



# iCoat-100

## Coating Thickness Gauge



Video



### Contact us

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## Product Features and Application

### Product Features

- Both magnetic and eddy current thickness measurement methods, it can measure the thickness of non-magnetic coatings on magnetic metal substrates and non-conductive coatings on non-magnetic metal substrates. It has a wide range of applications and can meet the measurement needs of coatings on substrates of different materials;
- Continuous and single measurement methods, as well as high-precision and fast measurement modes. The high-precision mode can average multiple measurements and filter suspicious data to ensure accuracy and stability; Fast mode enables real-time scanning and adapts to various measurement scenarios;
- Leading real-time temperature compensation technology, automatically compensates for errors caused by changes in environment and probe temperature, ensuring measurement accuracy under different temperature conditions and enhancing instrument environmental adaptability;
- There are five statistical values available to aid in data analysis; it provides zero point, single point, two-point calibration and probe system error correction methods to ensure measurement accuracy and flexible operation;
- Up to 500 measurement values can be stored for easy data recording and subsequent processing; it can delete individual or all data for easy remeasurement or error correction, effectively managing data;
- Operation buzzing sound, clearly interface, various shutdown methods, timeout period can be set, and a power level indicator. The overall operation is convenient and user-friendly, improving the user experience and efficiency;

### Application

- Used for precise measurement of coating and plating thickness on the surface of metal components;
- It can detect the coating thickness on the surface of chemical equipment





