LARGE SURFACE ANALYZER – LSA

SPECIFICATIONS

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Product group specifications	LSA	
Camera system		
Connection	USB 3.0	
Performance	2 × CF02: 10 fps at 1000 × 700 px	
Optics		
Focus	fixed focus	
Zoom	fixed focal length	
View angle	2°	
Field of view	2 × CF02: 4.7 mm x 3.3 mm	
Resolution	2 × CF02: 5 µm	
Illumination		
Type	high Power LED	
Wave length, dominant	468 nm	
Field of light	5 mm × 23 mm (D × H)	
Dosing system		
Dosing	double pressure dosing	single direct dosing
Drop deposition	software-controlled	
Cartridge/syringe, volume	disposable cartridge (1 mL)	disposable syringe (1 mL)
Resolution	0.1 µL	
Speed	fixed	
Portal system axes (x, y, z)		
Control	software-controlled	
Length	option 1: x:490 mm, y: 440 mm, z: 85 mm option 2: x: 2900 mm, y: 3150 mm, z: 85 mm option 3: custom size	
Resolution	0.001mm	
Accuracy	0.05 mm	
Software		
ADVANCE	contact angle surface free energy of solids	

Measurement specifications	LSA
Sessile drop	
Result	contact angle
Range [2]	0 to 180°
Resolution [2]	0.01°
Accuracy [3]	0.8°
Model	conic section, polynom, circle, Young-Laplace, height-width
Type	static
Surface free energy of solids	
Result	surface free energy
Model	equation of states, Zisman, Fowkes, Wu, Owens-Wendt-Rabel-Kaelble

General specifications	LSA
Sample dimensions	
Maximum measurable surface	option 1: 490 mm × 440 mm option 2: 2900 mm × 3150 mm
Housing and peripherals	
Compartment	stainless steel
Environment	
Temperature	operating: 10 to 40 °C
Humidity	without condensation
Instrument dimensions	
Footprint	option 1: 1010 mm × 960 mm (W × D)
Height	540 mm
Weight (without accessories)	100 kg
Power	
Voltage	2 × 90 to 264 V
Power consumption	560 W
Frequency	47 to 63 Hz
Interfaces	
PC	USB 3.0

[2] software-based
[3] instrument-based

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