Mikrosize®

iCoat-100

NEW Coating Thickness Gauge

Video

Contact us

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Product Advantages And Applications

The iCoat-100 NEW Coating Thickness Gauge is a portable instrument applicable to both iron and aluminum. It adopts the automatic conversion technology of magnetic induction and eddy current, can automatically identify various substrates and coatings, and can quickly, nondestructively and precisely measure the thickness of coatings, with a wide range of application fields.

Product Advantages

- The precision of touch measurement is good.
- No calibration is required, only zero adjustment is needed.
- Wide measuring range and high resolution.
- The measurement speed can reach 0.2 seconds per measurement.
- Integrated structure, small size and light weight.
- It can quickly and automatically identify magnetic and non-magnetic substrates.
- The instrument has the function of identifying iron powder putty layers and galvanized iron layers.
- This instrument is equipped with functions of automatic hibernation and shutdown to achieve power-saving.
- The wear resistance of the zirconia probe ensures the long-term effective use of the instrument.
- Adopting two thickness measurement methods, namely Hall effect and eddy current, it can nondestructively measure the thickness of non - magnetic coatings on magnetic metal substrates (such as steel, iron, alloys, and hard magnetic steel, etc.) (such as aluminum, chromium, copper, zinc, enamel, rubber, paint, powder, etc.) and the thickness of non - conductive coatings on non - magnetic metal substrates (such as copper, aluminum, zinc, tin, etc.) (such as enamel, rubber, paint, plastic, etc.).

Product Applications

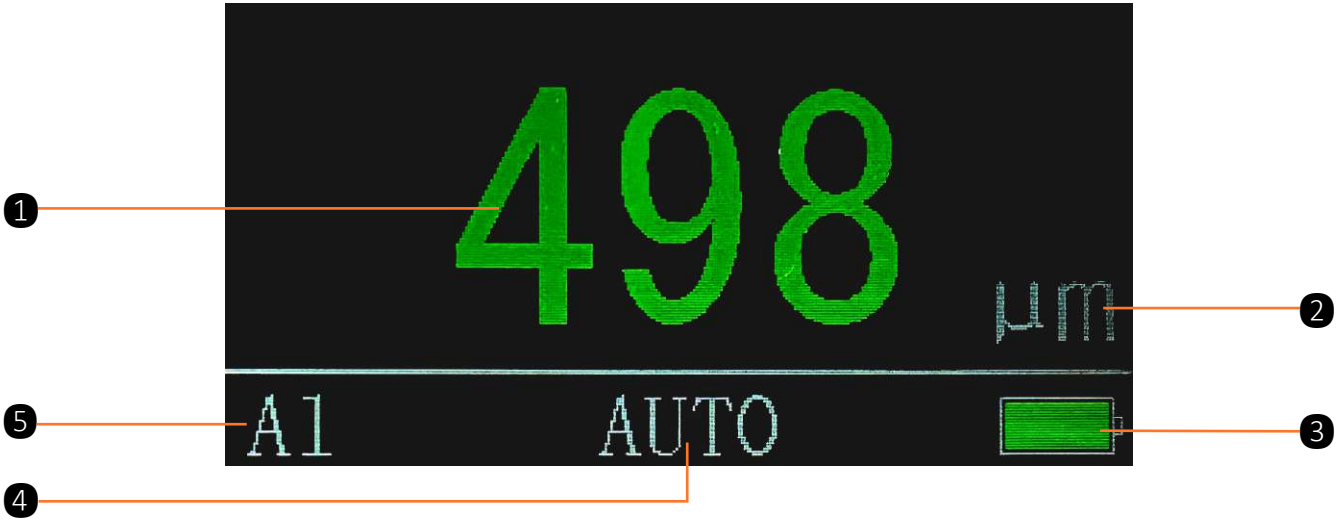
- It is applicable to fields such as manufacturing industry and metal processing industry, and is used for quickly, nondestructively and precisely measuring the thickness of coatings.
- It can be used in the laboratory to accurately detect the thickness of various coatings, ensuring the quality control of materials.
- It is a powerful tool for on - site engineering detection of coating thickness, with convenient operation and high measurement efficiency.
- In the chemical industry, it is used to detect the coating thickness of related products, contributing to the quality control in the production process.
- In the field of commodity inspection, this instrument can be used to conduct compliance inspections on the coating thickness of imported and exported products.

