Mikrosize®

iSurfa-220

Surface 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

- Multi-parameter measurement.
- High-precision inductive sensor.
- Four filtering modes: RC, PC-RC, GAUSS, D-P.
- Compatible with four standards: ISO, DIN, ANSI, JIS.
- LCD screen displays all parameters and graphics.
  Uses ARM processor for faster testing speeds.
- Built-in lithium-ion rechargeable battery and charging control circuit, with high capacity and no memory effect, allowing continuous operation for over 20 hours.
- Built-in Bluetooth communication module that can connect to Bluetooth printers in printing mode to print and save data content.
- Bluetooth communication module can switch to data transmission mode for wireless connection with Android data terminals such as mobile phones.
- Type-C USB port for charging and PC communication.
- Features automatic shutdown, memory function, and various prompt messages.
- Built-in smart reset circuit.

Product Application

- This instrument is suitable for production sites and can measure the surface roughness of various machined parts.

Product Details

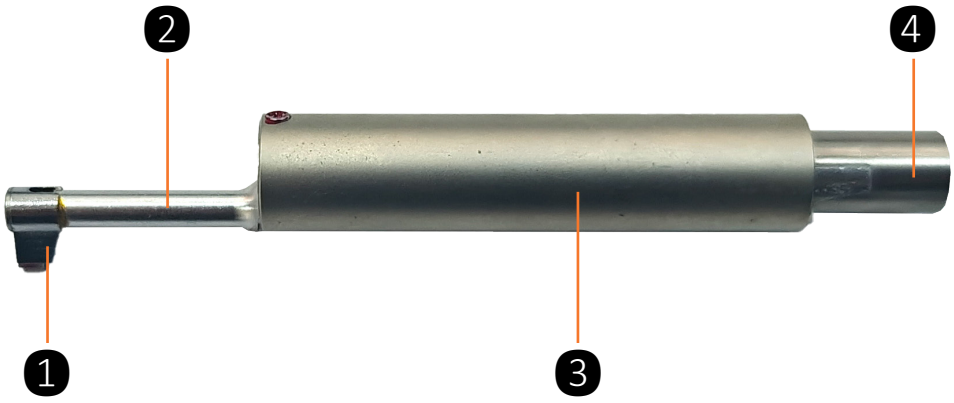
1.Standard Test Block **2.Sensor** **3.Display Screen**
4.Power Button/Waveform Display Button **5.Menu Button** **6.Up Button**
7.Measure/Enter Button **8.Move Right Button** **9.Down Button**
10.Move Left Button **11.Return Button**

Product Details

Instrument Interface

- 1.Charging/data transmission interface.
- 2.Installation holes for the lifting platform.

