

What is a power meter? Structure and use of electric meters

Our article will help you understand what an electric meter is, how it is made and how it works.

Electric gauges are widely used in many areas of life as well as production. So **what is a power meter? What is the structure and use of electricity meters**? Read TipsMake.com's article to find answers to these questions!

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What is a power meter?

Electricity meter is called with many different names such as multimeter, multi-function power meter, . This is an electrical measuring tool with many functions, specialized to check and determine parameters. of DC or alternating current, including: Current, voltage, capacitance, resistance, frequency, diode measurement, .

The multimeter is divided into two main categories: multimeter and digital multimeter.

Electrical meter: It is the first series of electric meters, usually measuring only some basic parameters such as current, voltage and resistance. The measurement results will be displayed using needles on an arc measurement.



Needle power meter

Electronic multimeter: This is the most commonly used electric meter, operating by the same power as the battery. The measurement results are displayed on a digital liquid crystal display. The electronic multimeter is equipped with more features than the electric needle meter.



Structure of electric meter

1. Structure of multimeter

1. External structure: Indicating needle, graduated gauge, static zero point screw adjustment, pure AC voltage probe, positive or semiconductor positive P, general Com probe or N negative semiconductor, front cover indicator face, glass face, back cover, 0? adjustment button (0? ADJ), scale selection switch, alternating current probe.
2. Internal circuit: Measurement plug (OUTPUT and COM), display block consists of M, power block, thermal compensation resistor system, protection block and measuring block.

2. Structure of digital multimeter with digital display

An electronic multimeter is usually composed of the following components: measurement result stop button, power power button, digital display screen, small current probe, large current probe, general probe COM, resistor, voltage probe, measuring the gain of Transistor switch, electronic circuit, .

Note:Not all electric meters have a structure that includes all of the above components. Some devices may have less or more depending on the manufacturer, each version.

Uses of electricity meters

What is electricity meter used for? They are often used to check and determine the parameters of electric currents, namely:

1. Uses of needle power gauges

The universal multimeter has 3 main uses: measuring voltage, measuring resistance and measuring current intensity.

2. The use of digital power meter

In addition to the three basic functions of measuring voltage, resistance measurement, measuring the current, the electronic multimeter is also equipped with additional features such as:

1. Check circuit connection
2. Equipped with power amplifiers that allow the user to measure the voltage, measure the small current when the resistor is large.
3. Measuring inductance of capacitors and capacitance of capacitors, useful when checking and installing electrical circuits.
4. Check diodes and transistors.
5. Support for temperature measurement by thermocouples.
6. Measuring medium frequency, amplifying sound, thereby adjusting the circuit of the radio.
7. Oscilloscope for low frequency.
8. Phone test kit, automotive circuit checker kit.

9. Keep measurement data.

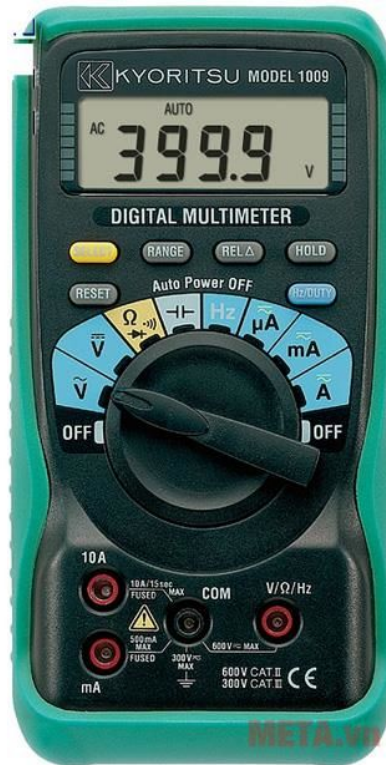


Specialized electric meter for checking and measuring electric current parameters

Which meter is good?

1. Universal power meter Kyoritsu 1009

Kyoritsu 1009 electronic multimeter has a compact, medium-sized design, which brings comfort to use. The device is manufactured on modern Japanese technology lines with accurate measuring capabilities. The 4000-point display makes it easy for users to read the results. Kyoritsu 1009 features automatic measurement and manual measurement. After 30 minutes of inactivity, the device will automatically power off to save battery power. **Reference price: 1,040,000 VND.**



Electric meter Kyoritsu 1009

2. Pocket watch Hioki 3244-60

Hioki 3244-60 is a versatile pocket watch that is designed to be very compact with a weight of only 60g, making it easy to carry. The power meter case is made of good-strength rubber, which can minimize damage in case of falling. Hioki 3244-60 is equipped with a hard plastic box to protect the gold-plated machine and a rod 15mm long. Wide-screen LCD display, displaying measurement parameters accurately and clearly. In particular, the power meter also features overload protection to 500V for resistors and currents. **Reference price: VND 1,250,000.**



Pocket watch Hioki 3244-60

We hope that our article will help you understand what an electric meter is, as well as the structure and utility of a power meter. Visit META.vn for advice and order all kinds of cheap and quality multimeter watches.

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