# Instrument Structure



**1. Screen**

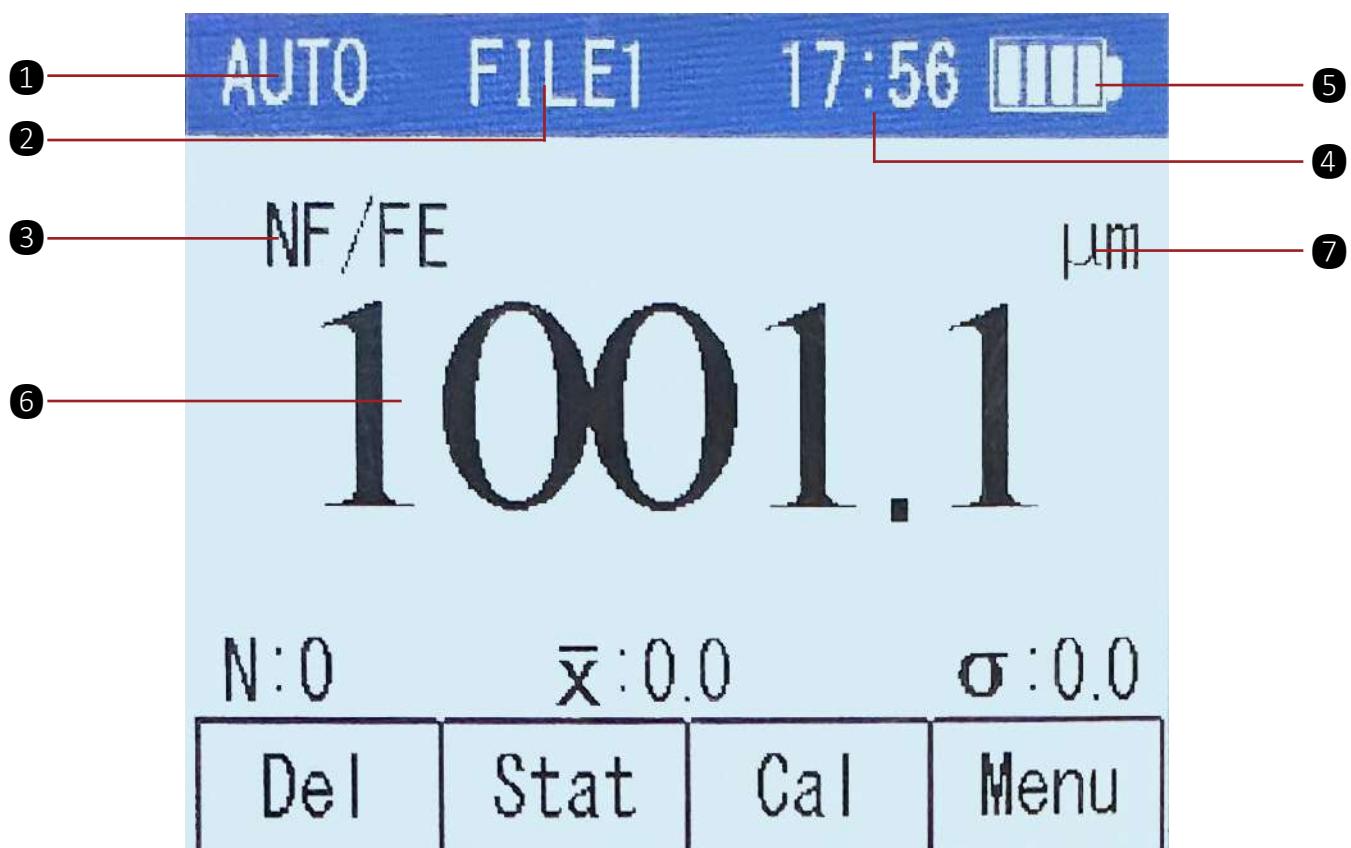
**2. Keyboard**

**3. Probe**

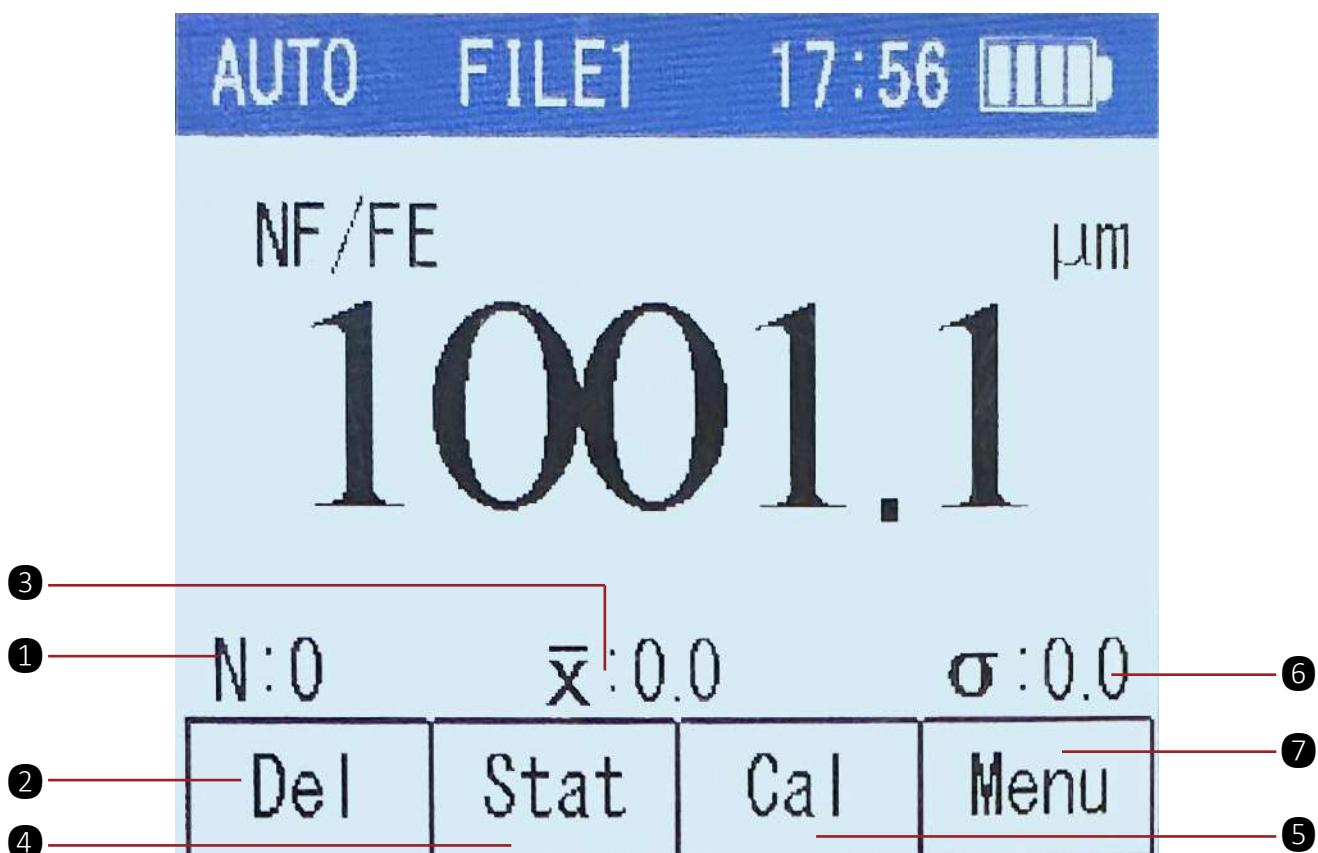
Web: [www.mikrosize.com](http://www.mikrosize.com)