Product Structure

1.Display Screen	2.Keys	3.Probe	4.Wrist Rope

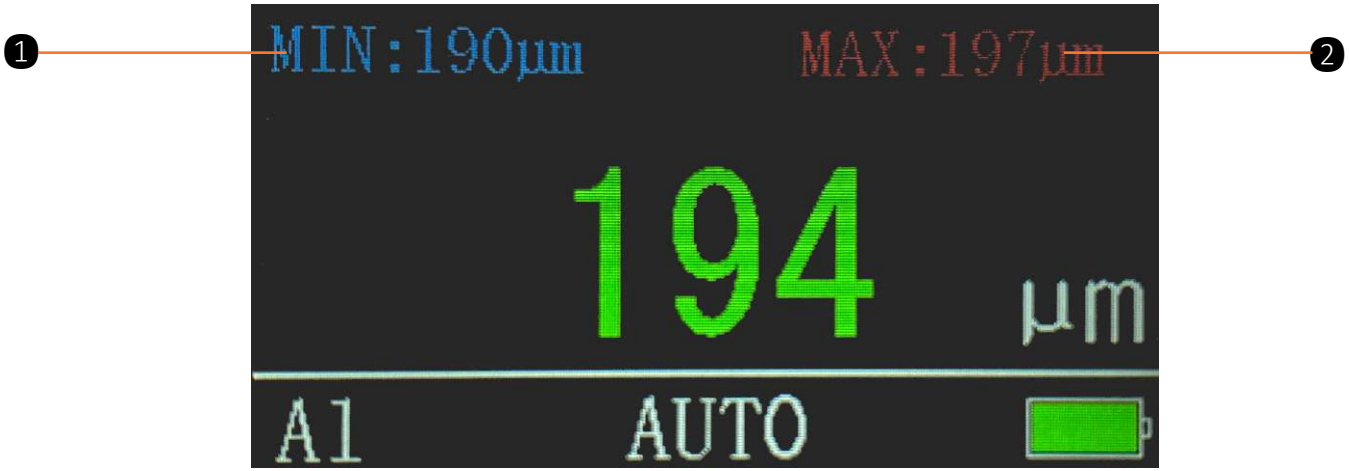
1.Back Label	2.Battery	3.Battery Cover

Numeric Interface



1.Measurement Reading **2.Measurement Unit** **3.Battery Capacity**
4.History Record Mode **5.Substrate Indication**

Numeric Interface(Maximum and Minimum Capture Mode)



1.Minimum **2.Maximum**

Numeric Interface(Differential Value Mode)

