# **Contact Angle Analyzer**



Phoenix 150 / 300

The Phoenix series is designed to offer the flexibility required for Q.A, R&D and engineering process development.

The Phoenix series has a specially designed optical system for reducing the light scattering and is mounted with a camera easily adjusted in all-directions. The fluid is dispensed from a manually controlled syringe system or semi-auto / automatically by embedded a stepping motor system. The position of the sample stage can be precisely adjusted along the X-, Y-, or Z-axis for fine image analysis.

#### **Features**

- · Data checking instantly without open analysis window by preview result function
- · Precision drop volume control per 1micro liter
- · Data comparison function
- · Automatic and rapid sample analysis and high-speed dynamic image capture.
- · Improved precision and reproducibility by the elimination of operator error.
- · Available to connect to Notebook or Desktop PC via USB port.
- · Auto calculation of surface energy and work of adhesion.
- · High-resolution and powerful image capture system.
- · Automatic & manual image analysis



## **Capabilities**

- Data checking instantly without open analysis window by preview result function. (P-150 / 300)
- · Static (P-150 / 300), dynamic contact angles. (P-300)
- · Advancing and receding contact angle by captive method. (P-300)
- · Sequence image captures by time basis & dynamic movies. (P-150 / 300)
- · Surface energy / dynamic video. (P-150 / 300)
- · Sessile drop / surface tension by pendent drop method. (P-150 / 300)
- Real time contact angle display. (P-150 / 300)
- Precise calculate drop volume. (P-150 / 300)
- · Precision drop volume control per 1micro liter. (P-300)
- · Data comparison function. (P-150 / 300)

## **Typical Application**

- · Semiconductor applications.
- Detection of organic contamination on PCB and electronic components.
- · Evaluation of cleanliness / treatment / coating processing.
- · Hydrophobicity and hydrophilicity of solid surfaces.
- Biological application such as the detection and characterization of proteins.
- · Adsorption / wettability of powder and pharmacy.
- Analysis of plasma treatments to increase the wettability on polymers surfaces.

#### **Technical Data**

- · Model
- · Max.Sample size (mm)
- · Zoom
- · Resolution
- · Max.Measuring speed
- · Drop controll
- · Contact Angle range
- · Operating system
- · Connecting type
- Power supplyDimension
- $(L \times W \times H, in/mm)$

#### Phoenix 150 / 300

 $200 \times 70 \times \infty \text{ (mm)}$ 

12X

640 x 480

70fps (USB), 84fps (1394)

PC controlled automatic syringe system

0~180, ± 0.1 accuracy

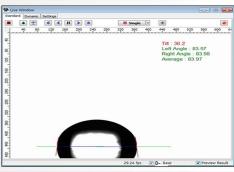
Windows XP, Window 7, Window 8

USB 2.0 or 1394

110V / 220V, 50 / 60Hz

24.4 x 10.2 x 19.7 (620 x 260 x 500 mm)





User friendly for "Preview and D-base" functions

### **Options**

- 1) Thermal chamber (RT to 250°C)
- 2 Thermal pad (RT to 250°C)
- 3 Entire tilting stage for tilt method
- 4 Captive bubble method kit
- Syringe heater





SEO (Surface Electro Optics)

SEO reserve the right to change specifications without notice