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

## Instrument Appearance

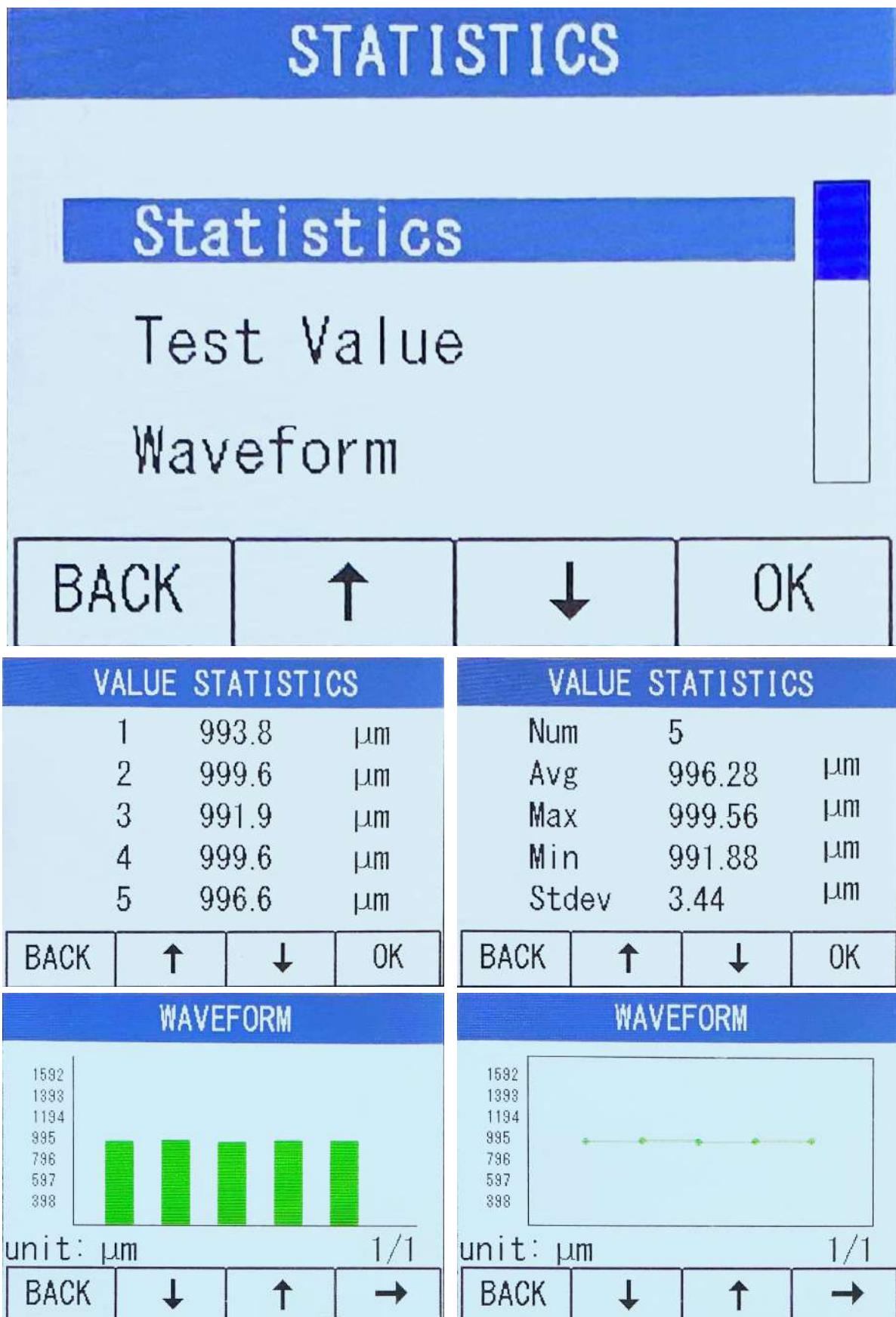


1. Test Mode      2. Current File      3. Probe Connection Status      4. Time Display  
 5. Battery Level      6. Current Measurement Data (Statistics)      7. Measurement Unit



