



# iSurfa-100

## Roughness Tester



Video



### 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)



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

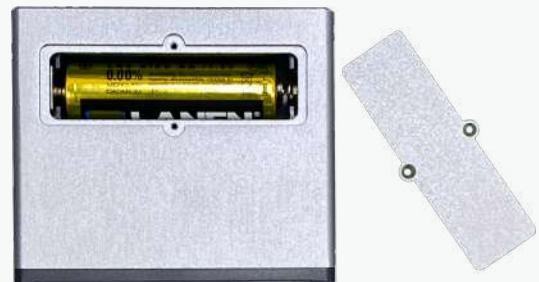
## Product Features and Measurable Workpiece Types

### Product Features

- The exterior is designed by drawing aluminium die, which is durable and has remarkable anti-electromagnetic interference ability, and conforms to the new trend of design today.
- This is a pocket-sized instrument with an integrated sensor and main body.
- Low-power consumption ARM processor is used for data processing and calculation, which greatly improves the speed of measurement and calculation.
- The display LCD adopts 1.14 inch IPS TFT, with high brightness and no visual dead angle, which is suitable for various occasions
- With a AA battery, it can work for a long time
- Equipped with Bluetooth adapter, it can communicate with Bluetooth devices such as smart phones
- 500 groups of measurement data can be stored
- Monitor and display the power of battery in real time, timely remind users to charge and with charging progress prompt.
- The automatic shutdown function and low-power software and hardware design make the instrument work for a long time, which is suitable for all kinds of field use.
- The sensor probe has a protective door, which effectively protects the sensor probe and ensures the accuracy of measurement.

### Measurable Workpiece Types

It can be widely used for the detection of various metal and non-metal processed surfaces.



# Instrument Interface



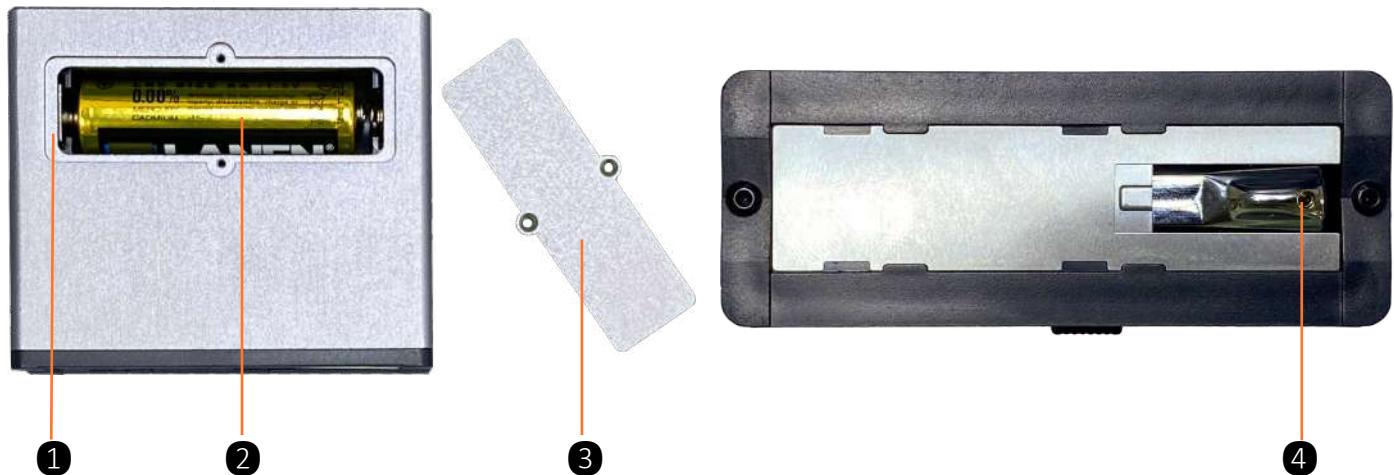
**1. Sampling Length Toggle Key / Up Arrow Key**