1.Difference Reading **2.Deviation Indicator** **3.Nominal Value**

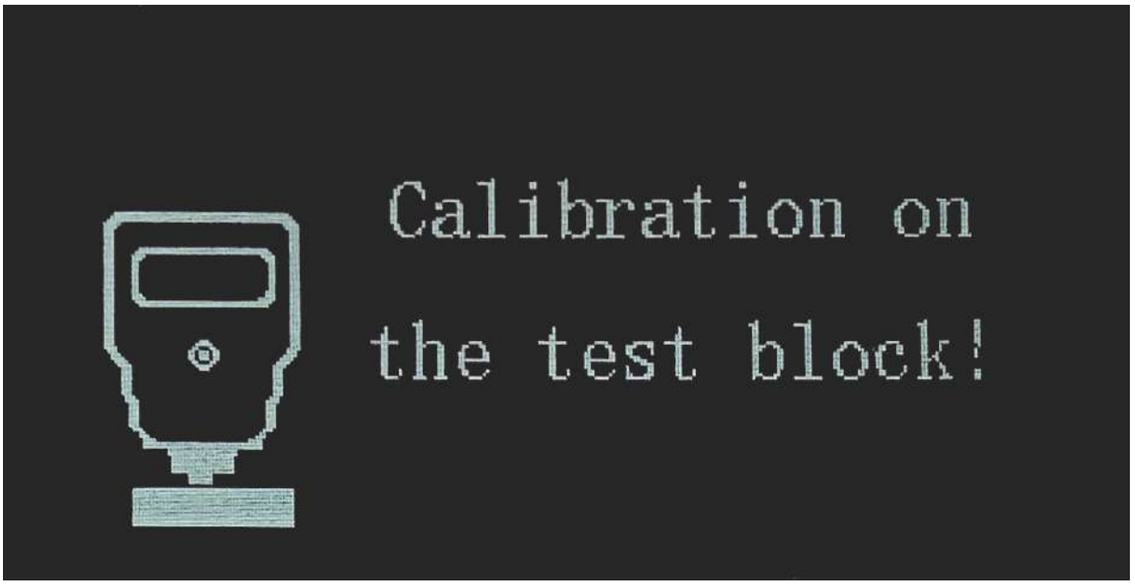
Measurement Mode

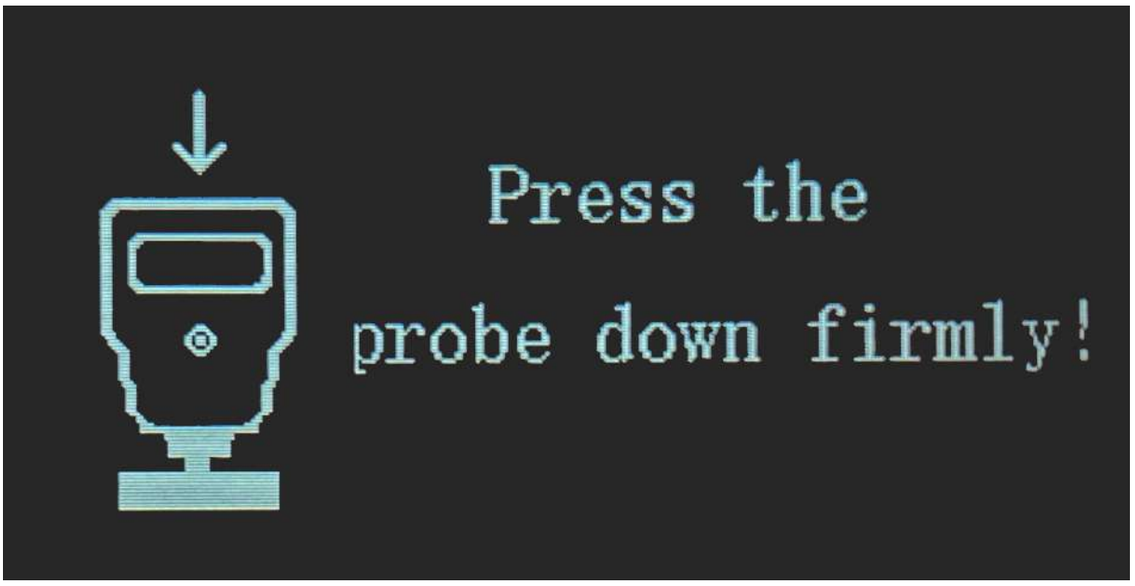
Normal Mode: Default interface, on which the current effective thickness value is displayed in large font.

Maximum and Minimum Capture Mode: In this mode, when the user continuously measures the material thickness, the minimum and maximum measured values are captured in real-time. This interface displays the minimum and maximum thicknesses detected during the measurement process, as well as the current measured value.

