



<b>Product Name</b>	<b>GAOTek E1 Tester</b>
<b>Product SKU</b>	<b>GAOTek-EIT-189</b>
<b>Product URL</b>	<a href="https://gaotek.com/product/gaotek-e1-tester-30/">https://gaotek.com/product/gaotek-e1-tester-30/</a>

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## I. Product Overview

This tester is an innovative product, small size, handheld operation, battery powered, easy to carry.

The tester is mainly suitable for testing the contact resistance of high and low voltage switches, dc resistance of high and low voltage cable lines, and another microcosmic resistance measurement, testing speed, and high accuracy.

## II. Functional characteristics

- Output current up to 200A, multi-current optional, wide measuring range.
- A variety of measurement time options, to meet a variety of field applications.
- Wide range, high accuracy, resolution 0.1uΩ.
- Lithium battery power, one charge can be more than 500 times continuous testing, a simple and convenient measurement process.
- With open circuit protection, overheating protection, and other protection functions.
- Adopt a 4.3-inch industrial high brightness color LCD screen, display clearly under strong sunlight.
- Equipped with an external printer, easy to print data.
- With local storage and U disk storage, convenient data storage.

## III. Technical parameters

- Output current: 200A, 150A, 100A, 50A
- Measuring range: 200A 0 - 1000uΩ  
150A 0 - 1400uΩ  
100A 0 - 2000uΩ  
50A 0 - 10 mΩ
- Accuracy: ± (reading x 0.5% + 1 uΩ)

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- Resolution: 0.1  $\mu\Omega$
- Measurement time: fast, 10 ~ 60 seconds optional
- Automatic shutdown: automatic shutdown after 5 minutes without operation
- Power supply: built-in lithium battery or external charger, charger input 100 - 240VAC, 50Hz/60Hz
- Charging voltage: 12.6V
- Charging current:  $\leq 3A$
- Host size: 220mm  $\times$  168mm  $\times$  65mm
- Host weight: 1.6kg (excluding test line)

#### IV. Conditions of use

- Ambient temperature: -10 °C - 50 °C
- Ambient humidity:  $\leq 85\%RH$
- Atmospheric pressure: 70 ~ 106Kpa;
- Storage temperature: -40 °C - +70 °C

## V. Panel introduction



LCD screen: 4.3 inch industrial high brightness color LCD screen, display operation menu and display measurement results.

Keyboard: used for the operation and parameter setting of various functions.



I+, I- : current output terminal. V+,

V- : voltage input jack.



USB port: Connects to an external USB disk for storing test data.

USB square port: Connects to an external printer. Charging interface: use special charger for charging.

## VI. Operation instructions

### 6.1 Testing Cable Connections

Clamp the two test tongs to the switch contact or both ends of the test item, connect the I+/U+ terminal to the red test wire, connect the I-/U- terminal to the black test wire, where the thick wire insert is connected to the current terminal, I+/I-, and the thin wire spring rod is inserted into the voltage terminal, U+/U-.

The special low resistance test line supporting the instrument must be used. The current terminal should be tightened and the test clamp should be firmly clamped to reduce lead resistance and save battery power.

If the current is open during the test, the instrument will stop the test and alarm.

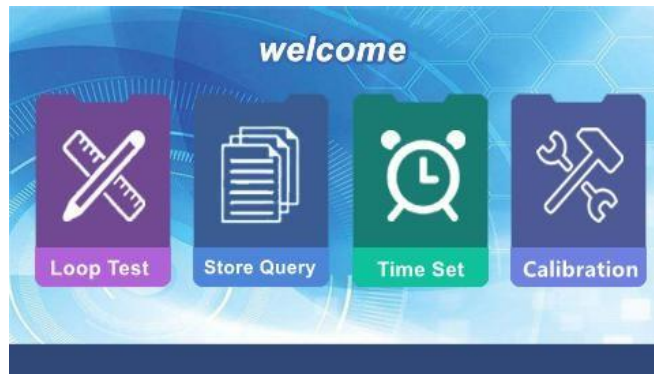
### 6.2 Smart electricity management

When the instrument is not operated for a long time, it shuts down automatically to save electricity. The instrument has low power charging prompt function and over discharge protection function.

