

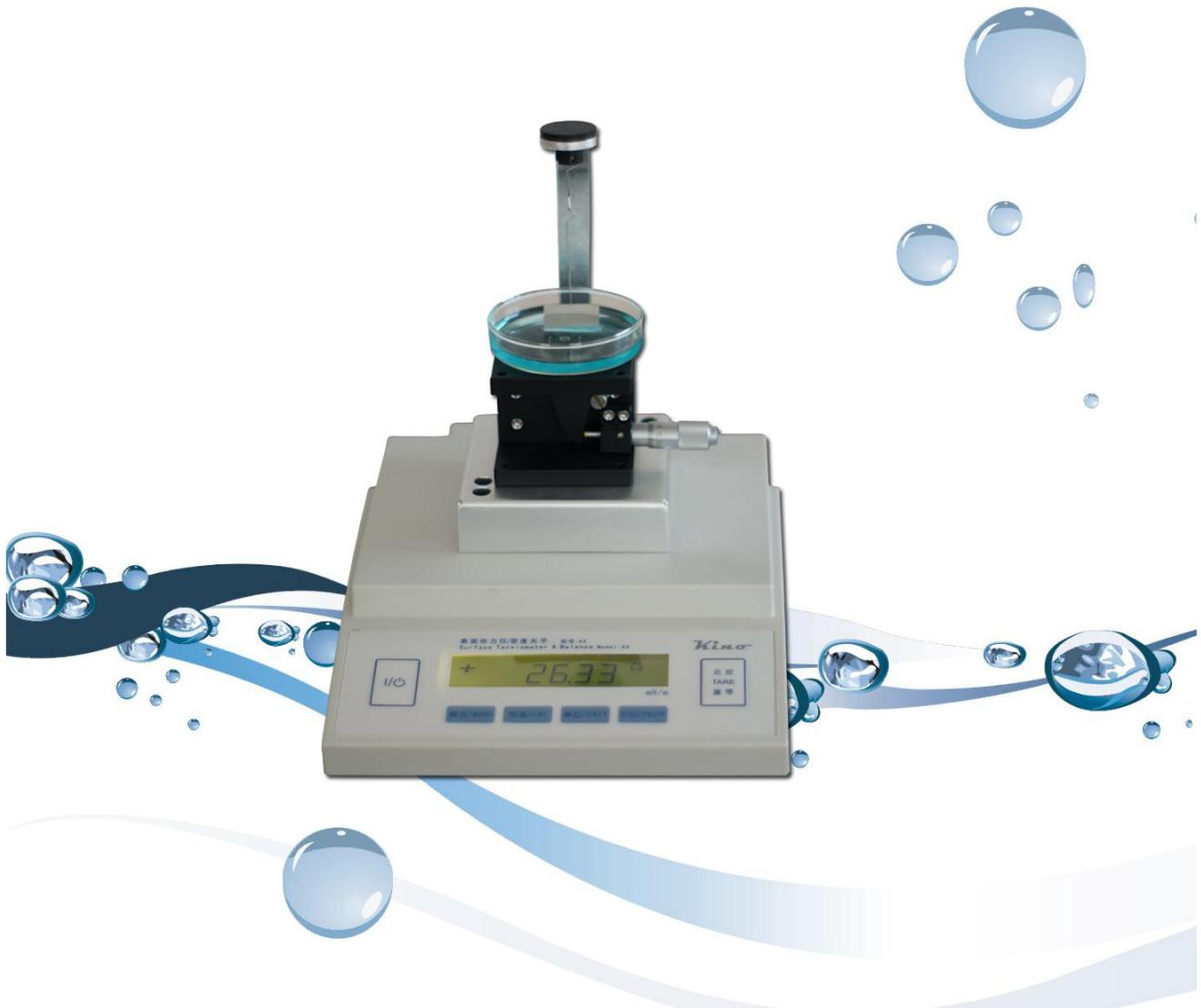
**Kino**

# Surface Tensiometer

## Model A3

— The Simple Manual Type

Weigh-based Interface Chemical Analytical System



Surface tensiometer model A3 is manual standard version standalone instrument that equipped with analytical balance and high precise positioning stage. It can be used to measure surface tension of liquids based on Wilhelmy plate and Du Noüy ring methods rapidly and simply.

### **Typical fields of application**

- Teaching experiment for demonstrating the method for measurement of surface tension
- Quality control: ink, paint, plating fluid, cosmetics and transformer oils, etc.
- Detergent ~ surfactant's absorbing speed, property, discussion of proper concentration

### Performance Features

- ✧ First type of the world that measures surface tension using Wilhelmy plate manually.
- ✧ Long and best seller model with reasonable price and specifications
- ✧ Analytical balance with fast data update speed and positioning stage with accuracy of 0.01mm eliminates personal error
- ✧ Analytical balance provides higher precise than weighing unit using torsion wire
- ✧ Measuring result is real time LED digital readout
- ✧ Simple operations with manual and simple calibration with standard weights (50g)
- ✧ 3th generation Wilhelmy Plate method presents you the performances below.:
  - Variations of surface tension over time in the presence of surfactant.
  - Surface tension of medium-to high viscosity liquids (up to about  $10^4 \sim 10^5$  CP.s)
- ✧ Possessing both Wilhelmy plate method and Du Noüy ring methods (Latter method needs manual calculating by Excel file provided from us)
- ✧ Standalone. Need not connect to PC.

### Technical Specifications

Measurement method:	Wilhelmy Plate method / Du Noüy Ring method (option)
Measurement range:	0~999.9 mN/m
Max load:	50g
Resolution:	0.1mN/m
Accuracy:	$\pm 1$ mN/m
Sample stage:	High precise positioning stage
Resolution of stage positioning:	0.01mm
Travel distance:	10mm
Data display:	Digital on LED
Measuring time:	1~3 sec. after touching interface (low viscous liquid sample)
Measuring temperature:	Ambient temp.
Sample volume:	min. 15mL or (1mL sample vessel made of PTFE for option)
Data output:	N.A.
Power supply:	Standard AC100-220V, 50-60Hz, 48W
Dimensions	190 W x 250D x 250H mm
Weight:	5 kg

### Standard Components

• Main body	1	• Calibration weight (50g)	1
• Holder	1	• Alcohol lamp	1
• Platinum plate	1	• Forceps	1
• Glass lab. dish for surface tension	2	• Install tool	1
• Glass lab. Dish for interface tension	1	• Operation manual	1