1. Number of Measurements      2. Delete Data      3. Average Measurement Value  
 4. Statistics      5. Calibration      6. Standard Deviation of Measurements      7. Menu

## Data Statistics



Users can view statistical data, individual measurement data, and data waveforms on this interface; Convenient for users to organize clear data



## Calibration

### CALIBRATION

- 1. measure on BASE
- 2. measure (1000  $\mu\text{m}$ )

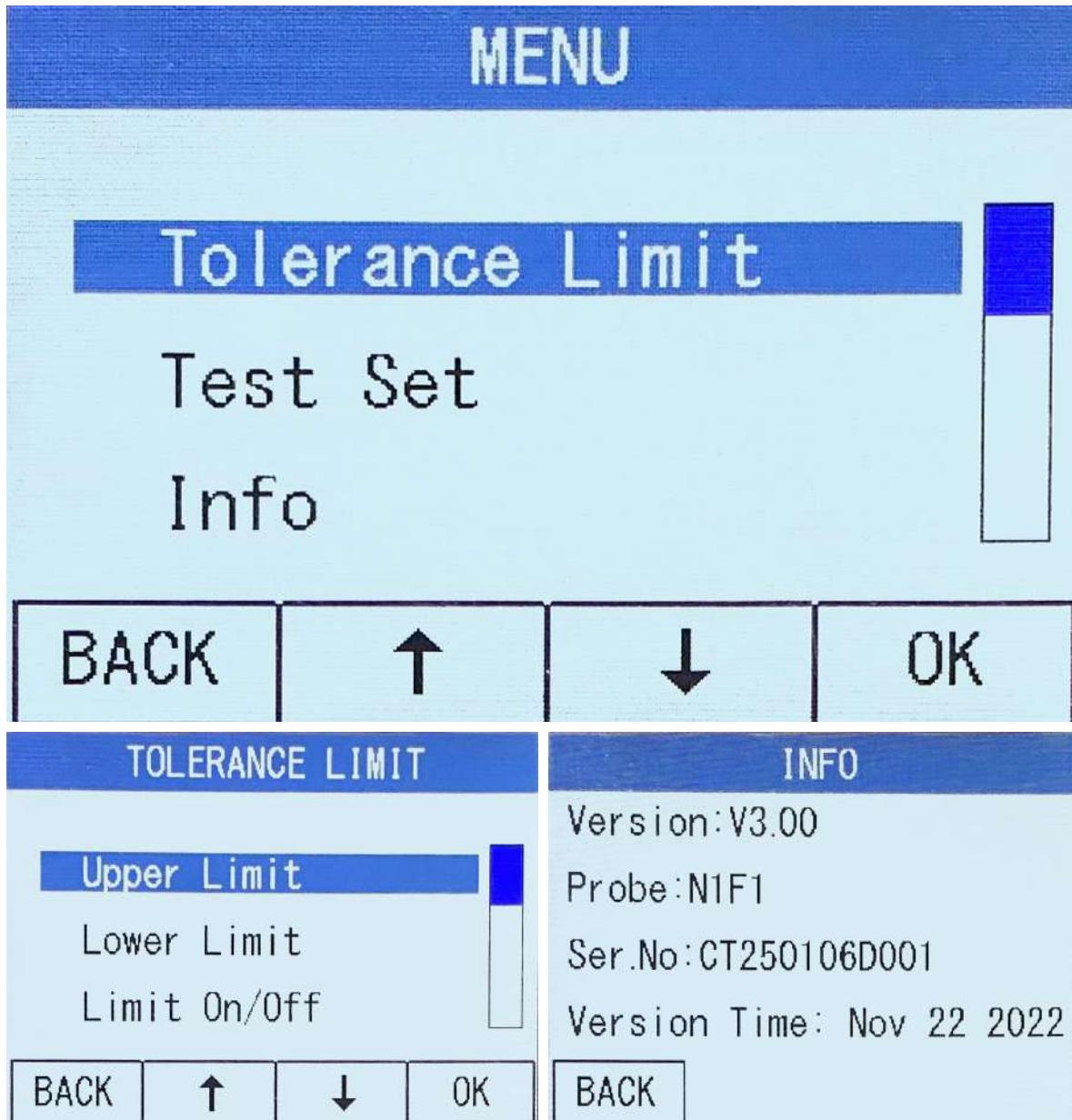
ESC

SKIP

This instrument provides two calibration methods used in measurement: zero point calibration and two-point calibration; Users can choose zero point calibration or two-point calibration according to their needs;