Difference Value Mode: This interface displays the difference (the difference between the actual measured thickness value and the nominal thickness value) and also shows the current measured value.

Zero Adjustment



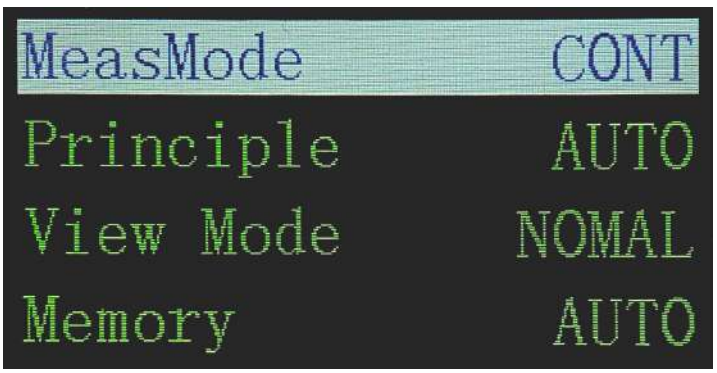


No calibration is required, only zero adjustment is needed.
The zero adjustment steps are simple. Just place the instrument on the standard block, press the probe firmly, and the instrument will automatically zero.

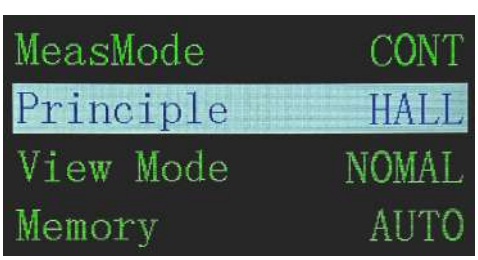
User-Friendly

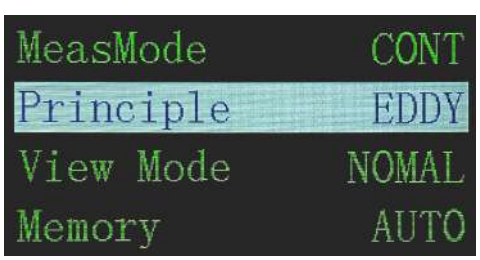
Short press the switch button, and the content on the display screen can be flipped 180°, which is convenient for users to use in different places.

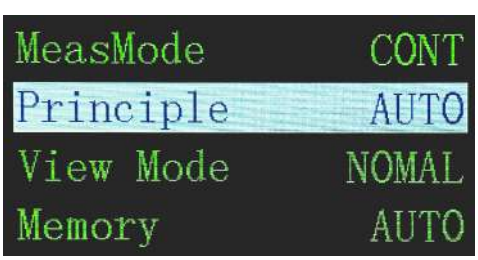
Settings Interface



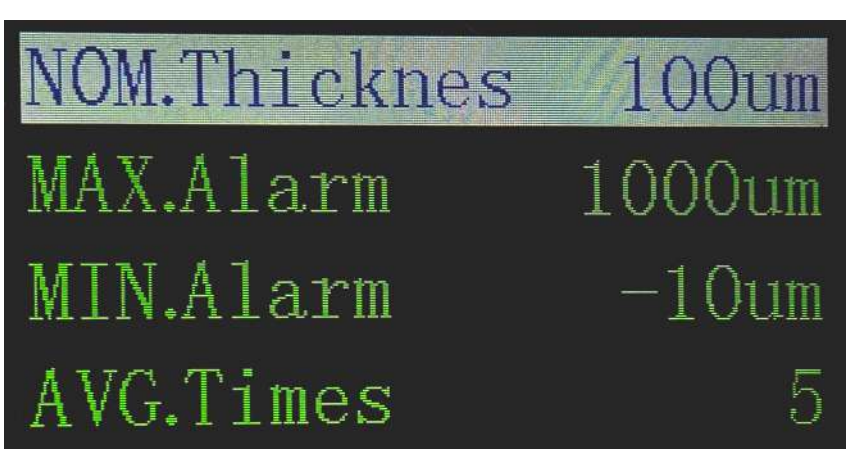
The product measurement mode can be selected as single measurement or continuous measurement.





