

Mikrosize®

iCoat-100 Coating Thickness Gauge



Video



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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 shut-down 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

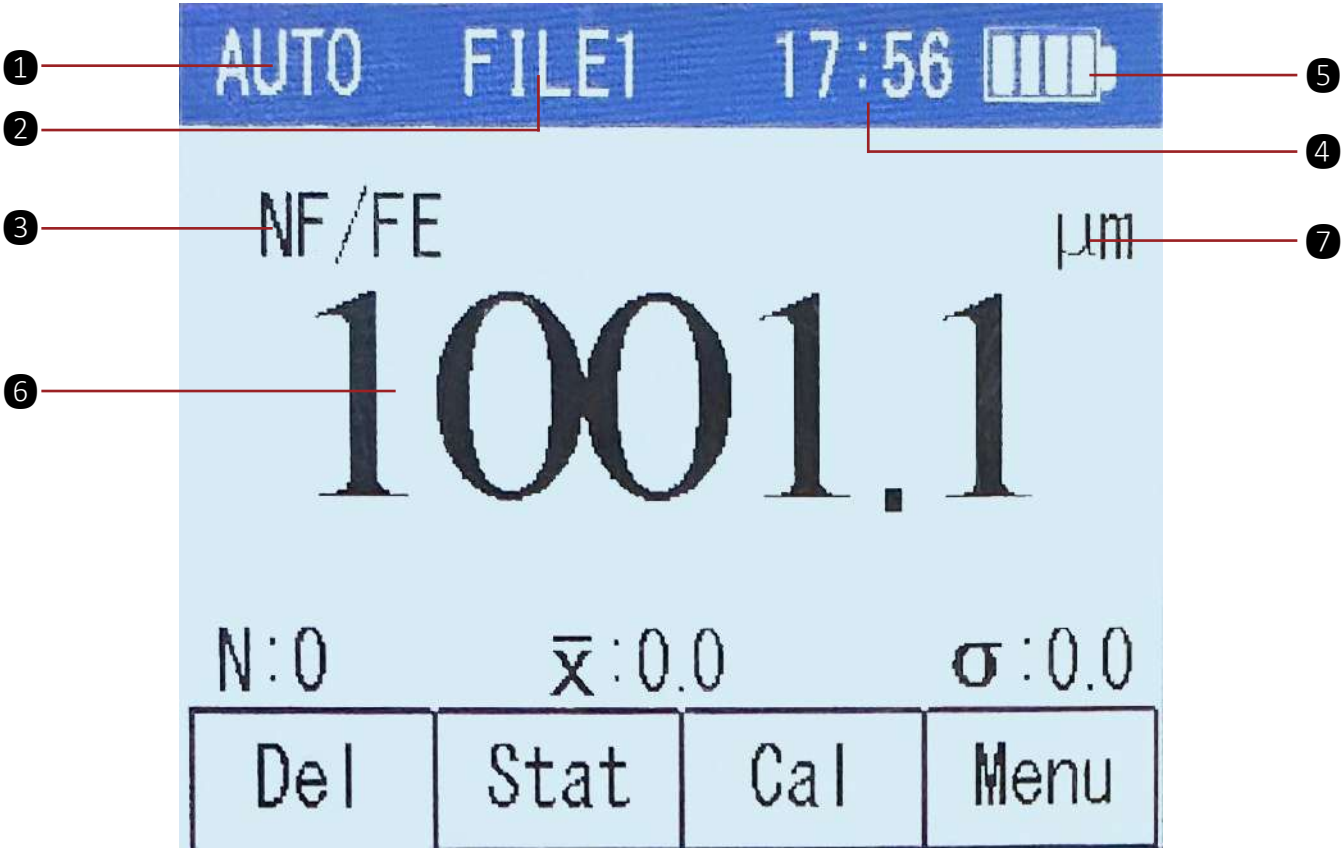


1. Screen

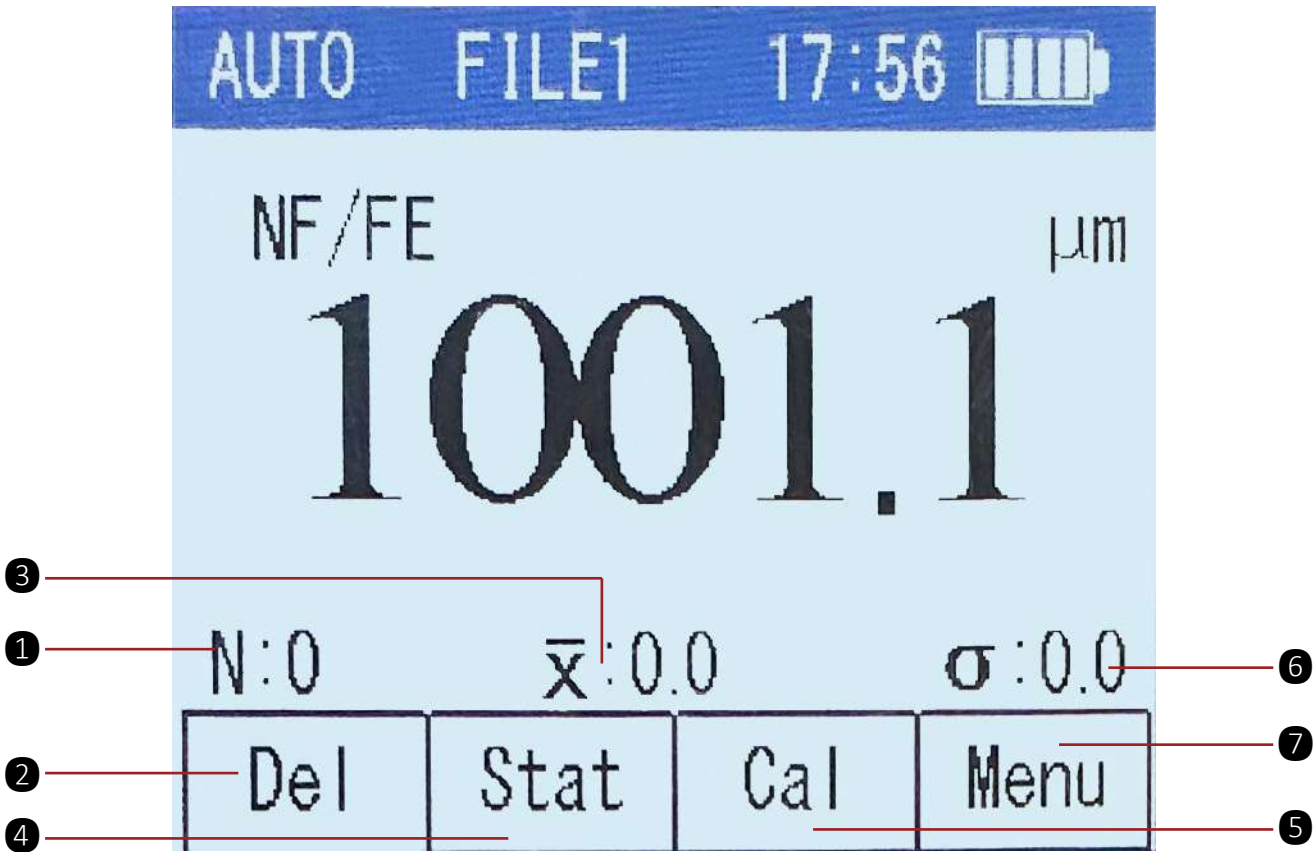
2. Keyboard

3. Probe

Instrument Appearance

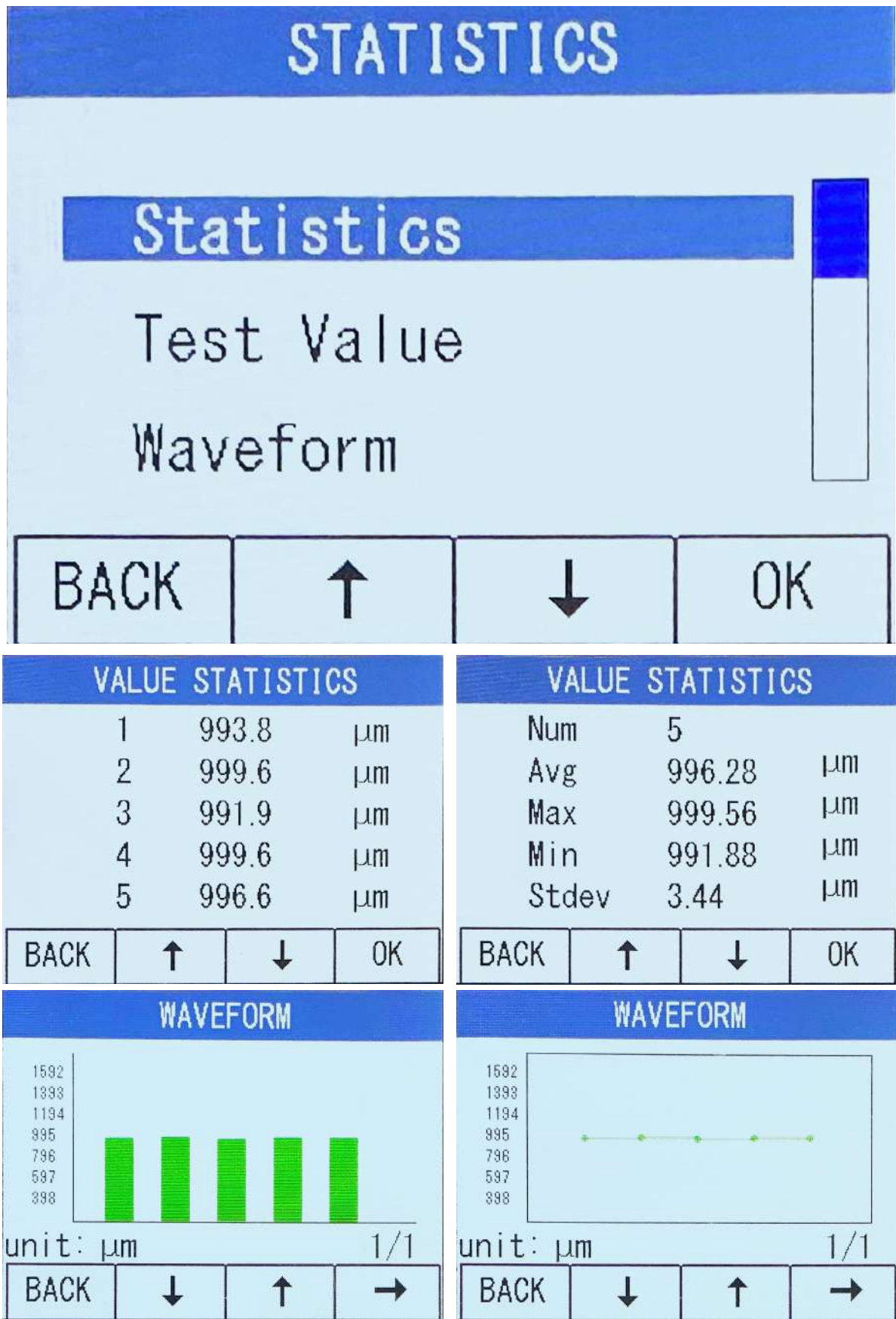


- | | | | |
|------------------|--|----------------------------|---------------------|
| 1. Test Mode | 2. Current File | 3. Probe Connection Status | 4. Time Display |
| 5. Battery Level | 6. Current Measurement Data (Statistics) | | 7. Measurement Unit |