**2. Roughness Parameter Toggle Key / Down Arrow Key**

**3. Display Screen**

**4. Power/Measurement Key**

**5. Probe Compartment Door Switch**



**1. Battery Compartment**

**2. AA Batteries (Size 5)**

**3. Battery Compartment Cover**

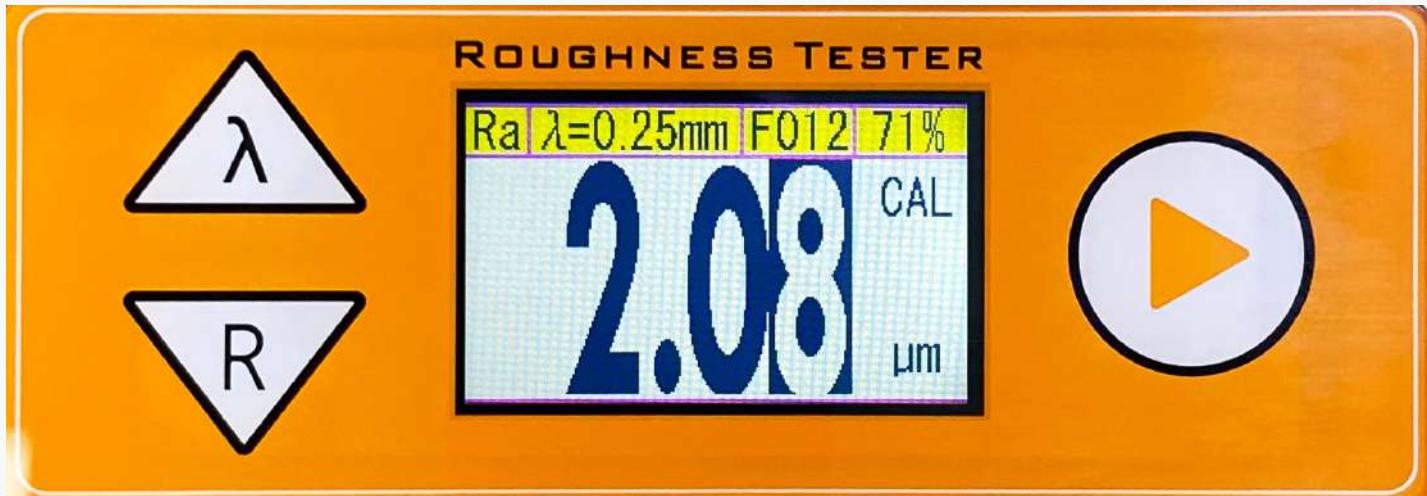
**4. Probe**

# Display Interface



- 1.Roughness Parameter
- 2.Sampling Length
- 3.Measured Value
- 4.Measurement Parameter Storage Number
- 5.Battery Level Display Percentage
- 6.Measurement Unit (Metric/Inch)

## Calibration Interface

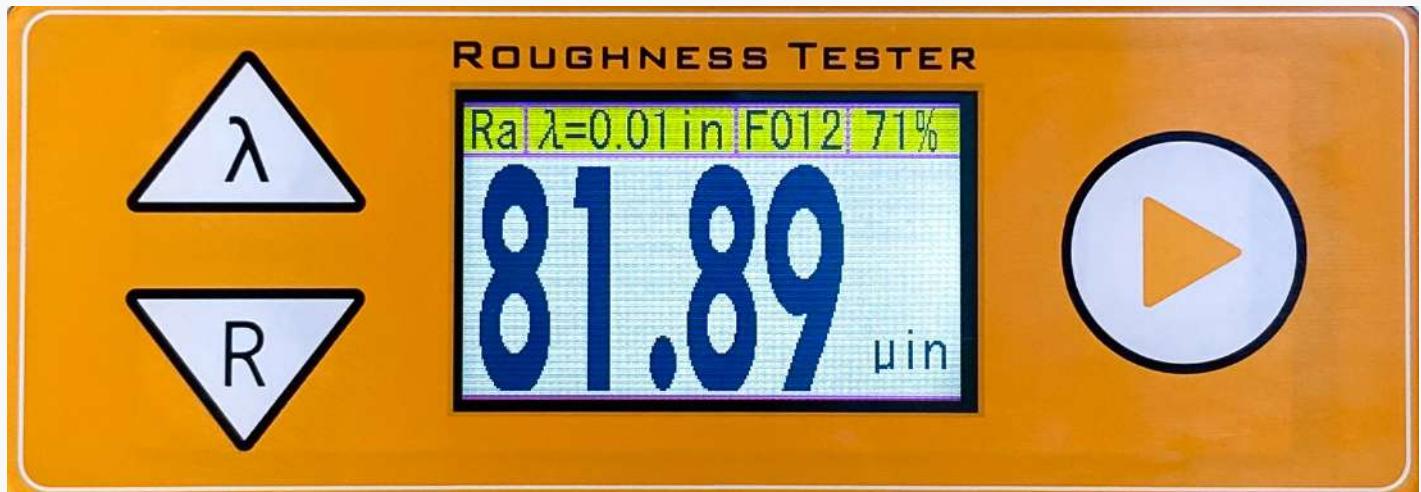


### Supports manual calibration function

After measurement on a standard test block, press and hold the "R" button for 3 seconds. Once "CAL" appears, the calibration interface will be entered, allowing for manual numerical adjustment. Press the "▶" button to switch positions. After calibration is complete, press and hold "R" to save and exit.