- 1.Connector

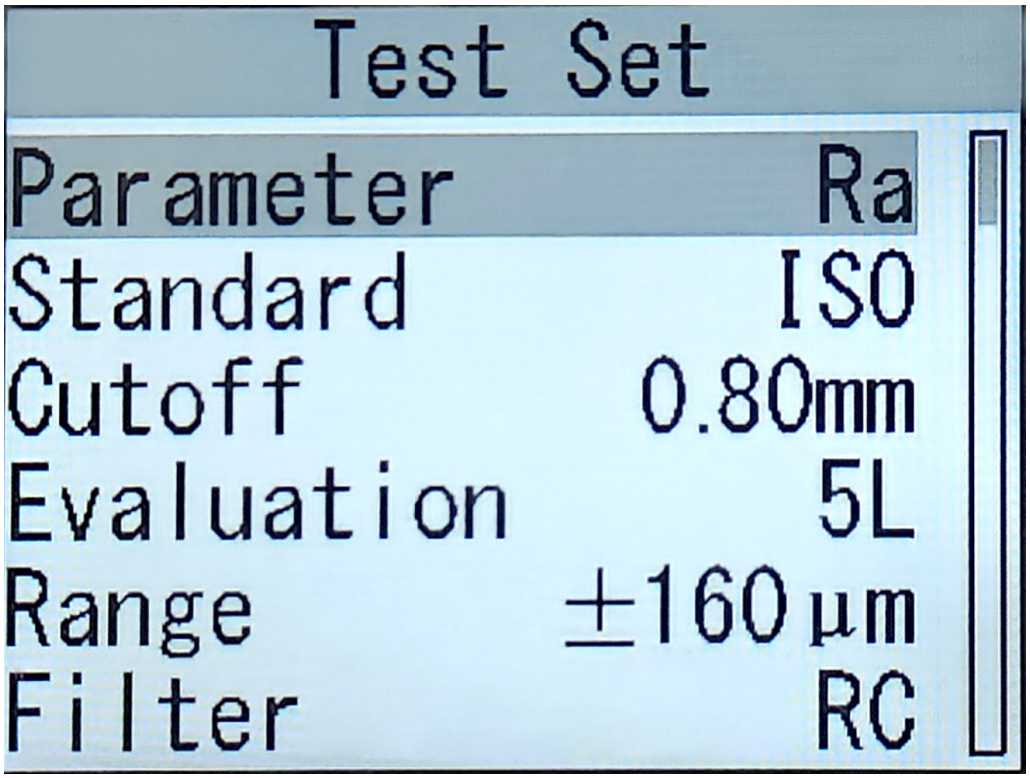


1.Probe **2.Protective Tube** **3.Main Body** **4.Connector**

- Installation: Hold the main body of the sensor, insert the sensor into the connector sleeve at the bottom of the instrument, and then gently push it to the end. Removal: Hold the main body of the sensor or the base of the protective tube, and slowly pull it outwards.