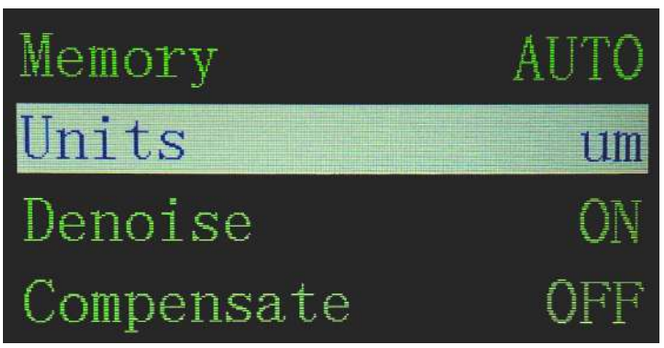


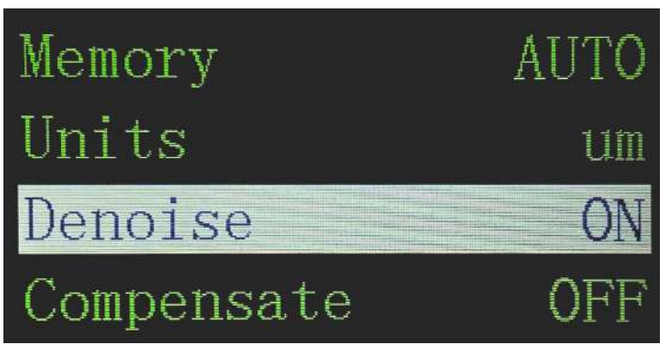
The product measurement principles can be selected as eddy current, magnetic induction (Hall), or automatic, and users can choose according to their needs.

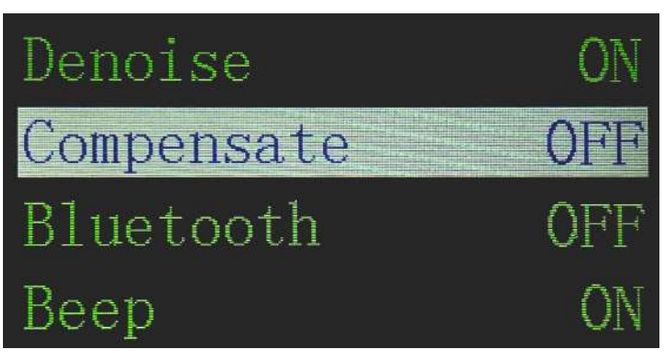


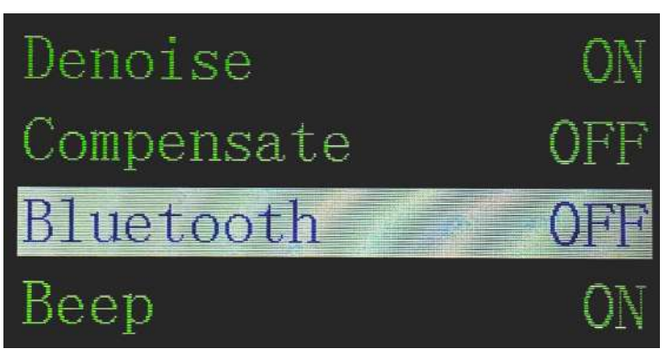
The upper and lower limits of the value can be set for the product. When the value exceeds the set upper limit or lower limit, the value on the display screen will be shown in red.

