

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

Email: mikrosize@mikrosize.com



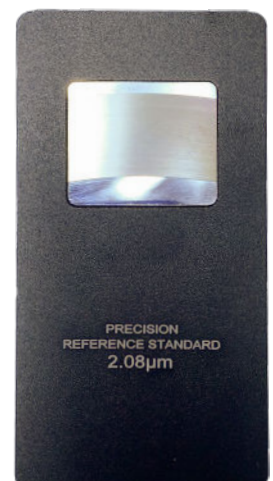
Feature and Application

Product Feature

- 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.

Product Application

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



Product Details



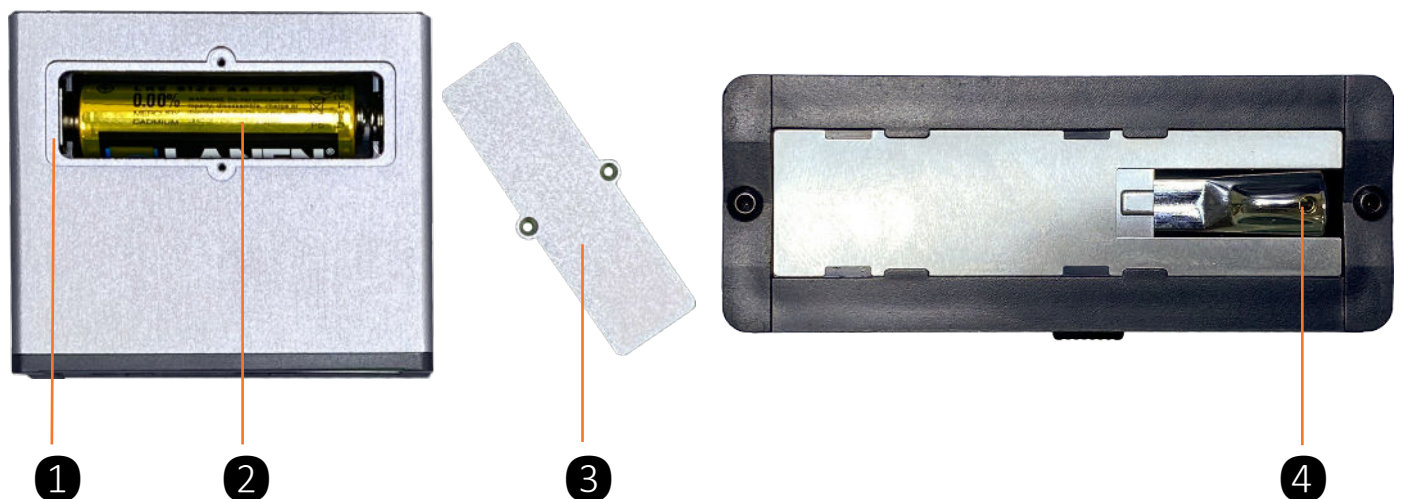
1.Sampling Length Toggle Key / Up Arrow Key

2.Roughness Parameter Toggle Key / Down Arrow Key

3.Display Screen

4.Power/Measurement Key

5.Probe Compartment Door Switch



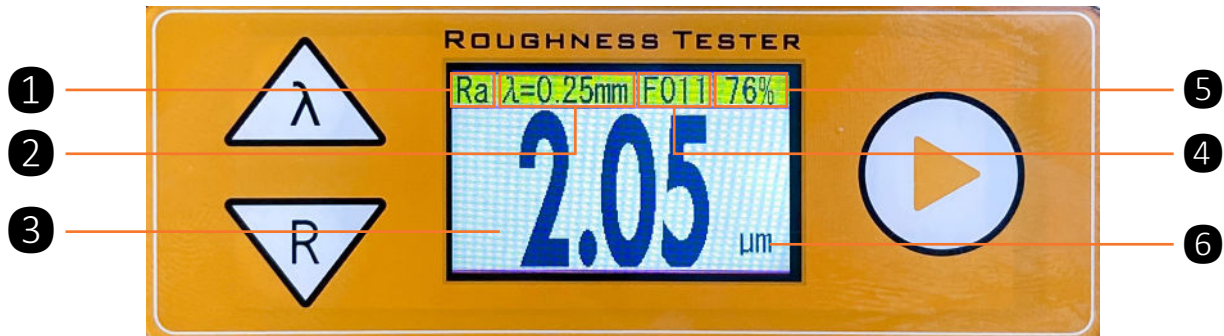
1.Battery Compartment

2.AA Batteries (Size 5)

