

Economical static contact angle meter

Contact Angle Meter DMe-211Plus

The DMe-211Plus is an economical yet fully-featured contact angle meter with a computer-controlled image analysis system.

The instrument combines manual droplet volume regulation and precise stage up/down motion for gentle deposition of droplets with "FAMAS" software-controlled measurements of contact angles (static and measured as a function of time), as well as measurements of surface and interfacial tension by the pendant drop method.

Analysis software to determine the surface free energy is a standard feature.



FEATURES

- ◆ Automatic droplet recognition and subsequent automated droplet analysis
- ◆ Fine adjustable stage in the z-axis for gentle deposition of droplets without distortion
- ◆ Manual dispenser with a set of 5 glass syringes and SUS needles for precise adjustment of droplet volume and fast and easy syringe exchange
- ◆ Adjustable level of instrument and stage
- ◆ Droplet calibration standard, consisting of one full circle for calibration and three droplet silhouettes for periodic inspections of measurement accuracy

STANDARD COMPONENTS

Item	Q'ty	Item	Q'ty
DMe-211Plus main body ¹⁾	1	Manual dispenser	1
Set of 5 glass syringes and 22G SUS needles	1	Droplet calibration standard (standard view)	1
Acrylic plate (for practice)	1	Level	1
USB cable	1	FAMAS software installation disc	1
Operation manual (English)	1	FAMAS license key	1

¹⁾ The main body comprises a CMOS camera, an LED light source, a manual stage device, and a dispenser holder.

SPECIFICATIONS

Measuring method	Contact angle: Sessile drop	Surface and interfacial tension: Pendant drop
Analysis method	Contact angle: Surface and interfacial tension: Surface free energy of solids: ¹⁾	θ/2, tangent, curve fitting (ellipse, circle), Young-Laplace Young-Laplace, ds/de OWRK, Owens-Wendt, Kaelble-Uy, Kitazaki-Hata, Wu, acid-base, Zisman
Measuring range	Contact angle: 0 to 180 °	Surface and interfacial tension: 0 to 2000 mN/m
Resolution	Contact angle: 0.01 °	Surface and interfacial tension: 0.01 mN/m
Accuracy ¹⁾	Contact angle: 0.3 °	Surface and interfacial tension: 0.3 mN/m
Field of view	6.3mm(W) x 4.7mm(H), fixed focal lens, including manual focus	
Sample size	160mm(W) x 100mm(D) x 10mm(H), max. weight: 300g	
Stage movement	10.5mm in the z-axis, manually via rotation knob	
Droplet dispensing	Manual dispenser	
Dispensing resolution	0.1μl	
Droplet deposition	Manually via stage up/down movement	
Measuring temperature	Ambient	
Power supply	USB bus power (a Windows PC, which is optionally available, is required to operate the instrument)	
Dimensions, weight	170mm(W) x 346mm(D) x 283mm(H), approx. 1.8 kg	
Operating environment	Temperature: +10 to +35°C, Relative humidity: 30 to 80% (non-condensing) Positioned away from sources of electrical noise and vibration.	

¹⁾ Accuracy is the repeatability in terms of standard deviation based on the manufacturer's calibration standard.

For detailed information, please get in touch with our sales partner or us directly at +81-48-483-2629 or overseas-sales@face-kyowa.co.jp.

Specifications and design are subject to change without notice.

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