Operation Interface

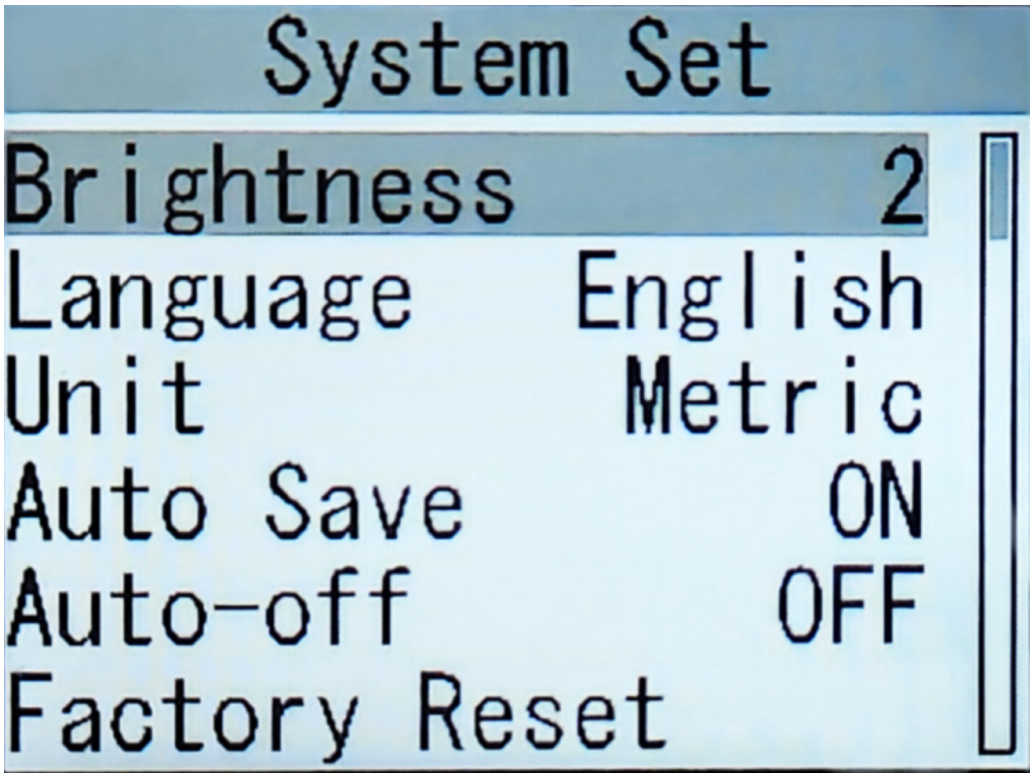
Measurement Settings



- Select parameters to display for the measuring status.
- Calculation Standards:ISO 4287; DIN 4768; JIS B601; ASME B46.1
- Sampling Lengths:0.8mm； 2.5mm； 0.25mm
- Evaluation Lengths:1 -5L
- Measuring Ranges:±40µm; ±80µm; ±160µm
- Filters:RC; PC-RC; GAUSS; D-P

Operation Interface

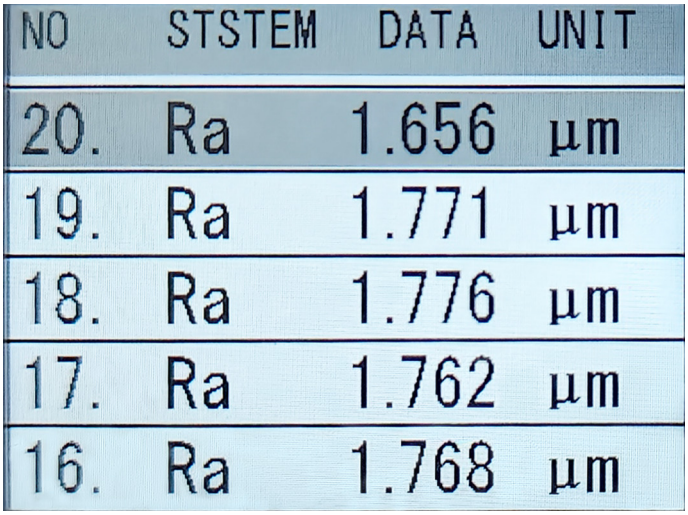
System Settings



- Adjust the liquid crystal brightness.
- Switch between two display languages: Chinese and English.
- Switch between two units: metric and imperial.
- Turn the auto-save function on and off.
- Set the auto-shutdown time.
- Restore factory settings.

