

## MS480C Milliohm Meter



### Contact us

**Mikrosize Precision Instrument Co.,Ltd**

A-4035 RuiFeng Business Expo, Wuhu City, China , 241000.

Web: [www.mikrosize.com](http://www.mikrosize.com)

Email: [mikrosize@mikrosize.com](mailto:mikrosize@mikrosize.com)



## Feature And Application

The MS480C milliohm meter is an instrument that uses a stable constant current source and a precise digital bridge to measure resistances through four-wire methods. It can accurately measure resistances above 0.01mΩ, various conductors, electrical heating elements, and contact resistances of welding points, etc. This instrument features portability, wide measurement range, backlight display, and other functions. The entire machine is elegant, high-end, and stable in performance. When paired with a shoulder strap, it enables two-handed operation and is suitable for detecting contact resistances in power resistors, motor coils, transformers, circuit boards, cables, antennas, telecommunications equipment, electromechanical equipment, power facilities, and other related applications.

### Product Feature

- Using a constant current source and a precise digital bridge, four-wire measurement can accurately measure resistances above 0.01 mΩ. It is applicable for various conductors and contact resistance detection.
- It features portability and a wide measurement range, with backlight display. It comes with a shoulder strap for convenient two-handed operation, and is suitable for contact resistance detection in various scenarios.
- It has various function keys such as power switch and range selection. The LCD display is clear. The zero adjustment knob ensures zero value correction before measurement.
- Three-and-a-half-inch LCD display, sampling rate approximately 3 times per second, low battery indication, suitable for a wide range of operating and storage environments.
- Multiple measurement ranges are available. Different ranges have different accuracy and resolution. The measurement accuracy is clearly guaranteed and the calibration period lasts up to one year.
- Equipped with data retention and backlight functions, there are standardized instructions for preheating and other operations before use. The troubleshooting methods are simple and easy to follow.



## Feature And Application



### Product Application

- Suitable for power resistance testing, it can accurately measure the contact resistance. With stable performance and precise measurement capabilities, it meets the testing requirements.
- It can be used for the contact resistance detection of motor coils and transformers. The four-wire measurement method ensures the accuracy of the measurement on such components.
- It can detect the contact resistance of circuit boards and cables. Its lightweight feature makes it more flexible and convenient to use in these scenarios.
- It can meet the requirements for detecting the contact resistance of mechanical and electrical equipment, and the backlight display function enables clear reading of data even in areas with insufficient light such as inside the equipment.

## Product Details



- 1. Power/Range Selection Switch**    **2. LCD Monitor**    **3. Black Test Lead Input Socket**  
**4. Red Test Wire Input Socket**    **5. Zero Adjustment Knob**    **6. Backlight Button**  
**7. Reading Retention Button**    **8. Power Indicator light**



- 1. Battery**                                    **2. Battery Compartment**                                    **3. Battery Cover**

## Product Details

### Measurement Function



- Multi-range coverage: 20mΩ to 2kΩ. suitable for measuring resistances ranging from milliohms to kilohms, meeting the detection requirements for different conductors, components, and contact resistances.
- Different ranges correspond to different levels of accuracy and resolution. for example, the 20mΩ range has an accuracy of  $\pm(1.0\% \text{ reading} + 3)$ , while the 200mΩ range is  $\pm(0.5\% \text{ reading} + 3)$ . This ensures the accuracy of measurements in all ranges.;
- The range selection is operated conveniently through a switch. after each switch, the zero point can be reset, ensuring the accuracy of the measurement values within the selected range and adapting to various scenarios.



- Pressing the "HOLD" button will lock the current reading and display the "HOLD" symbol, which is convenient for data recording. - Press it again to cancel, and the operation is simple and efficient, thereby improving the measurement efficiency.
- In complex measurement scenarios, it can accurately fix the instantaneous reading, avoiding errors in recording due to changes in line of sight or data. This ensures the accuracy of the data.

## Product Details

### Rich in Functions



- Pressing the "\*" key can turn on or off the backlight. When the light is insufficient, it can illuminate the LCD screen to ensure clear reading of the measurement data and enhance the usability in various environments.
- The backlight function is suitable for various working scenarios, especially in environments with dim lighting such as inside mechanical equipment or in corners of power facilities, ensuring clear readings and reducing visual errors.
- Turn on or off the backlight as needed, which can not only meet the lighting requirements but also avoid unnecessary power consumption. Combined with the low battery indicator, it can extend the battery usage time.

- When powered by an external 9V DC adapter, the internal battery will be disconnected. This design is suitable for long-term continuous measurement, avoiding the frequent replacement of batteries and ensuring the continuity of the operation. Section 6: 1.5V "AA" battery-powered mode, making the instrument more portable. No external wiring is required, suitable for mobile scenarios or use in environments without an external power source. The two power supply modes can be flexibly switched. The external power supply is suitable for fixed-site operations, while the battery mode is suitable for outdoor or mobile detection, meeting the power demands of different scenarios.



# Technical Specification

<b>Name</b>	Milliohm Meter
<b>Display</b>	Three and a half-digit liquid crystal display, maximum reading "1999"
<b>Sampling Rate</b>	About 3 times per second
<b>Additional Temperature Coefficient</b>	0.15 X specified accuracy/°C (<18°C or >28°C)
<b>Altitude</b>	Less than 2000 meters
<b>Operating Environment</b>	Indoor use, pollution level 2
<b>Operating Environment</b>	-15°C to 55°C, relative humidity < 75%RH
<b>Storage Environment</b>	-40°C to 60°C, relative humidity < 90%RH
<b>Power Supply</b>	Section 6: 1.5V "AA" battery or external DC 9V adapter power supply
<b>Power Consumption</b>	120mA
<b>Fuse</b>	150mA/60V Self-Recovering Fuse 150mA/60V Self-Recovering Fuse
<b>Dimensions Of The Shape</b>	176(L)x116(W)x63(D)mm
<b>Weight</b>	580g (including battery)

## Range Technical Parameters

Range	Precision	Resolution	Test Current
20mΩ	±(1.0% reading+3)	0.01mΩ	Approximately 100mA
200mΩ	±(0.5% reading+3)	0.1mΩ	Approximately 50mA
2Ω		1mΩ	
20Ω		10mΩ	
200Ω		100mΩ	
2KΩ		1Ω	

## Standard Delivery

Name	Qty	Photo
MS480C Digital Milliohm Meter	1pc	
Four-wire test probe	1pc	
User Manual	1pc	
Certificate of Conformity	1pc	
Back strap	1pc	
5# Battery (1.5V)	6pcs	