# Menu Interface

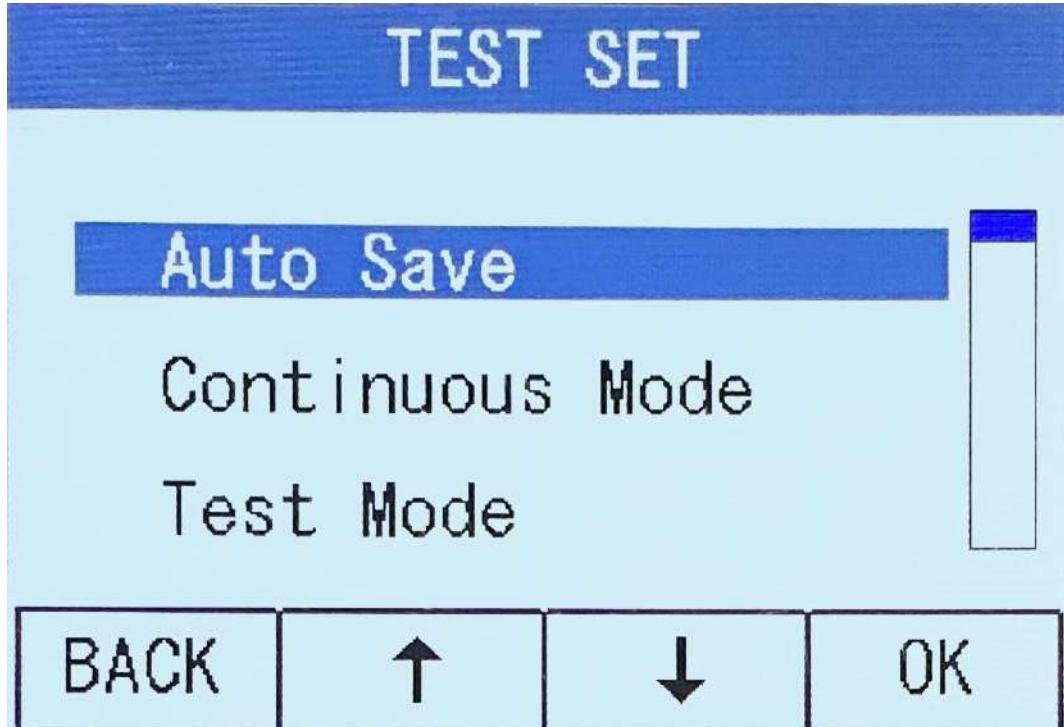
The menu interface functions include: Tolerance Limit, Test Set, Product Info.



- Users can set upper and lower limit alarm functions and alarm function switches to facilitate quick detection of whether the tested product is qualified;
- Users can view product information on this interface, including instrument version, probe type, serial number, etc;