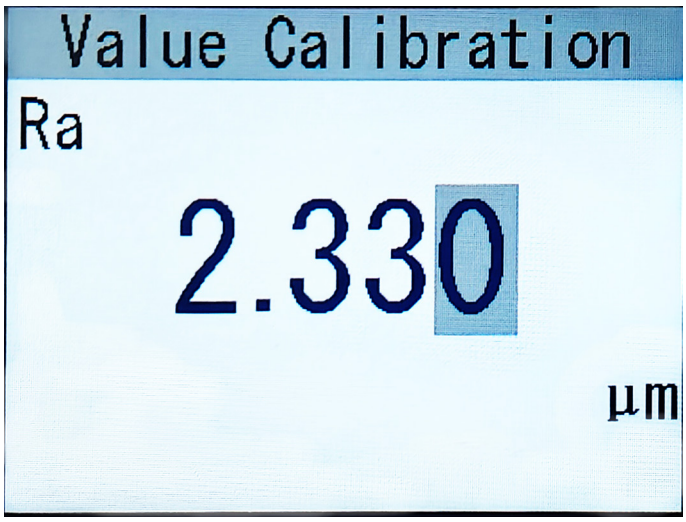
Operation Interface

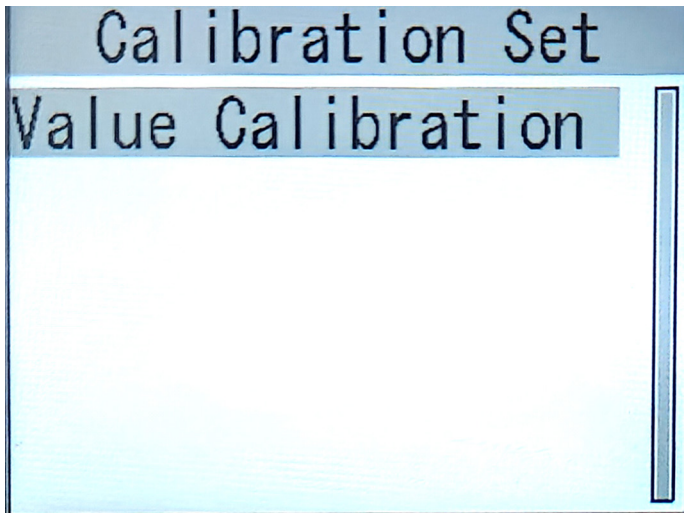
Storage Management



- Data storage interface; use the up/down keys to view different data, and press the menu key to delete data.
  After connecting the device to a printer, press the start key to print and output data.