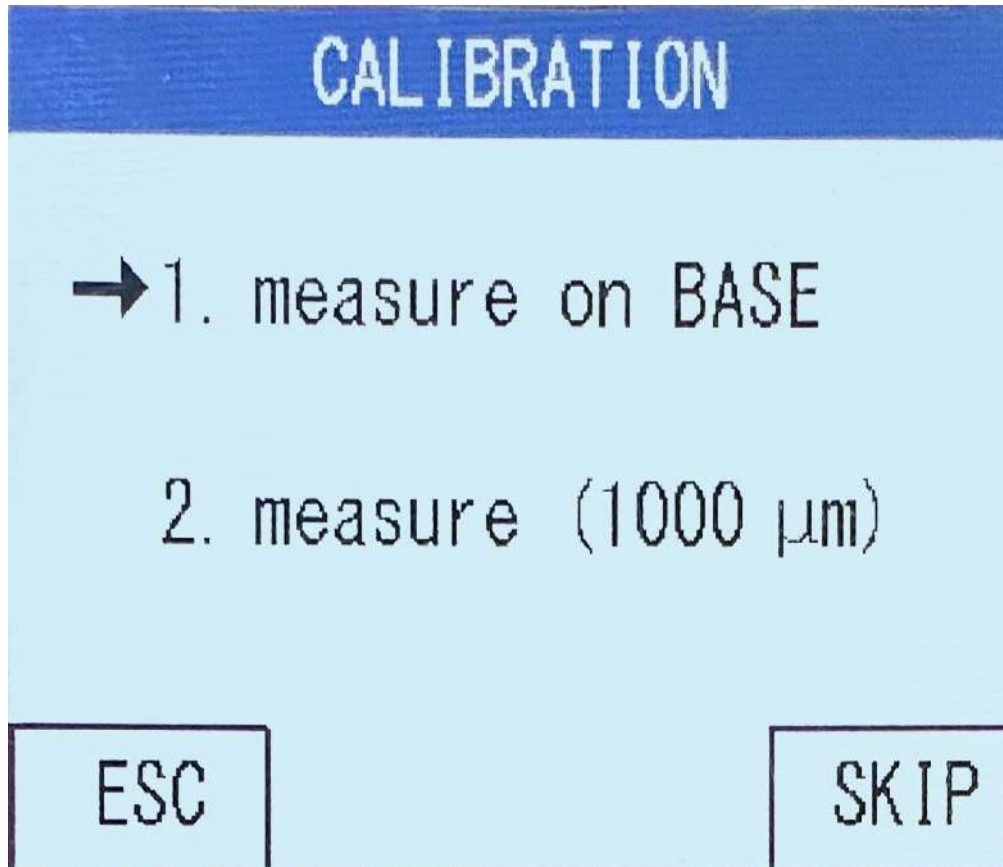
- | | | | |
|---------------------------|----------------|---------------------------------------|---------|
| 1. Number of Measurements | 2. Delete Data | 3. Average Measurement Value | |
| 4. Statistics | 5. Calibration | 6. Standard Deviation of Measurements | 7. Menu |