3.Battery Compartment Cover

4.Probe

Operation Interface



1. Roughness Parameter

2. Sampling Length

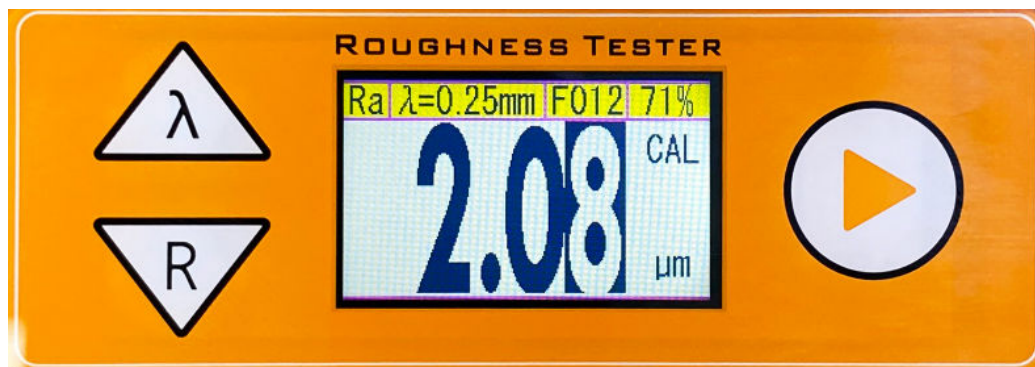
3. Measured Value

4. Measurement Parameter Storage Number

5. Battery Level Display Percentage

6. Measurement Unit (Metric/Inch)

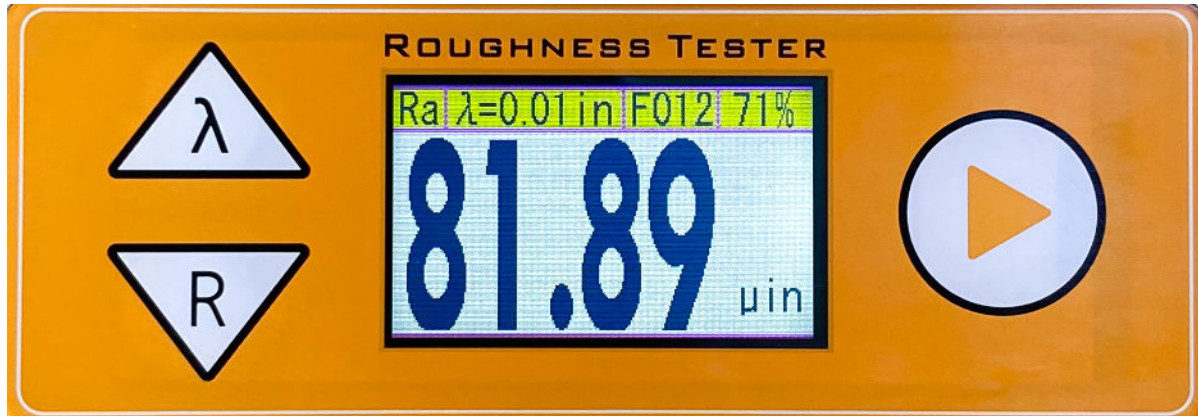
Supports Manual Calibration Function



- 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.

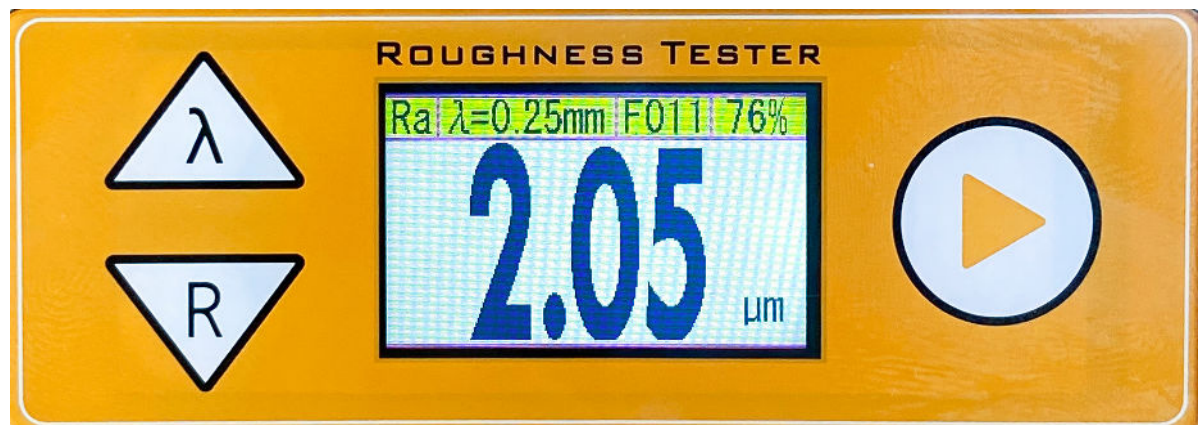
Operation Interface

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 "λ" 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.

