



www.insize.com



**5801-A55
MINI DIGITAL REFRACTOMETER
OPERATION MANUAL**

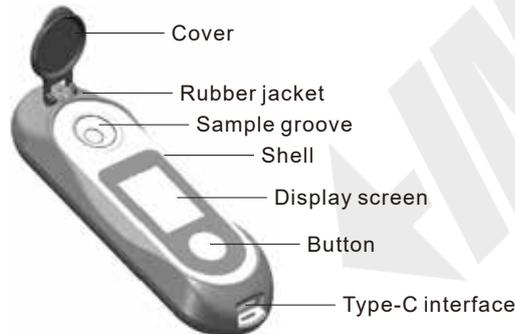
PLEASE SCAN QR CODE TO
WATCH THE OPERATION
VIDEO OF PRODUCTS.



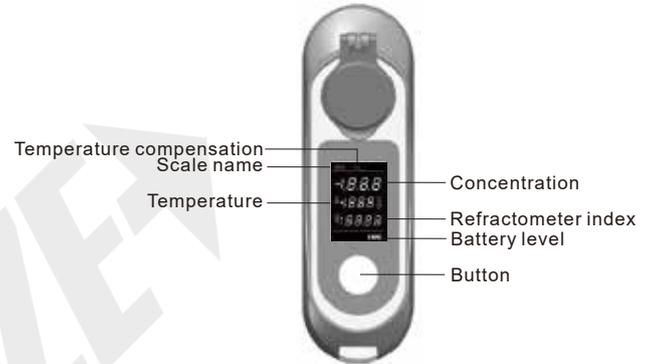
General introduction

This is a microprocessor-based optical instrument that accurately measures the refractive index and concentration of liquids. At the same time, your instrument has a friendly operation mode and display interface. Compared with traditional hand-held refractometers, the measurement is faster, more accurate, clearer, and automatically temperature compensated.

Panel description



Display and button



Turn on and measurement

- ◆ Turn on
Short press the button, the meter is turned on and starts the first measurement automatically. If there is no liquid in sample groove, the screen will display “---”.
- ◆ Measurement
 1. After startup, drip the sample liquid into the sample groove, 0.2~0.3ml is enough
 2. Once short press the button one time, the meter starts the measurement once, and new results with temperature compensation displayed
 3. If the result is out of measuring range, “HHH” or “LLL” will be displayed

Notes:

- a. Zero calibration need be implemented before measurement
- b. When use the meter outdoors, please avoid strong light
- c. Please keep the meter in a stable status
- d. Before each measurement, please drip 0.3~0.4ml of pure water into sample groove and wipe it dry
- e. Because of the fine particles inside the coolant, there will be slight particle precipitation covering the surface of the test port prism during the measure process, and the value will fluctuate slightly in the continuous measurement, which is a normal phenomenon, and the measurement can be repeated by averaging the method to ensure the accuracy of the measurement.

Zero calibration

Pure water is used for zero calibration.

Operation steps:

1. Drip 0.2~0.3ml of pure water into sample groove
2. Press the button for 2 seconds to enter into calibration mode, once entered, YES is blinking on screen and waiting for confirmation
3. Short press the button, the meter starts zero calibration, after finishing the calibration, the screen will show End, as following right picture shown



Turn off

The meter will be turned off automatically, once there is no operation for 1 minute.

Maintenance and preservation

- ◆After finishing the measurement, please use soft tissue or cloth to dry the sample groove firstly, then drip 0.3~0.4ml of pure water into the groove to clean it, and use clean tissue or cloth to dry it lastly. Please pay attention on the protection of prism surface.
- ◆The built-in lithium battery can't be dismantled. Please charge the meter, once  is displayed.
- ◆Store the meter in a dry place and avoid direct sunlight. Exposure in moisture and high temperature environment may damage the meter.

Specification

Measuring range	0~50% (1.3330~1.4200RI)
Accuracy	±0.2% (±0.0003RI)
Resolution	0.1% (0.0001RI)
Power supply	built-in 3.7V rechargeable lithium battery
Dimension	147×46×27mm
Weight	115g (including battery)