## Unit Switching Interface



Press and hold the "λ" button to switch between metric and imperial units.



## Data Viewing Interface

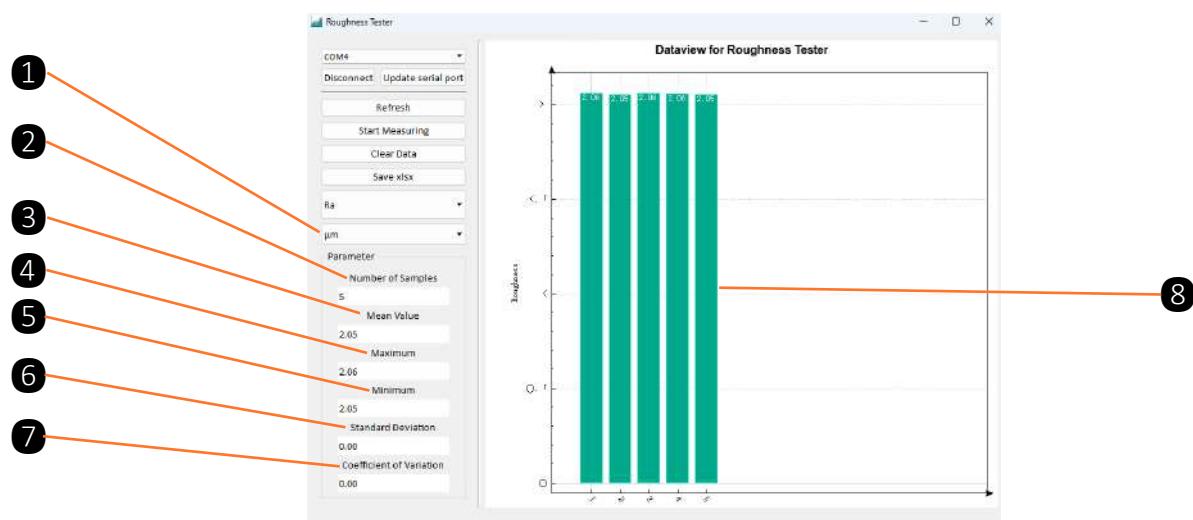


The instrument supports viewing measurement data directly on the device. To access the data storage, simultaneously press and hold the " $\lambda$ " and "R" buttons. Once "MEN" appears, you can navigate through the instrument's storage, which holds up to 500 data entries. To delete all stored data, press and hold the "▶" button for a prolonged period.

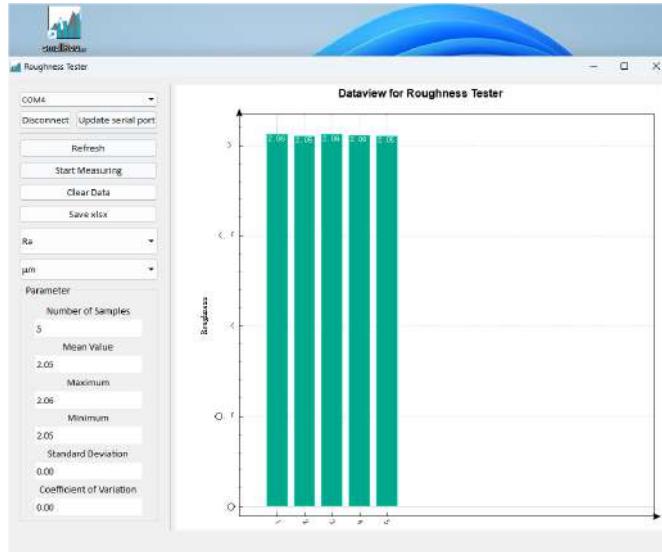
# Software Interface



1. Port Name   2. Connect/Disconnect   3. Update Serial Port   4. Refresh  
 5. Start Measurement   6. Clear Data   7. Save Data as XLSX  
 8. Roughness Parameter Toggle