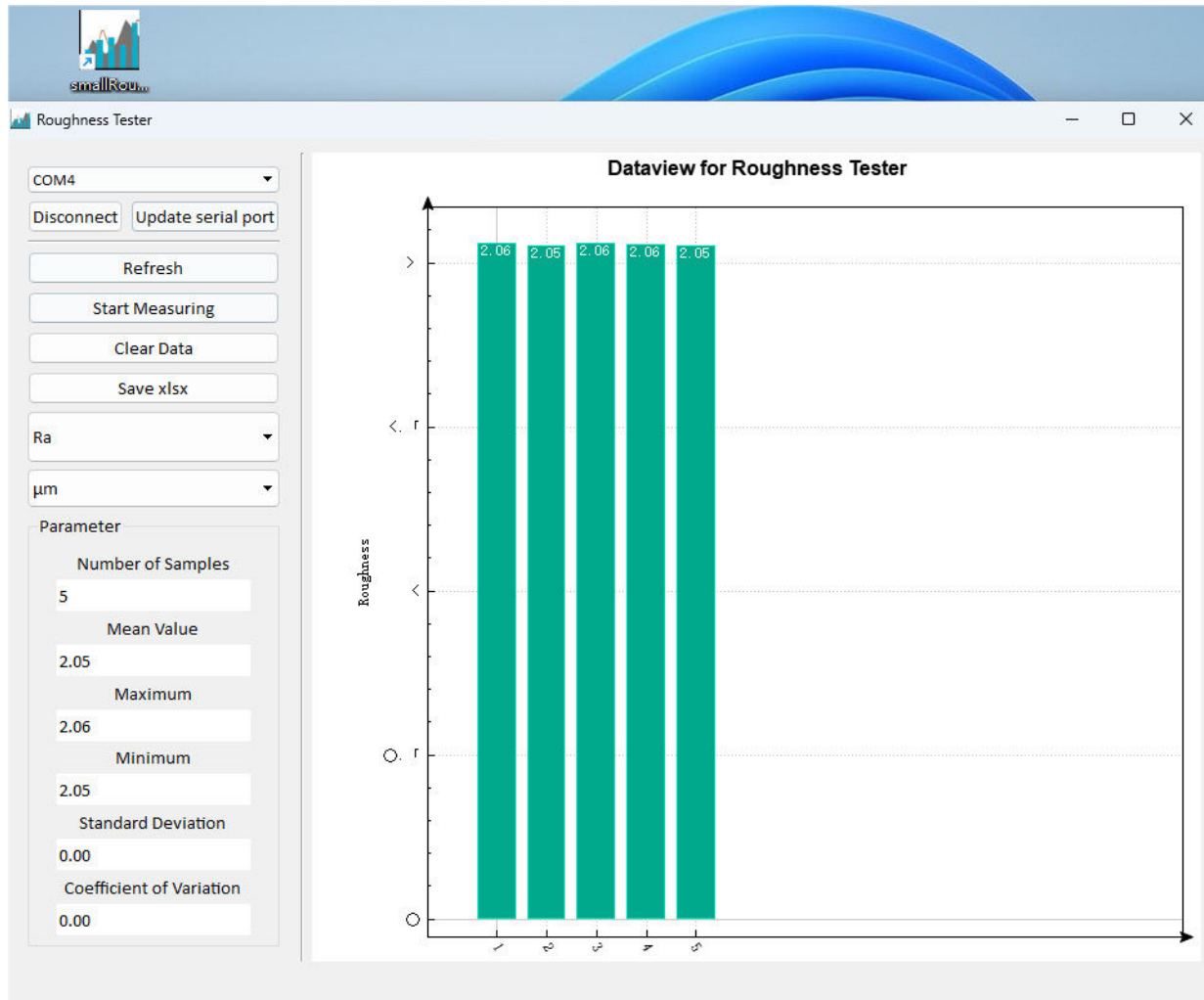
Software Interface



- | | | | |
|-------------------------------------|--|-----------------------------|-------------------|
| 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 | 9.Roughness Parameter Unit Toggle | | |
| 10.Sample Quantity | 11.Average | 12.Maximum | 13.Minimum |
| 14.Standard Deviation | 15.Coefficient of Variation (Dispersion Degree) | | |
| 16.Data Chart | | | |