Calibration Settings

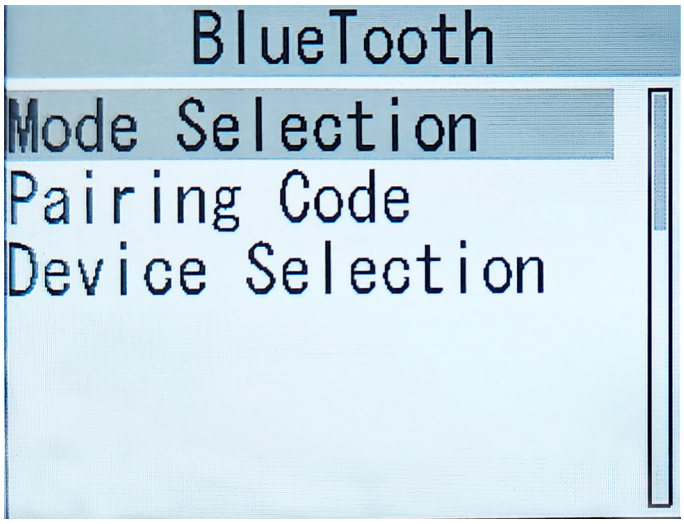


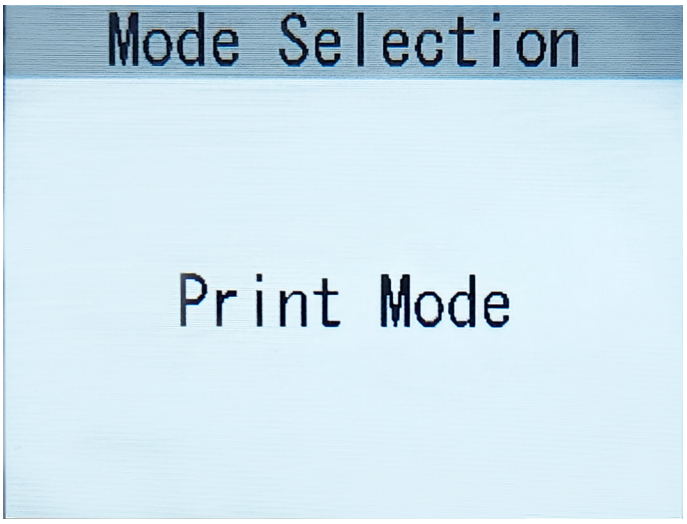


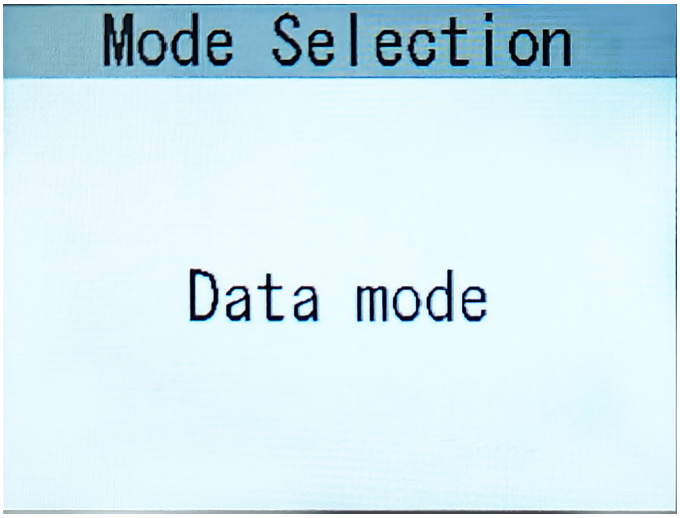
- Enter the calibration interface, adjust the values to match the standard test block, then measure the standard test block once. After the measurement is complete, the calibration is finished.

Operation Interface

Bluetooth Settings







- The device has a built - in Bluetooth module with two modes: printing and data transmission. It supports wireless printing and data transfer with mobile devices and PCs.
- Setting a pairing code boosts the device's compatibility with Bluetooth printers.

Mikrosize®

Technical Specification

Sensor	Measuring Principle	Inductive
	Measuring Range	320μm
	Probe Radius	5μm
	Probe Material	Diamond
	Probe Touch Force	4mN(0.4gf)
	Probe Angle	90°
	Longitudinal Radius Of Guide Head	45mm
Drive Parameters	Max Travel	17.5mm/0.7inch
	Drive Speed	Sample Length= 0.25mm Vt=0.5mm
		Sample Length= 0.8mm Vt=0.75mm/s
		Sample Length= 2.5mm Vt=1mm/s
		Returning Speed Vt=1.5mm/s
Indication Error		Less than 10%
Indication Variability		Less than 4%
Display Content	Menu	Measurement Settings, System Settings, Storage Management, Calibration Settings, Bluetooth Settings, And Product Information

Technical Specification

Display Content	**Parameters**	ISO、DIN、ANSI、JIS Four Standards Roughness Parameters	
	Graph	Filter Contour Graph And TP Curve	
	Reminder Information	Measurement , Menu Reminder, Error ,Battery Level, And Shutdown	
Contour And Filter	**Contour**	Filter	
	Filter Contour	RC	
		PC-RC	
		Gauss	
	Unfiltered Contour	D-P	
Cut Length/Sampling Length		0.25mm, 0.8mm, 2.5mm Optional	
Evaluation Length		(1~5)L Optional	
Roughness Parameters And Display Range		Parameters	Display Range
		Ra、Rq	0.005μm~32μm
		Rz、R3z、Ry、Rt、Rp、Rm、Rk、Rpk、Rvk	0.02μm~320μm
		Mr1、Mr2	0~100%

Technical Specification

Roughness Parameters And Display Range	S、Sm	1mm
	tp	0~100%
Measuring Range And Resolution	Measuring Range	Resolution
	±40μm	0.02μm
	±80μm	0.04μm
	±160μm	0.04μm
Power Supply	1 Lithium-ion Rechargeable Battery	
Work Environment	Temperature	0~40℃
	Humidity	<90%RH
Transportation And Storage Environment	Temperature	-40℃~60℃
	Humidity	<90%RH
Dimensions And Net Weight	156x55x46.5xmm, about 400g	
Type-C USB Cable	Type-C USB Cable	
Connecting To Printer	Bluetooth Connecting To The Printer, As Long As The Pairing Code Of The Roughness	

Standard Delivery

Name	Qty
Main Unit	1pc
Sensor	1set
Standard Block	1pc
Sensor Protection Cover	1pc
Instrument Case	1pc
Standard Charger (5V2A)	1pc
Data Cable	1pc
Documents	1set

Optional Delivery

Optional	Surface Sensor
	Ostiole Sensor
	Measurement Stage
	Groove Sensor
	Deep Groove Sensor
	Extension Pole
	Bluetooth Printer

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