Spinning Drop Tensiometer SDT Specifications





Product group specifications	SDT	
Camera system		
Connection Performance	USB 3.0 15 fps at 2560 × 1920 px	
Optics		
Focus Zoom Field of view Resolution	fixed 1.4× zoom, fixed 6 mm × 4.5 mm 2.3 μm	
Illumination		
Type Wave length, dominant Field of light	high power monochromatic LED and stroboscope 469 nm 57 mm × 7 mm (D × H)	
Sample stage		
Tilting Resolution	±20° 0.1°	
Capillary drive		
Resolution Long term stability	0.1 rpm ±1 rpm	
Software		
ADVANCE	spinning drop	
Software languages		

Chinese (simplified), English, French, German, Japanese, Korean, Portuguese, Russian, Spanish



Measurement specifications	SDT
Spinning drop	
Result Range Resolution Models	interfacial tension (IFT) 10 ⁻⁶ to 2000 mN/m 10 ⁻⁶ mN/m Vonnegut, Young-Laplace

General specifiations	SDT		
Sample dimensions			
Minimum required sample volume	surrounding liquid: 1 mL drop liquid: 1 to 4 μL		
Temperature control			
Types Range Resolution Flow-through thermostat	electric ambient to 120 °C 0.1 °C -	liquid -10 to 120 °C depending on external circulator optional	
Temperature measurement			
Types Range Resolution Precision Locations	internal sensor -10 to 180 °C 0.1 °C 0.1 °C heating element	infrared sensor -10 to 180 °C 0.1 °C 0.1 °C capillary	
Housing and peripherals			
Camera parking system Control panel	protecting the camera when not in use glass surface with capacitive sensing		
Capillary			
Septum free filling system Quick lock loading Drop launch mechanism	for easy sample preparation for fast sample exchange drop creation at the press of a button		
Environment			
Operating temperature Humidity	15 to 30 °C without condensation		
Instrument dimensions			
Footprint Height Weight (without accessories)	360 mm × 240 mm (W × D) 325 mm 15 kg		
Power supply			
Voltage (AC) Power consumption Frequency	100 to 240 V maximum 250 W 50/60 Hz		
Interfaces			
PC Auxiliary Circulator	USB 3.0 RS232 quick couplings		