Data Statistics



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

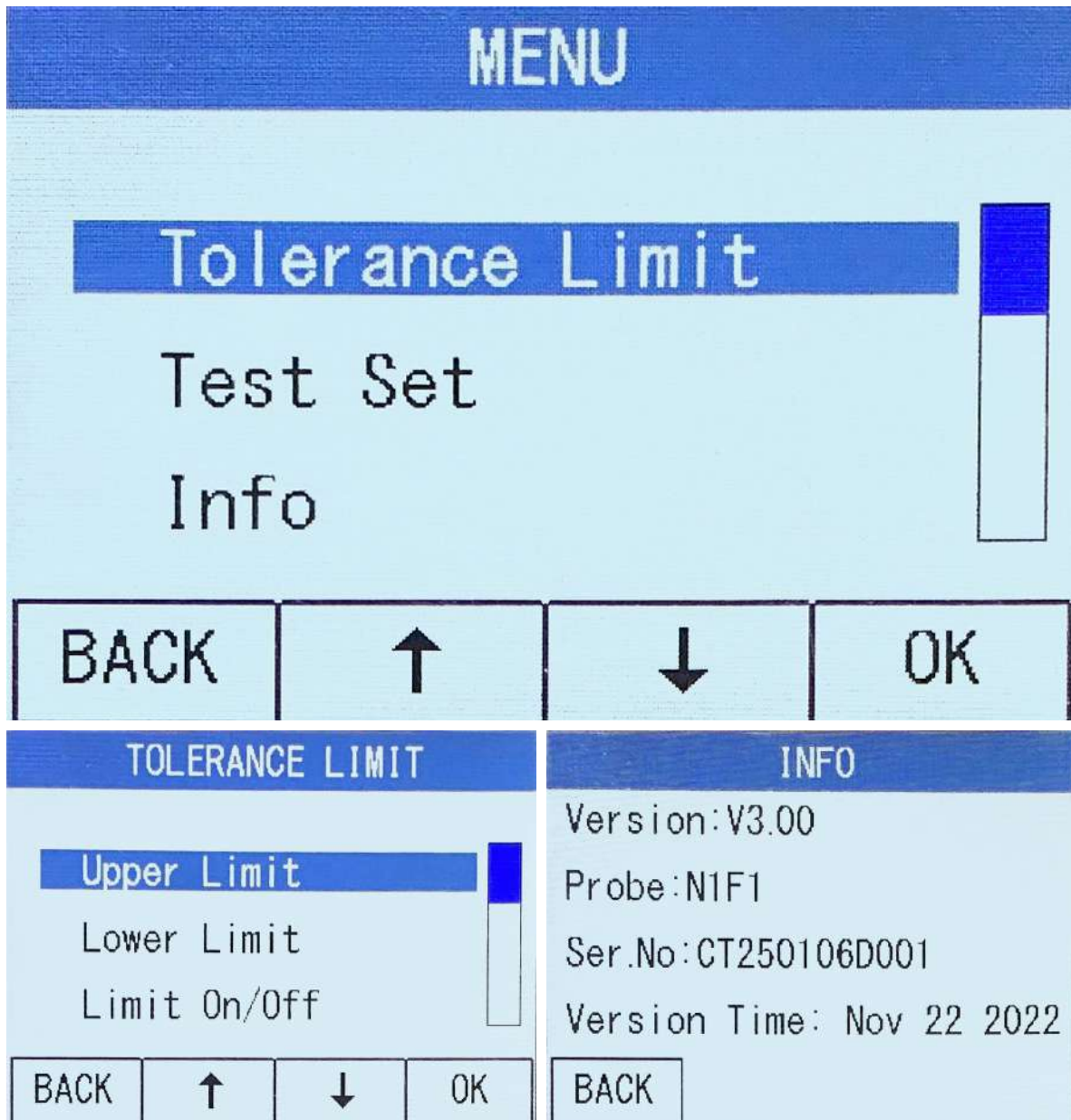
Calibration



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

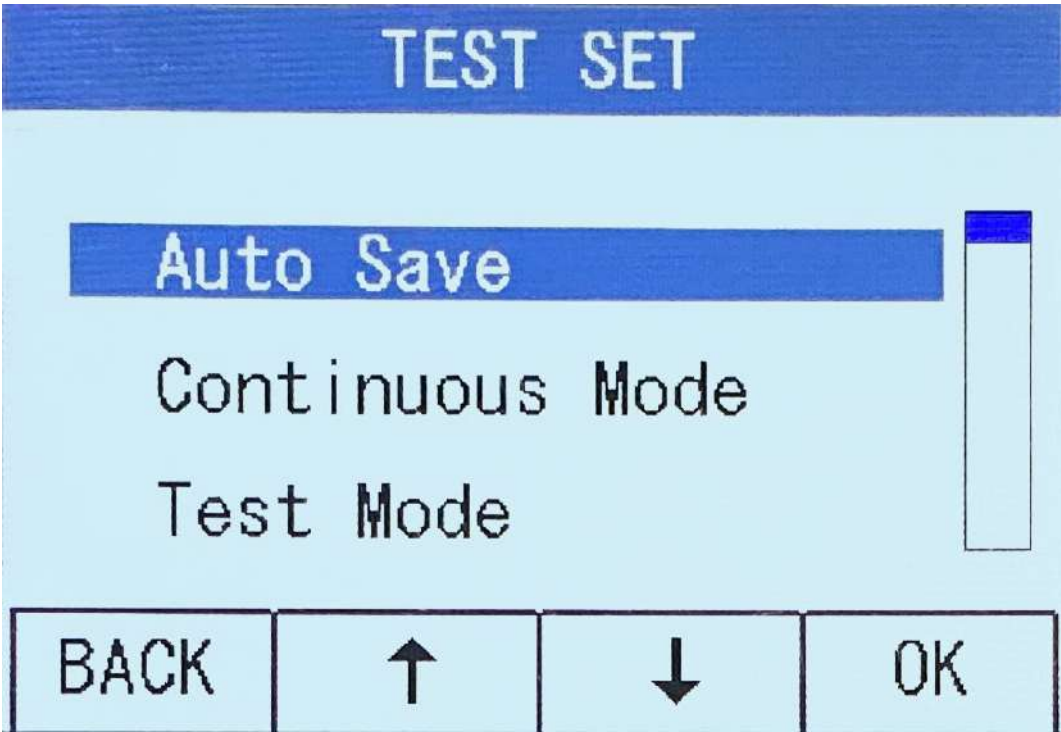
The menu interface functions include: Tolerance Limit, Test Set, Product Info.