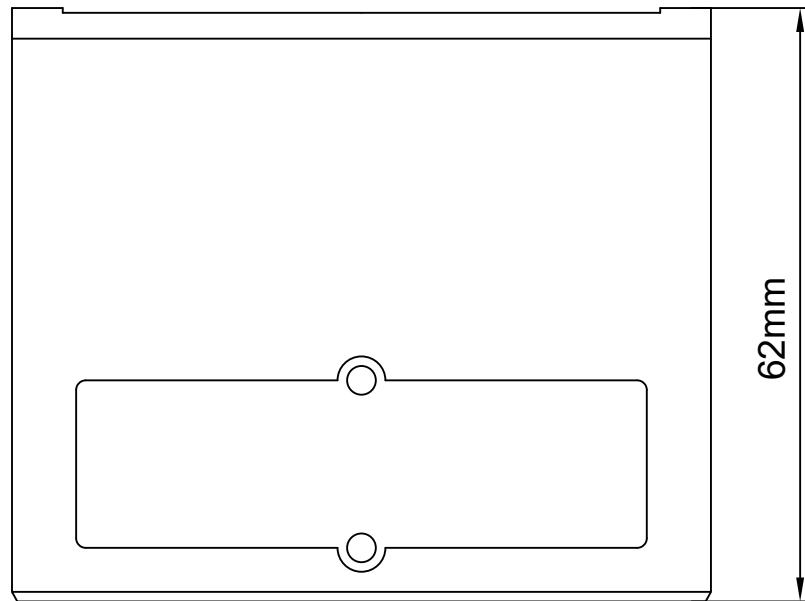
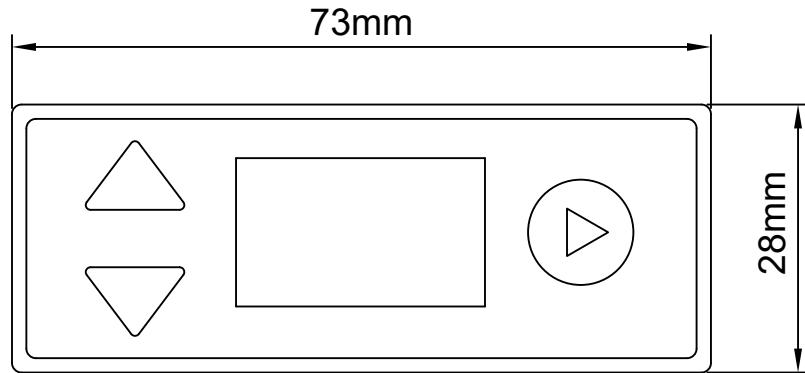


## Recommended Sampling Length Table



The instrument can be controlled to start measurement through software on a computer, and the roughness measurement data can also be viewed on the software. Charts are directly displayed, providing a visual and convenient way for users to review the data.

## Instrument Dimension





# Technical Parameters

<b>Measuring Range(μm )</b>	Ra,Rq: 0.05~10.0 Rz,Rt: 0.1~50
<b>Parameter(μm )</b>	Ra,Rz,Rq,Rt
<b>Travel Length(mm)</b>	5.6
<b>Sample Length(mm)</b>	0.25,0.80,2.50
<b>Evaluation Length(mm)</b>	1.25,4.0
<b>Display Error</b>	±10%
<b>Display Variability</b>	<12%
<b>Stylus Radius and Angle</b>	90°(+5°,-10°)
<b>Stylus Radius</b>	10μm±1 μm
<b>Measuring Force of Probe</b>	≤0.016N
<b>Force Change Rate</b>	≤800N/m
<b>Sensor Guide Pressure</b>	≤0.5N
<b>Battery</b>	One 1.5V AA dry battery
<b>Dimensions</b>	73mm×28mm×62mm
<b>Weight</b>	220g
<b>Working Environment Conditions</b>	Temperature: -20°C~40°C Relative humidity: < 90% No vibration and corrosive medium around



## Standard Delivery

Items	Qty	
Main Unit	1	
Calibration Block	1	 A black rectangular calibration block with a small, square, reflective metal plate in the center. The text "PRECISION STANDARD" and "REFERENCE 2.08µm" is printed vertically along the right edge of the block.
Operating Manual	1	
Certificate	1	
Guarantee Card	1	
Suitcase	1	
Screwdriver	1	 A clear plastic bag containing several small, dark blue screwdriver bits, positioned next to a blue-handled screwdriver.



## Optional Delivery

Items	Qty	
Bluetooth Adapter	1	A small, clear plastic USB dongle with a green printed circuit board (PCB) inside. The PCB has several electronic components, including a central integrated circuit (IC) and various resistors and capacitors. The text "H2-0001 (C1)" is printed on the top left of the PCB, and "USB DONGLE" is printed on the right side.

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