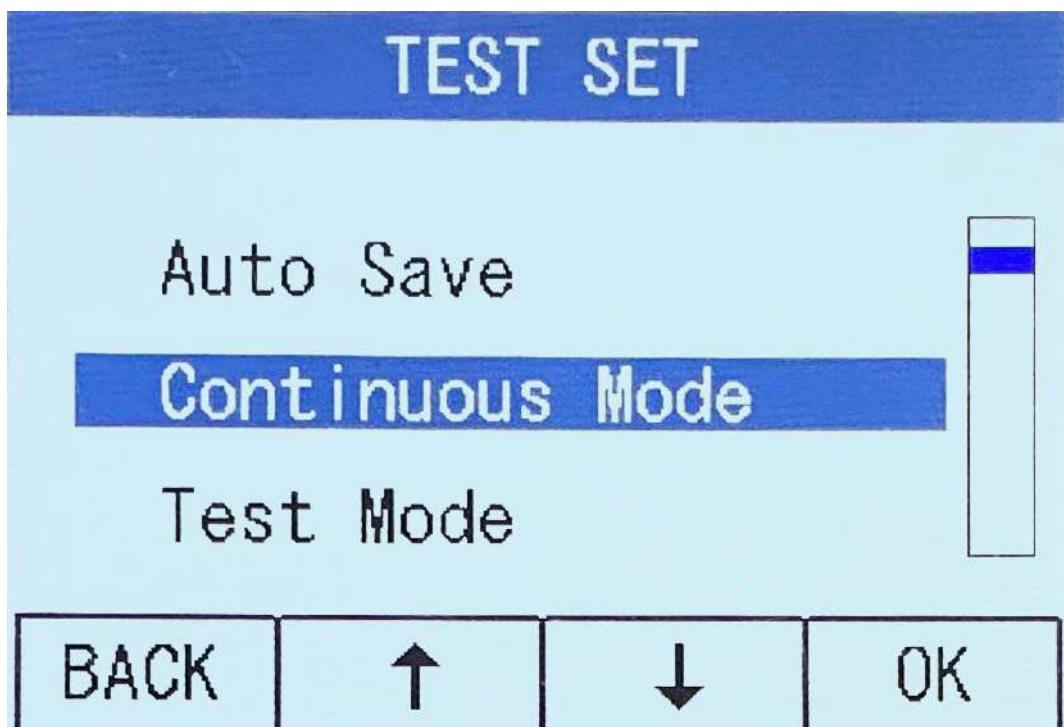
## Test Set

The Test Set includes: "Auto Save", "Continuous Mode", "Test Mode", "Sound Signal", "Display Accuracy", "Units", "Time Set", "Group Mode", "Language", "Auto Power Off";



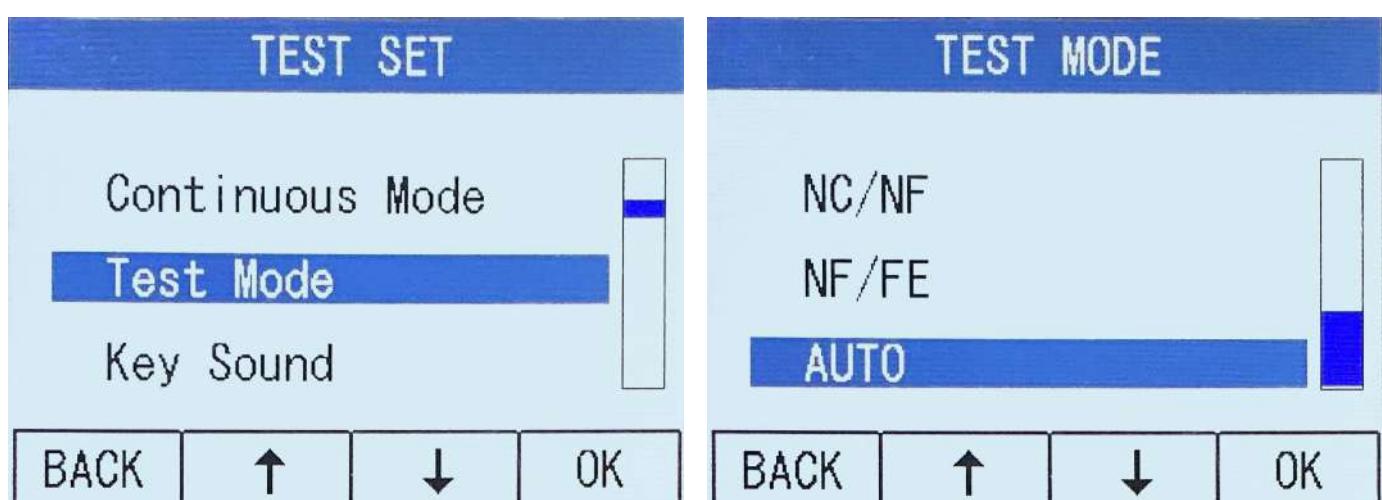
### Auto Save

Users can choose to turn on or off the automatic storage reading function;



