○ Optioanl ● Basic

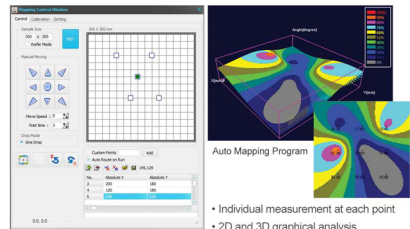| Hardware	Phoenix-MT(M)	Phoenix-MT(A)	Phoenix-MT(T)	Remark
Main frame (High class surface treatment)	○	○	●	Upgradeable
Linear guide	○	○	○	
Dispensing type	Manual	Auto one drop	Touch drop	Upgradeable
Sample stage	fixed	X,Y axis frictional sliding	X,Y axis linear sliding	Upgradeable
Camera stage	fixed	Tilting	Tilting + moving F&B	

Software				
Static contact angle	●	●	●	
Dynamic contact angle	○	●	●	Upgradeable
Surface tension by pendent drop	●	●	●	
Auto one drop capture	○	●	●	Upgradeable
Curved sample measurement	○	●	●	Upgradeable
All process are automatic	○	○	●	Upgradeable

Main options				
Mapping control of sample stage	X	○	○	
Syringe heating (˚C/˚F)	○	○	○	Amb to (180 / 356)
Heating plate (˚C/˚F)	○	○	○	Amb to (350 / 662)
Cooling chamber (˚C/˚F)	○	○	○	Amb to (-40 / -104)
Heating chamber (˚C/˚F)	○	○	○	Amb to (350 / 662)
Nano / Pico dispensing	○	○	○	Up to 60 Picoliter
Captive bubble kit	○	○	○	
Entire tilting system	○	○	○	0~90degree

Technical Data

- **Max.Sample size** (L x D x H, in / mm) — 15.7 x ∞ x 13.7 (400 x ∞ x 350) Standard or Customizing
- **Device Dimension** (L x D x H, in / mm) — 31.5 x 6.2 x 23.6 (800 x 160 x 600) Standard or Customizing
- **Lens** — High resolution Zoom & focusing
- **Max.Measuring speed** — 70 / 315 (Optional) F.P.S
- **Contact Angle range** — 0˚~180˚ deg
- **Accuracy** — ± 0.1˚ deg (standard Calibration)
- **Surface tension range** — 0.01 ~ 2,000 Dyne / Cm
- **Connecting type** — USB 2.0, 3.0
- **Operating system** — Windows 7, Window 8, Window 10
- **Power** — 110 / 220 volt, 50 / 60Hz

Sessile Drop Contact Angle with Preview Results

Pendent Drop Surface Tension

Auto mapping

Auto Mapping Program
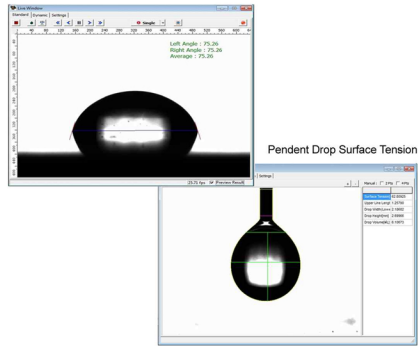
- Individual measurement at each point
- 2D and 3D graphical analysis

Dynamic Contact Angle (Advancing & Receding)

Surface Energy Calculator
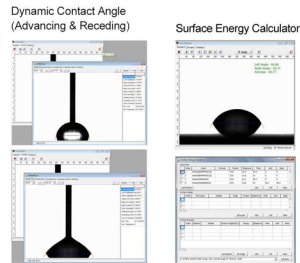
Contact angle & surface tension analyzer

World's first

THE NEW STAGES THAT DEFINE PERFORMANCE

Surface Electro Optics
Excellence in Surface Chemistry Analysis

A new level of designing performance and flexibility

It is the world's first model that can be used by turning the equipment, the individual modules can be separated, and the length of each main frame can be selected to change the model to suit almost all samples.

Any Sample

By the transform device, able to make suitable condition of hardware easily

Any Application

All modules are placeable for several different sample

New stage1.

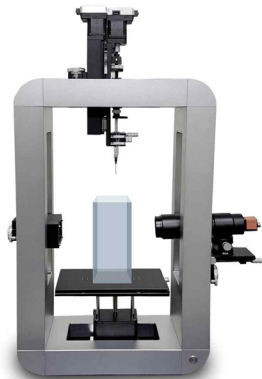• Every main frame is able to change the length for It's sample figure

New stage2.

• Use it on horizontally and vertically
• Depend on sample feature It can be transformed

Common mode
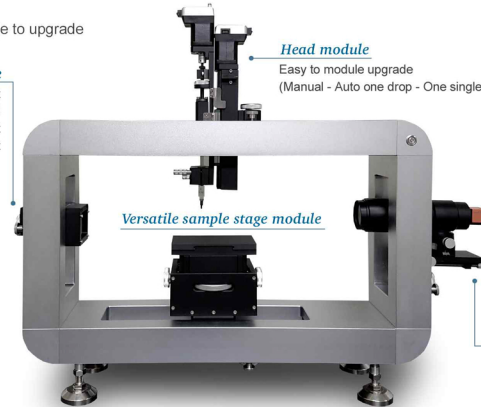
Vertical mode

New stage3.

• Every module is able to upgrade

LED module
The system light source that minimizes light distortion and supports super-low contact angle measurement

Head module
Easy to module upgrade
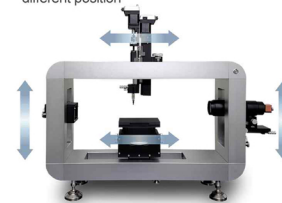(Manual - Auto one drop - One single touch - Multi syringes touch)

Versatile sample stage module

Camera stage
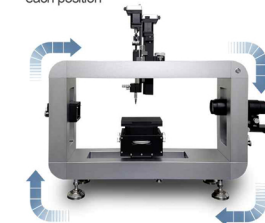Prealigned and optimized for consistent camera / lens performance

New stage4.

• Every module is able to make different position

New stage5.

• Every module is able to change each position

New stage6.

• Without tools able to change position

Features

• **Flexibility** : Easy to upgrade (Manual → Auto one drop → Single touch → Multi syringes Touch) by modularization
• **Automation** : Automatic measurement progress at once
• **User friendly** : Easy to transform for changed sample figure
• **No need the tools** : No need tools required for modules change
• **Module position changeable** : According to Sample figure is changed, Module is able to change the position
• **Huge Application** *Thin sample* : use on Horizontal platform
  Thick sample : move all module (camera, light, stage, head) and turn device
• **Data output** : Data can be exported as an Excel file, offering the highest flexibility

Capabilities

• Static/dynamic contact angle (captive method & tilting method)
• Surface energy calculation
• Surface tension and interfacial tension by Pendent drop method
• Curved sample measurement
• All process (from make drop to measured data) are by one click (at touch system)