### SEO Contact angle & surface tension analyzer

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#### 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





### New stage3.

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



### 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



- · 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)

### SEO Contact angle & surface tension analyzer

Hardware	Phoenix-MT(M)	Phoenix-MT(A)	Phoenix-MT(T)	Remark
Main frame (High class surface treatment)	0	0	•	Upgradeable
Linear guide	0	0	0	
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	0	•	•	Upgradeable		
Surface tension by pendent drop	•	•	•			
Auto one drop capture	0	•	•	Upgradeable		
Curved sample measurement	0	•	•	Upgradeable		
All process are						

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

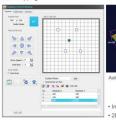
Sessile Drop Contact Angle with Preview Results

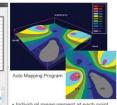


Pendent Drop Surface Tension



Auto mapping





• 2D and 3D graphical analysis

#### Technical Data

- Max.Sample size  $(L \times D \times H, in/mm)$
- · Device Dimension  $(L \times D \times H, in/mm)$
- · Lens
- Max.Measuring speed
- · Contact Angle range
- Accuracy
- · Surface tension range
- Connecting type
- · Operating system
- Power

15.7 x ∞ x 13.7 (400 x ∞ x 350) Standard or Customizing

31.5 x 6.2 x 23.6 (800 x 160 x 600)

High resolution Zoom & focusing

70 / 315 (Optional) F.P.S

0~180; deg ± 0.1 deg (standard Calibration)

0.01 ~ 2,000 Dyne / Cm

USB 2.0, 3.0

Windows 7, Window 8, Window 10

110 / 220 volt, 50 / 60Hz

#### Dynamic Contact Angle (Advancing & Receding)







# SEO Surface Electro Optics

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