### Continuous Mode

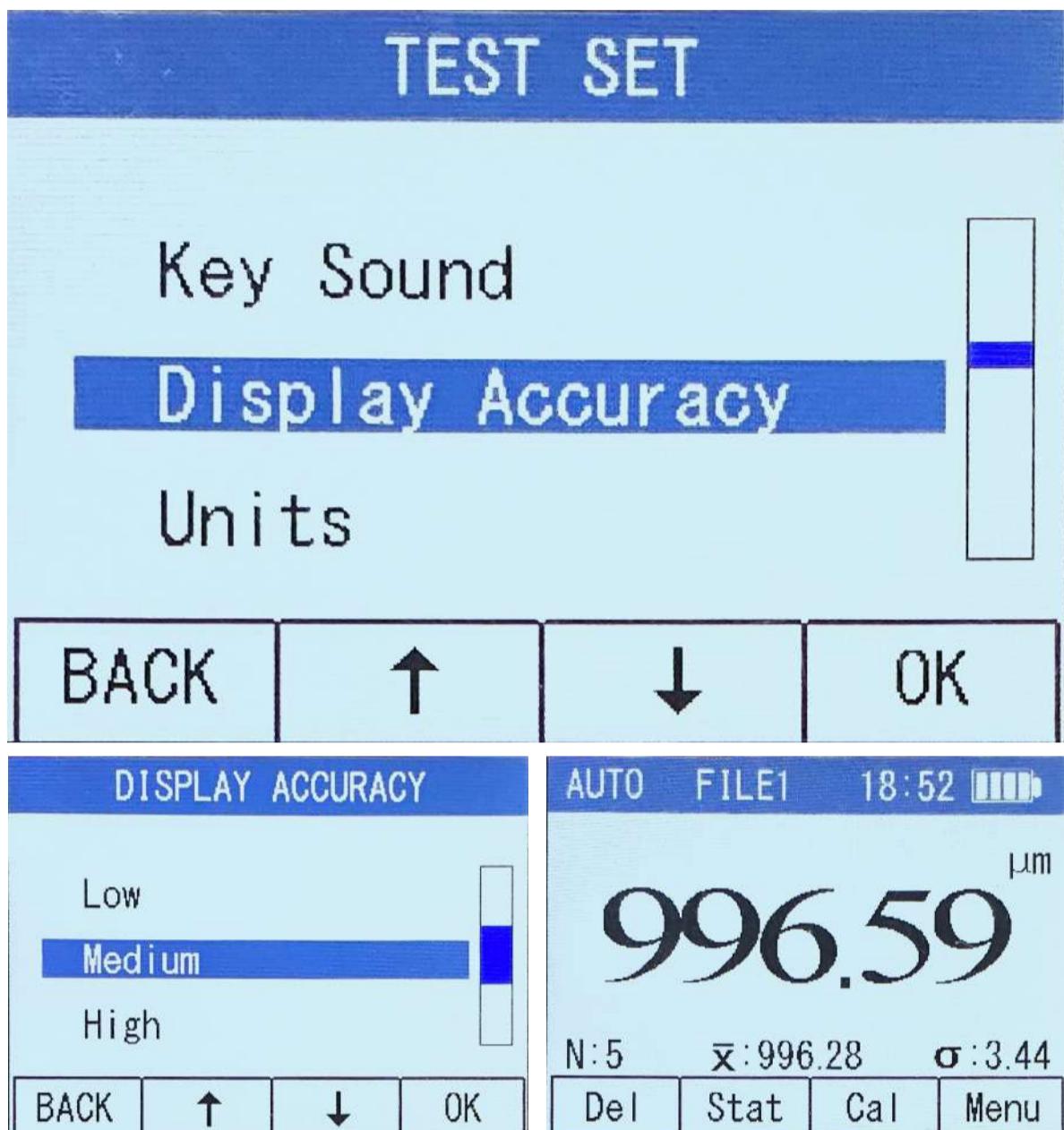
The measured data can be displayed in a single or continuous manner