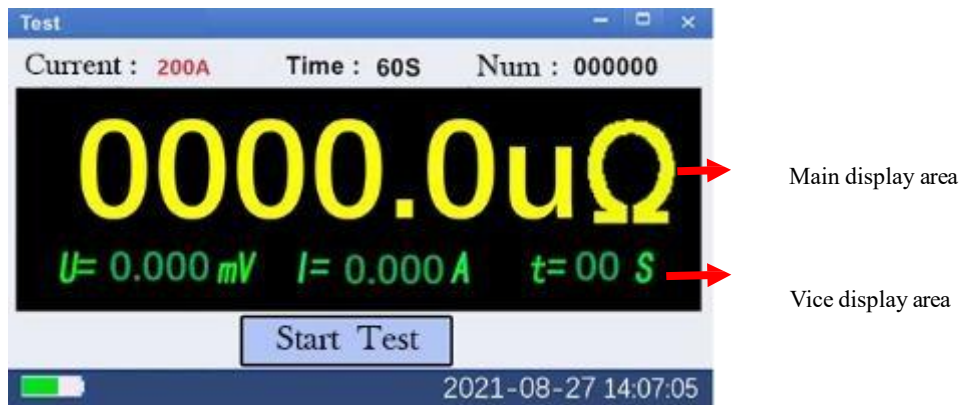
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### 6.3 Operation

After all test wires are connected, power on the instrument and enter the "main menu" interface after initialization, as shown in the picture below.



Select "Start test" and press "Ok" to enter the "Prepare test" interface, as shown below.



Current: Set the output power of this experiment to 50A/100A/150A/200A.

If the circuit resistance exceeds the range of the corresponding tap during the test, the current may not reach the set current.

Time: Set the test time of this experiment, 50A / 100A can choose "fast" or "10 / 20 / 30 / 40 / 50 / 60 seconds", 150A/200A can choose "fast" or "5 seconds" test can press "Cancel" to stop the test at any time.

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Number: Set the sample number of this experiment

Main display area: display the resistance value of the measured object.

Vice display area: display the voltage value, current value and test time of the tested product.

"Test Results" is shown below. Press left and right to move the cursor, and press OK to perform the selected operation.



In the testing process, if the instrument has detected the fault of poor contact with the test line, the fault prompt box will pop up to alarm and stop the measurement.

If the instrument detects that the internal temperature is too high, the fan will be automatically turned on for cooling, and the fan will be automatically turned off after the temperature drops.



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Continue measurement: Continue the resistance measurement with the current setting.

Print data: Print the current test results by connecting to an external printer.

Save data: Save the current test results to the local machine. On the Main menu interface, select "Save Query" and press "Ok" to enter the "Save Records" interface, as shown in the following figure.

Usb flash drive storage: The local storage content is saved to an external USB flash drive.

#### 6.4 Printer Instructions

Before using the printing function, connect the external printer first. After the printer is powered on, the indicator light is on when it is normal and blinks when it is short of paper.

Printer paper change: buckle out the rotating wrench, open the paper bin cover; Load the printer paper. And pull out a section (more than a bit of tearing tooth), pay attention to the paper neatly, the direction of the paper is the liquid side (smooth surface) upward; Close the paper bin cover, press the paper axis of the print head back to the print head with a little force after leveling the printing paper, and push the rotating wrench into the reset.

### VII. **Notes**

- 7.1 Read this manual carefully before using the instrument.
- 7.2 The operator of the instrument shall have common knowledge of general electrical equipment or instruments.
- 7.3 The instrument can be used inside and outside, but should avoid rain, corrosive gas, dust too thick, high temperature, direct sunlight and other places.
- 7.4 The maintenance, care and adjustment of the instrument shall be carried out by professional personnel.
- 7.5 Do not move the test clip or power supply line during the test.
- 7.6 In the test process, when the instrument output current, do not remove the test line, in order to avoid accidents.
- 7.7 When using high current test, the instrument will heat up, so stop for a while and test again.

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