- 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;

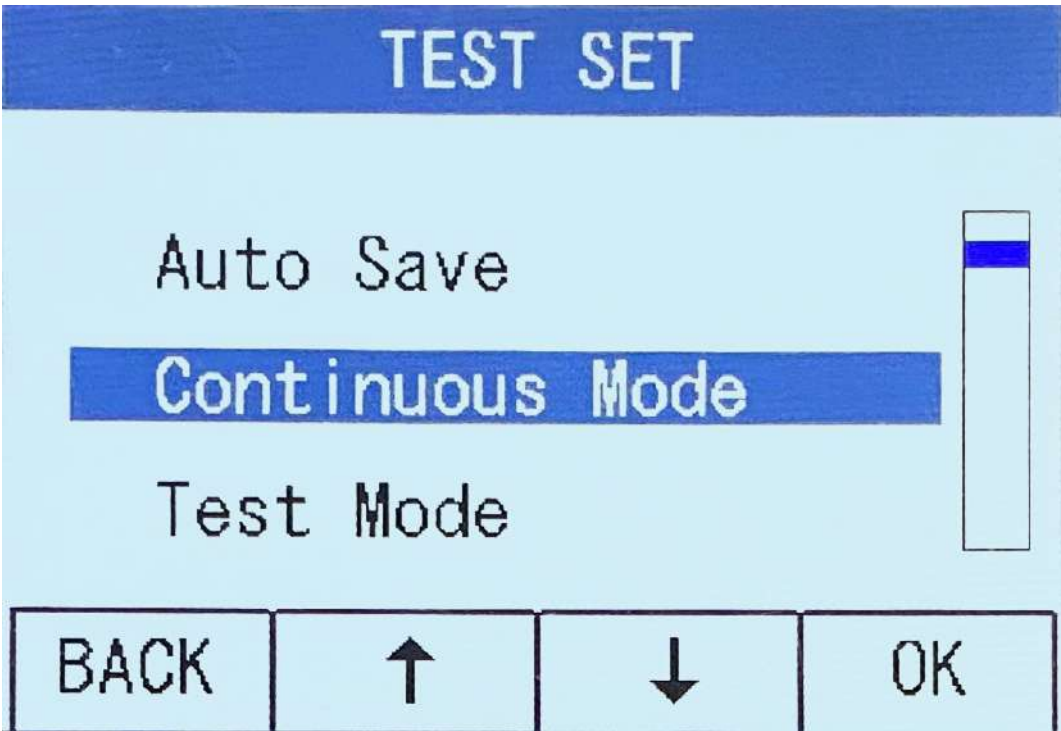
Test Set

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



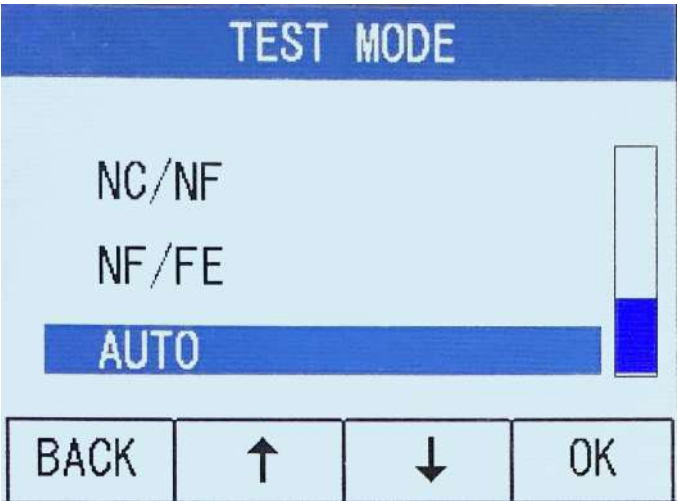
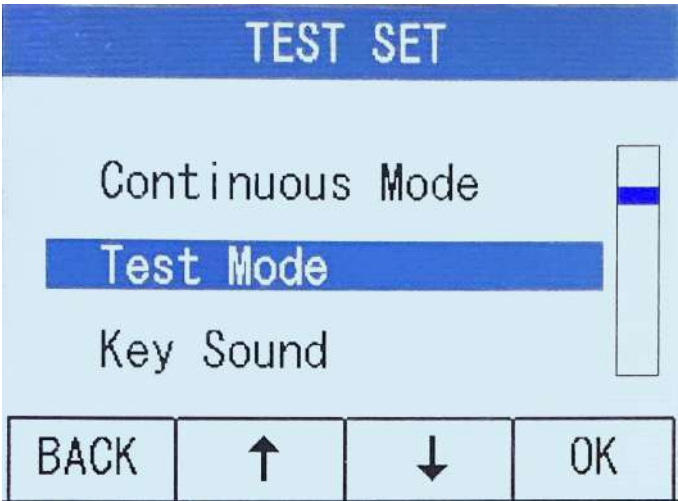
Auto Save

