

General Specifications for FTÅ Drop Shape Instrumentation

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● = standard ○ = optional "practical"=obtained with ordinary care ≈=approximately or essentially

	FTÅ100 Series	FTÅ200, D200	FTÅ4000
<b>Contact Angle by Sessile Drop</b>			
Range	≈0-180°	≈0-180°	≈0-180°
Practical accuracy	±1°	±1°	±1°
Resolution	0.1°	0.1°	0.1°
<b>Contact Angle by Capillary Rise</b>			
Range		0-90°	0-90°
Practical accuracy		±1°	±1°
Resolution		0.1°	0.1°
<b>Interfacial Tension by Pendant Drop</b>			
Range	≈0-2000mN/m	≈0-2000mN/m	≈0-2000mN/m
Practical accuracy	±0.5%	±0.5%	±0.5%
Resolution	0.1%	0.1%	0.1%
<b>Interfacial Tension by Sessile Drop</b>			
Range	10-2000mN/m	10-2000mN/m	10-2000mN/m
Practical accuracy	±1%	±1%	±1%
Resolution	0.2%	0.2%	0.2%
<b>Interfacial Tension by Drop Volume</b>			
Range		≈0-2000mN/m	≈0-2000mN/m
Practical accuracy		±2%	±2%
Resolution		0.1%	0.1%
<b>Liquid Drop Dispense</b>			
Manual pipette, manual Z	●		
Adjustable vol pipette, manual Z	○		
Stepper motor syringe, manual Z		●	
Stepper motor syringe, stepper motor Z		○	●
Practical drop volume	2-40μl	2-200μl	100pl-20μl
<b>Optical System</b>			
Video measuring accuracy	±0.1%	±0.1%	±0.1%
Viewing angle 0° (horiz) or 3° (down)	●	●	●
Horizontal field of view (FOV)	≈8mm, 4mm	≈8mm-660μm	≈6mm-200μm
Telecentric lens with ×1, ×2 adapters	●		
12:1 zoom + fine focus + var aperture		●	●
Stepper motor auto zoom/focus		○	○
<b>Camera</b>			
60 VGA images per second	●	●	●
360/240/120 images per second		○	○
<b>Software</b>			
Surface energy and adhesion calcs	●	●	●
Dynamic movie capture	●	●	●