### Test Mode

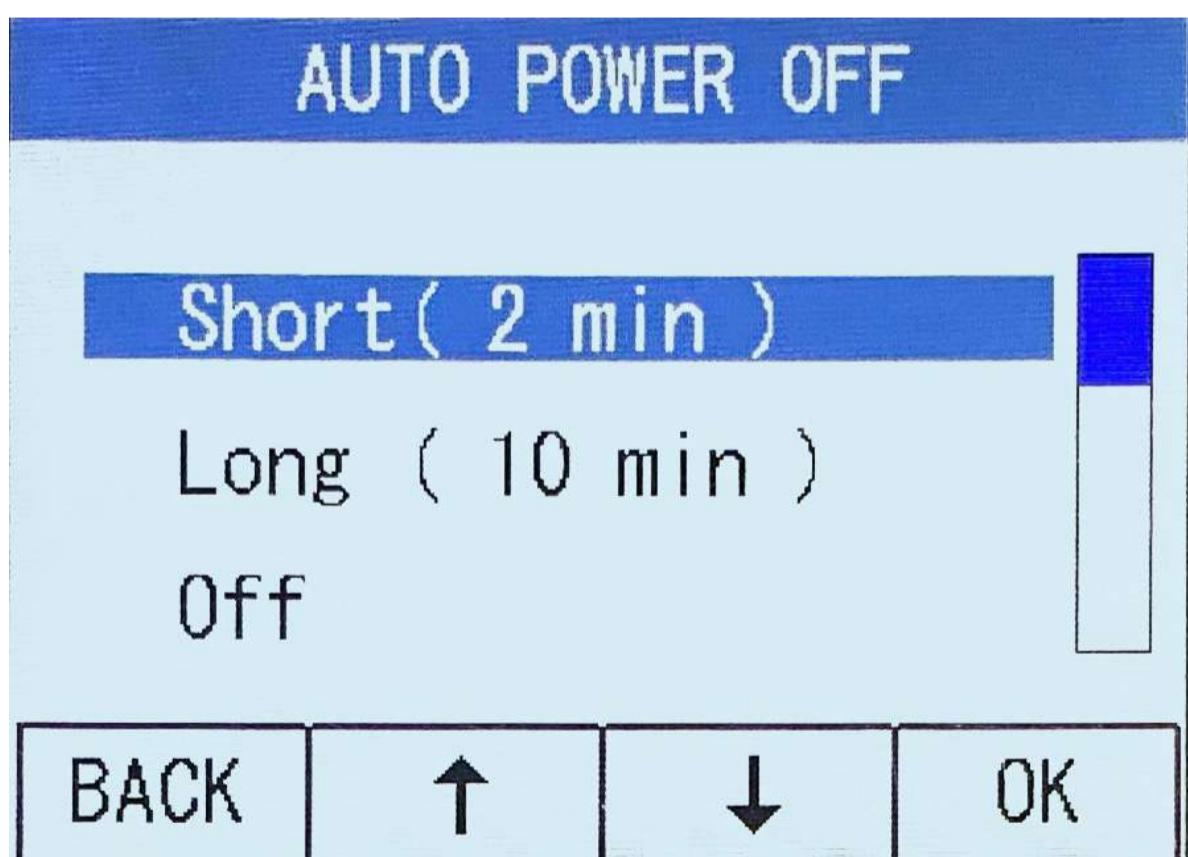
The measurement mode can be switched among Eddy Current, Magnetic Induction, and AUTO Mode.

## Test Set



### Display Accuracy

Measurement accuracy includes: low, medium, and high; Users can choose the appropriate measurement accuracy according to their needs;



### Auto Power Off

Users can set automatic shutdown time: 2 minutes, 10 minutes, or Off;

# Technical Specification

Probe Type	F	N
<b>Measuring Range</b>	0~1500μm	0~1500μm Copper plated grid 0~40μm
<b>Working Principle</b>	Magnetic	Eddy
<b>Resolution</b>		0.1μm
<b>Accuracy</b>	<b>Zero-point Calibration</b>	±(3%H+1)μm
	<b>Two-point Calibration</b>	±[(1~3)%H+1]μm
<b>Test Conditions</b>	<b>Minimum radius of curvature</b>	Convex 3mm
	<b>Minimum area diameter</b>	Φ7mm
	<b>Matrix critical thickness</b>	0.5mm 0.3mm
<b>Using Environment</b>	Temperature: 0 °C~40 °C	
	Humidity: 20% Rh~90% Rh	
	No Strong Magnetic Field Environment	
<b>Power Supply</b>	3*AA Alkaline batteries	
<b>Weight</b>	About 70g	
<b>Dimensions</b>	114×58×29mm	

# Packing List

Name	Qty	
<b>Main Unit</b>	1unit	
<b>Iron Substrate</b>	1pc	
<b>Aluminum Substrate</b>	1pc	
<b>Calibration Block</b>	5pcs	<div style="display: flex; justify-content: space-around; align-items: center;"> <span>240618CA0122 50µm±1%</span> <span>240605CA0002 101µm±1%</span> <span>240604CA0058 247µm±1%</span> <span>240615CA0008 498µm±1%</span> <span>240618CA0001 1001µm±1%</span> </div>
<b>Package Case</b>	1case	
<b>Documents</b>	1set	
<b>No.5 Alkaline battery (1.5V)</b>	3pcs	