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



Continuous Mode

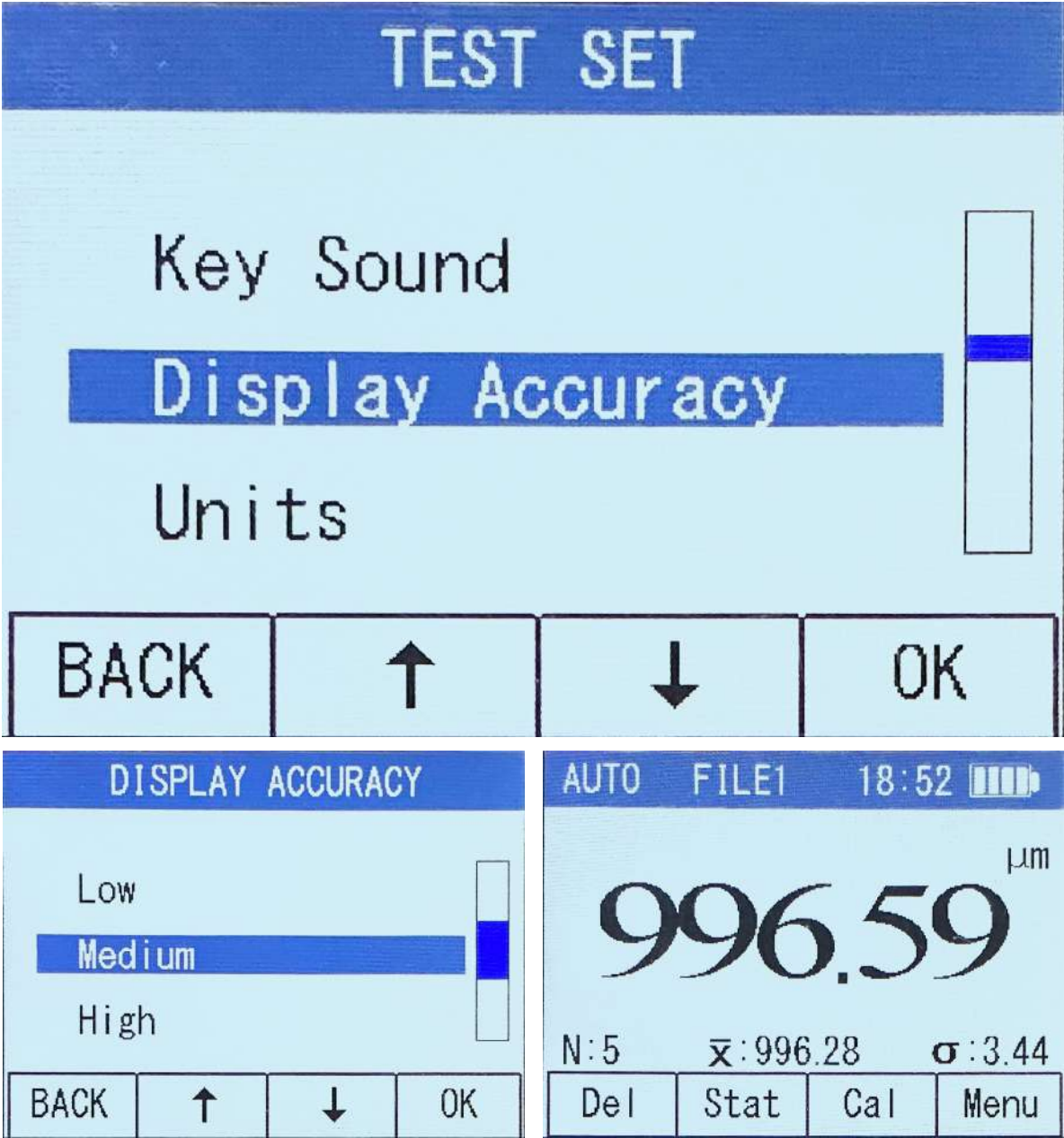
The measured data can be displayed in a single or continuous manner