Setting Interface





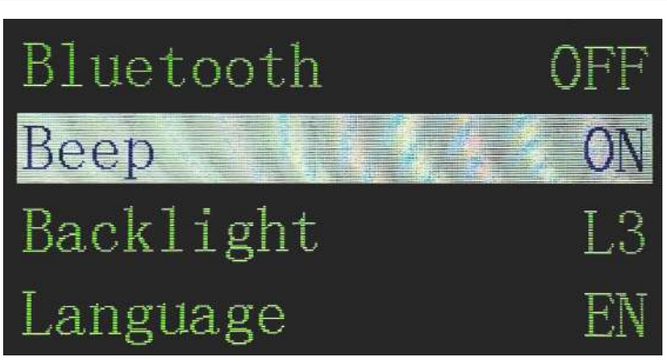


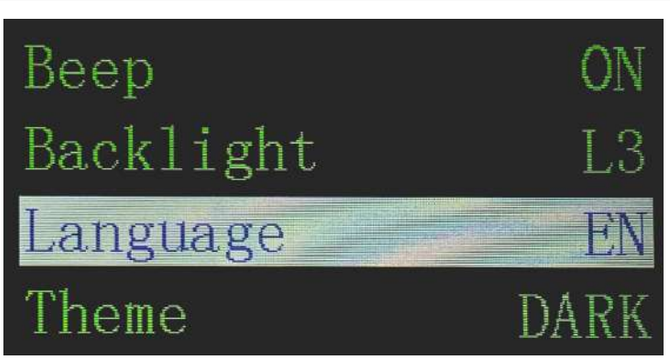


The product supports various settings:

- The unit supports metric system and imperial system.
- Digital noise reduction is supported.
- Automatic correction is supported.

Bluetooth connection is supported.