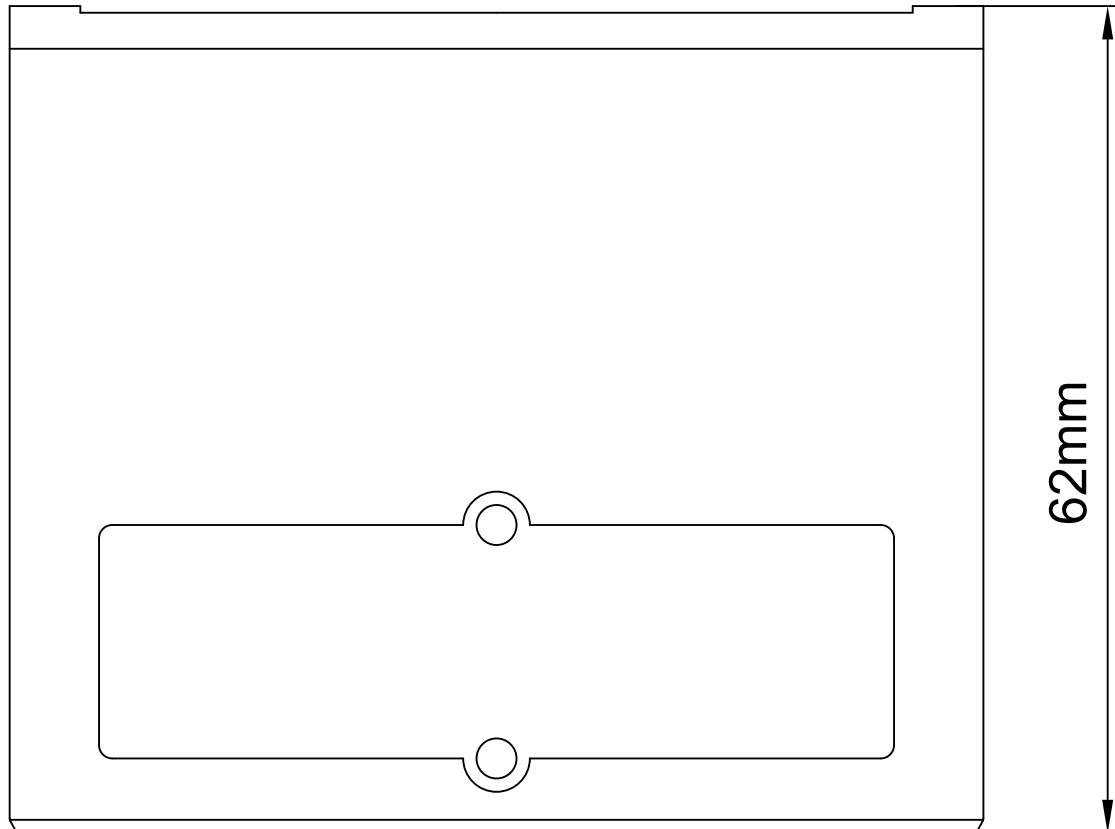
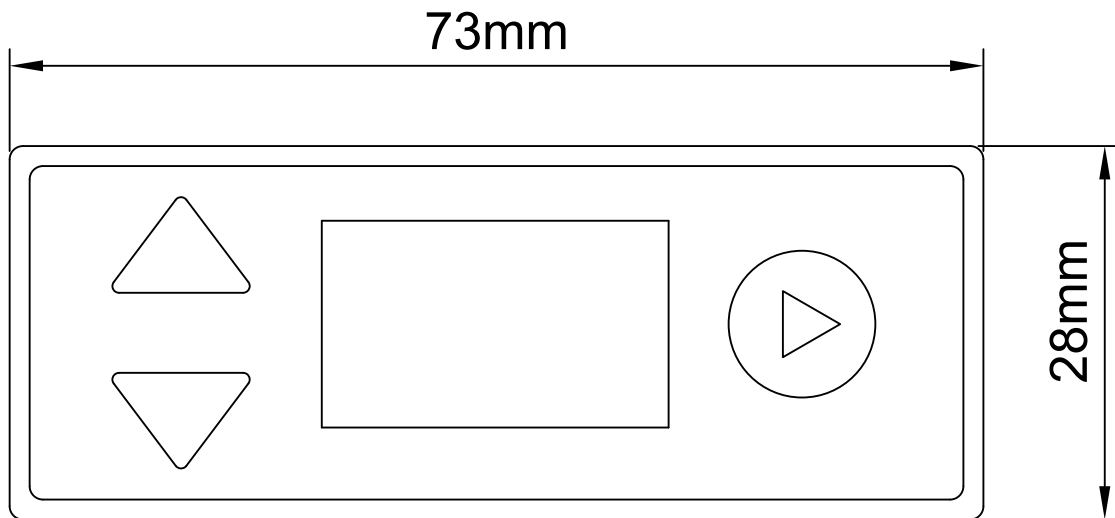
Software Interface

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 Specification

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

Standard Delivery

Name	Qty	Photo
Main Unit	1pc	
Calibration Block	1pc	
Suitcase	1pc	/
Screwdriver	1pc	
Operating Manual	1copy	
Certificate	1copy	
Guarantee Card	1copy	

Optional Delivery

Optional

Bluetooth Adapter



Mikrosize Precision Instrument Co.,Ltd

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

Tel: 0553-2836939 Fax:0553-2836938 Web: www.mikrosize.com

