



# VERTEX

## SURFACE ROUGHNESS TESTER



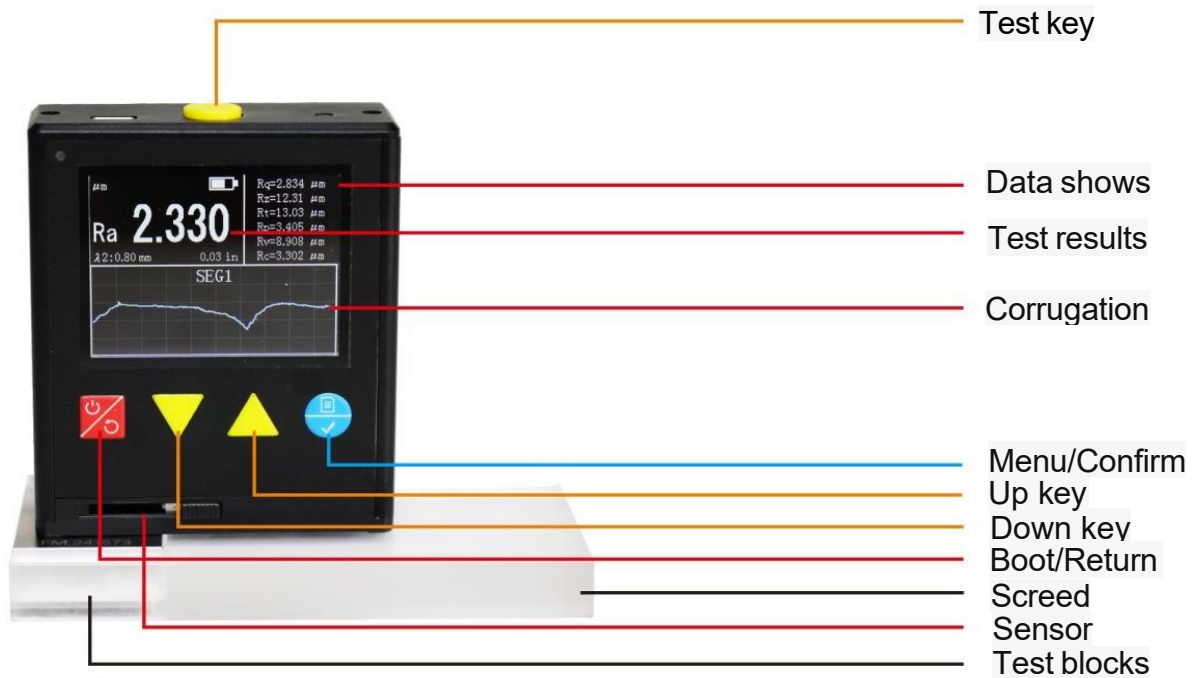
### INTRODUCTION:

The portable roughness tester is a new generation of portable surface roughness tester introduced by our company. It has the characteristics of high measurement accuracy, wide measurement range, simple operation, easy portability and stable operation. It can be widely used in the detection of various metal and non-metal processing surfaces. It is a pocket instrument integrated with the host computer of sensors, and can be used for measurements for long time. It has the characteristics of hand-held, and is more suitable for use in the production site.


### FEATURES:

- The exterior is designed by drawing aluminum die, which is durable and has remarkable anti-electromagnetic interference ability, and conforms to the new trend of design today.
- 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 2.4inch IPS TFT, with high brightness and no visual dead angle, which is suitable for various occasions.
- Built-in lithium-ion rechargeable battery and charge control circuit, high capacity, non-memory effect. It can work for a long time.
- 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 OPERATION:



## ❖ Turn On

Press and hold  for 1 second and then the instrument will turn on, automatically display the model, name and manufacturer information, and then enter the basic measurement state, as shown in Figure 1-1.

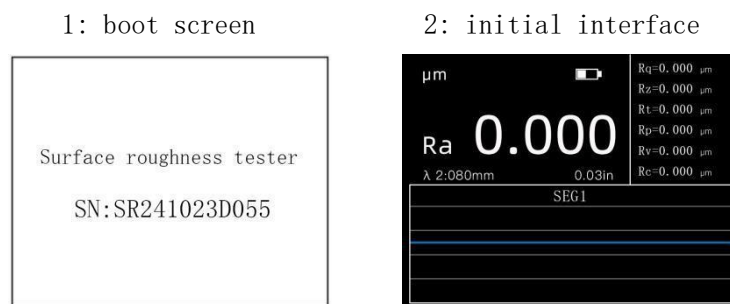




Figure 1-1 start-up process


## ❖ Main page

Press and hold  for 3 seconds to turn the instrument off.






Data measurement: Short press  to perform data measurement.

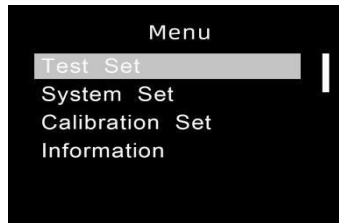
Waveform page switch: Short press  to cycle through waveform pages (SEG1- SEG4).

Waveform enlarge: Short press  to amplify the waveform.




Waveform reduce: Short press  for waveform reduction.