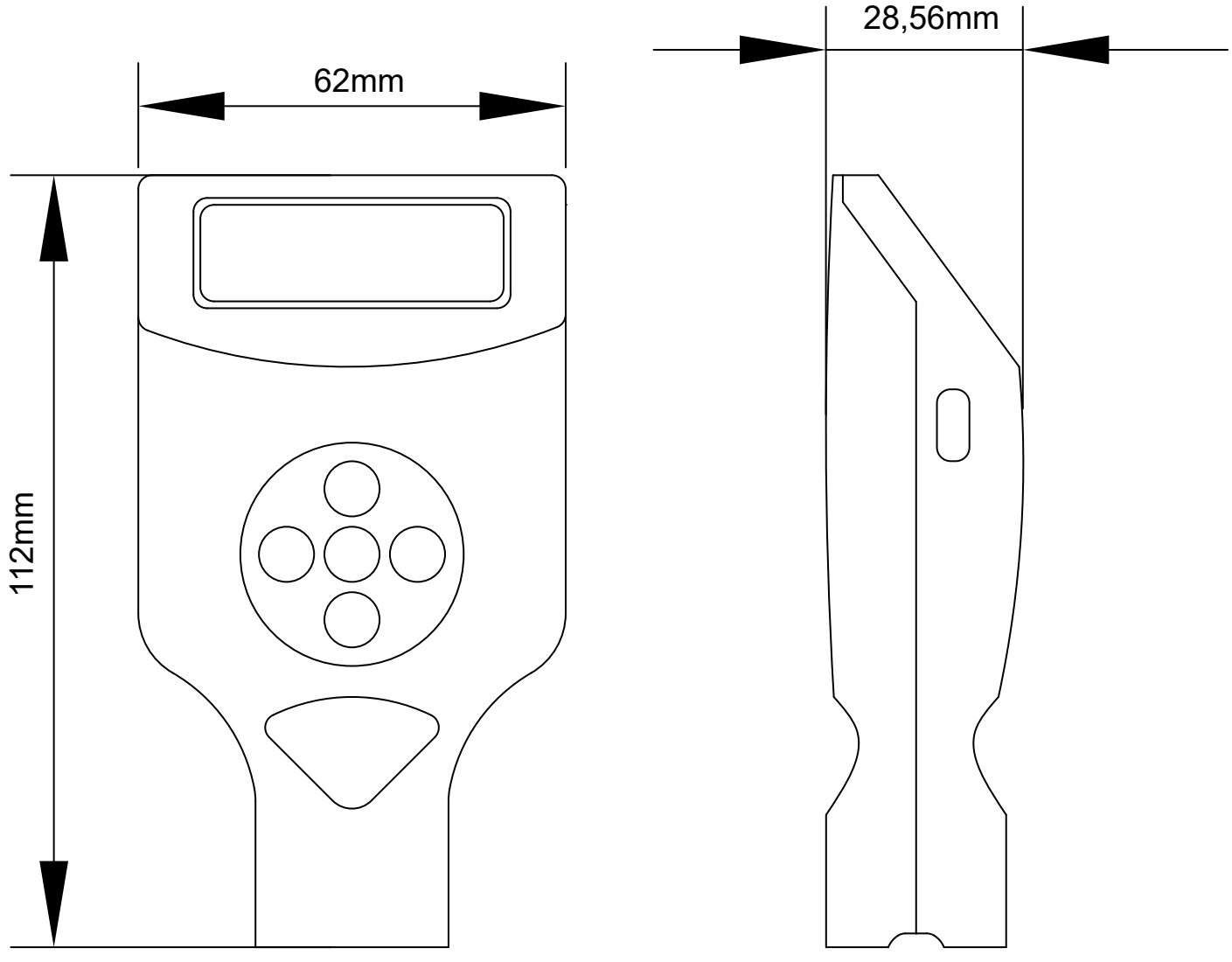


The product supports a variety of settings:

- The product supports the sound on - off function.
- It supports 5 - level brightness adjustment: energy - saving, eye - protection, standard, out-door, and high - brightness.

It supports the switching between Chinese and English.

Instrument Dimension



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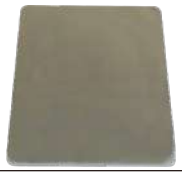
Technical Parameters

Resolution	Auto (0.1um/1um/0.01um)
Measurement Range	0.0-3500um
Measurement Accuracy	0-100um:≤±(1%H+2um)H is the standard value.
	100-1000um:≤±(2%H+2um)H is the standard value.
	1000-3500um:≤±(3%H+3um)H is the standard value.
Measurement Interval	0.2s
Substrate Indication	Iron, Aluminum, Iron - Zinc, Iron Powder Putty
Minimum Measurement Area	Φ=25mm
Minimum Radius of Curvature	Convex Surface: 5mm / Concave Surface: 25mm
Minimum Substrate Thickness	Fe：0.2mm/NFe：0.05mm
Probe Type	Built-in Integral Type
Measurement Principle	Iron: Hall Effect / Aluminum: Eddy Current
Probe Tip	Zirconium Oxide
Viewing Mode	Normal/ Maximum and Minimum/ Difference
Measurement Mode	Continuous / Single
Auxiliary Function	Automatic Shutdown, Theme Switching, Backlight Adjustment, Screen Rotation, Metric-Inch Switching
Unit	um/mm
Display Screen	320x170 IPS LCD Display Screen
Power Supply Mode	2 AAA Alkaline Batteries
System Language	Chinese/English
Host Size	112mmx63mmx29mm
Operating Energy Consumption	20 milliamps, 60 milliwatts
Operating Temperature Range	-20°C-50°C
Storage Temperature Range	-30°C-60°C
Weight (Including Battery)	85g

Packing List

Name	Qty	Remark
Host	1pc	
Ferrous	1pc	
Aluminum Base	1pc	
AAA Battery	2pc	
Standard Diaphragm	1pc	
Instruction Manual	1pc	
Warranty Card	1pc	
Certificate of Conformity	1pc	
Instrument Package	1pc