution	Accuracy
Resistance	0.010Ω-0.099Ω	0.001Ω	±(1%rdg+0.01Ω)
	0.10Ω-0.99Ω	0.01Ω	±(1%rdg+0.01Ω)
	1.0Ω-49.9Ω	0.1Ω	±(1%rdg+0.1Ω)
	50.0Ω-99.5Ω	0.5Ω	±(1.5%rdg+0.5Ω)
	100Ω-199Ω	1Ω	±(2%rdg+1Ω)

Technical Parameters

Function	CET 09	CET 27	CET 36
Power Supply	4 PCS of LR6 alkaline batteries		
Clamp Size	65mm×32mm		
LCD Size	4 Digits LCD display, Screen : 47mm×28.5mm		
Range	0.010Ω~200Ω	0.010Ω~1200Ω	0.010Ω~1200Ω
Resolution	0.001Ω		
Current Measurement Range	NA	NA	0.00mA to 20.0 A
Accuracy	±1%±0.01Ω		
Data Storage	99 sets		
Data Upload Function	RS232 Interface (Optional)		
Auto Power-off	Automatically power off after 5 minutes without any operate		
Power Consumption	≤50mA, continuously working for 30 hours		
Working Environment	-20°C~55°C ; 20%rh~80%rh		
Store Environment	-20°C~60°C ; below 90%rh		
Alarm threshold setting range	Resistance: 1~199Ω		
Audible and Visible Alarm	“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 “OL Ω”, “LO.01” or “OL A”		
Tester Weight	1100g		
Tester Dimension	285mm×85mm×56mm		