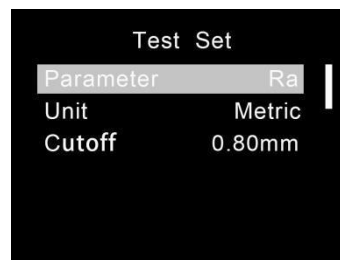
### ❖ Menu page

Under the main page, press and hold  to enter the menu page. After entering the menu page, you can press and hold   to select the option in the menu bar, and then press and hold  to enter the option page. Short press  to exit the menu page and return to the main page.






### ❖ Parameter Setting Page

The parameter setting page can set parameters, units, sampling length, etc. You can use short press   to select the corresponding option, and then use short press  to select the parameter.







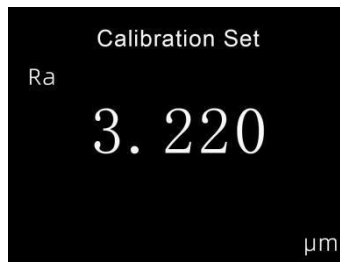
### ❖ System Setting Page

The system setting page can set the language, brightness, turn-off time, etc. You can use short press   to select the corresponding option, and then use short press  to select the parameter.



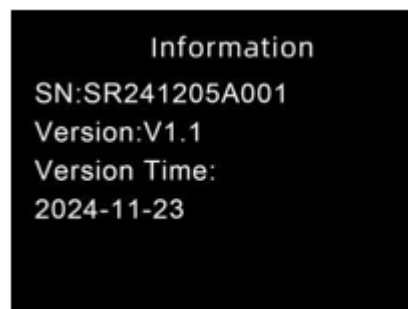
### ❖ Calibration Setting Page

The Calibration Setting Page can calibrate the measured data. When calibrating, press and hold  to modify the data position, then press and hold   to modify the data at the selected position. When the data modification is completed, press and hold  to calibrate the data, and wait for the data measurement to be completed. Then turn off the tester, the calibration results saved automatically.

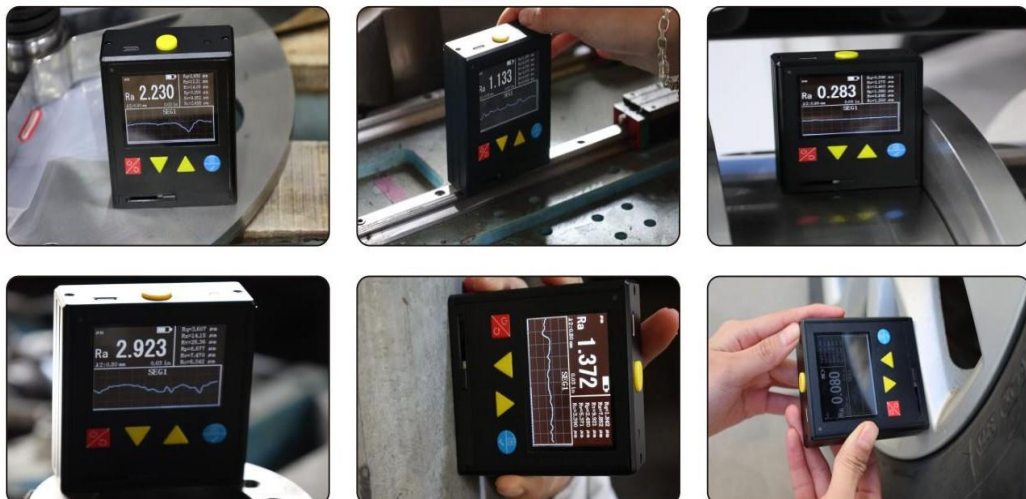


### ❖ Product Information Page

The Product information page displays information about the product.



### ❖ Wide Range Of Application



## TECHNICAL PARAMETERS:

Measurement parameters ( $\mu\text{m}$ )	Ra、Rz、Rq、Rt、Rp、Rv、Rc
Stroke length(mm)	5.6
Sampling length(mm)	0.25 , 0.80 , 2.50
Evaluation length(mm)	1.25 , 4.0
Measuring range ( $\mu\text{m}$ )	Ra、Rq: 0.05 ~ 10.0; Rz、Rt、Rp、Rv、Rc: 0.1 ~ 50
Indication error	$\pm 10\%$
Repeatability	$< 6\%$
Angle of sensor stylus tip	$90^{\circ} \begin{smallmatrix} +5^{\circ} \\ -10^{\circ} \end{smallmatrix}$
Tip arc radius	$10 \mu\text{m} \pm 1 \mu\text{m}$
Sensor guide head pressure	$\leq 0.5\text{N}$
Battery	Lithium-ion Rechargeable Battery
Size	73 mm $\times$ 28 mm $\times$ 62 mm
Weight	220g
Working environment conditions	Temperature: $-20^{\circ}\text{C} \sim 40^{\circ}\text{C}$ ; Relative humidity: $< 90\%$ , No vibration and corrosive medium around

## CONFIGURATION LIST:

Serial Number	Name	Quantity
1	Roughness Tester Host	1
2	Test Block	1
3	Manual	1
4	Certificate	1
5	Warranty Card	1
6	Charging Cable	1
7	Instrument Box	1



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Actual product may differ in color and appearance due to constant development.