Test Mode

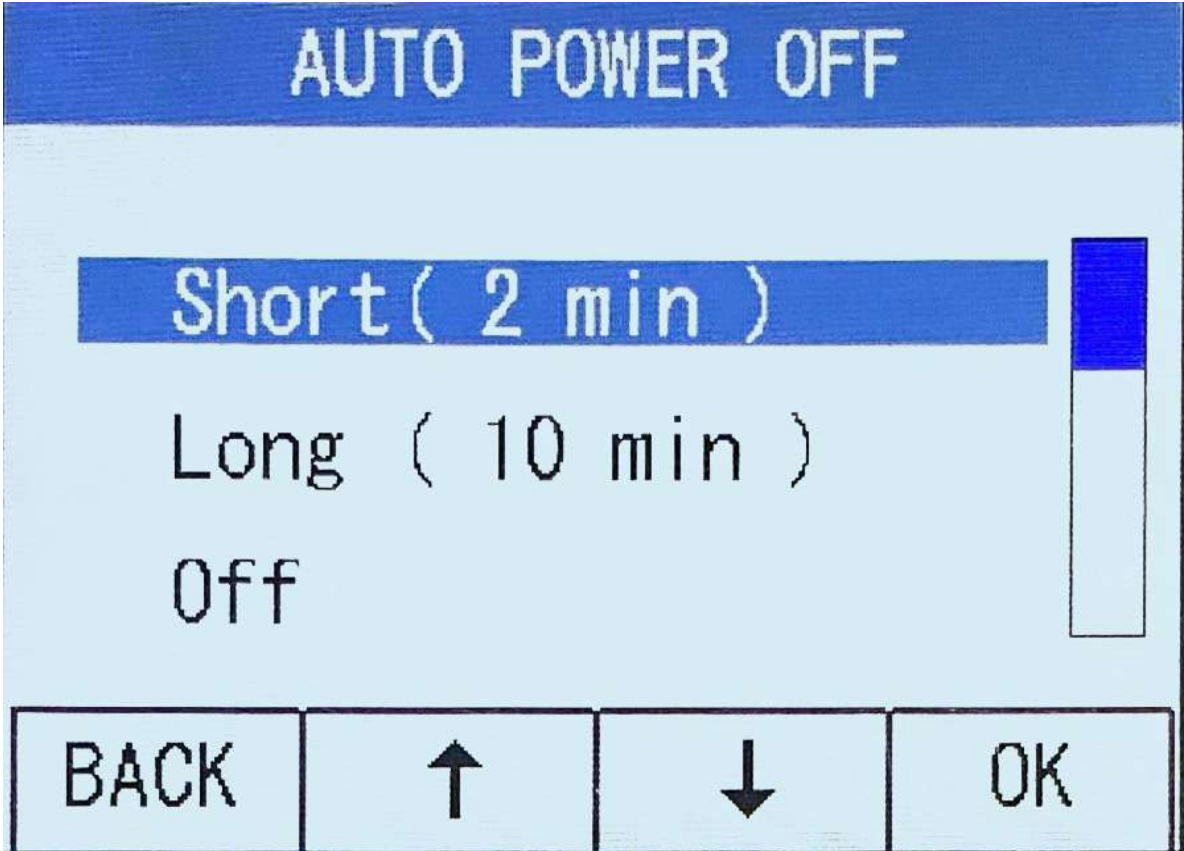
The measurement mode can be switched among Eddy Current, Magnetic Induction, and AUTO Mode.

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
Measuring Range		0~1500μm	0~1500μm Copper plated grid 0~40μm
Working Principle		Magnetic	Eddy
Resolution		0.1μm	
Accuracy	Zero-point Calibration	$\pm(3\%H+1)\mu m$	$\pm(3\%H+1.5)\mu m$
	Two-point Calibration	$\pm[(1\sim3)\%H+1]\mu m$	$\pm[(1\sim3)\%H+1.5]\mu m$
Test Conditions	Minimum radius of curvature	Convex 3mm	
	Minimum area diameter	Φ7mm	
	Matrix critical thickness	0.5mm	0.3mm
Using Environment		Temperature: 0 °C~40 °C Humidity: 20% Rh~90% Rh No Strong Magnetic Field Environment	
Power Supply		3*AA Alkaline batteries	
Weight		About 70g	
Dimensions		114×58×29mm	

Packing List

Name	Qty	
Main Unit	1unit	
Iron Substrate	1pc	
Aluminum Substrate	1pc	
Calibration Block	5pcs	
Package Case	1case	
Documents	1set	
No.5 Alkaline battery (1.5V)	3pcs	