

MOBILE SURFACE ANALYZER – MSA

SPECIFICATIONS



KRÜSS

Advancing your Surface Science

Product group specifications**MSA****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 × 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 ¹⁾
Drop deposition	software-controlled	
Cartridge/syringe, volume	disposable cartridge (1 mL)	disposable syringe (1 mL)
Resolution	0.1 μL	
Speed	fixed	

Software

ADVANCE	contact angle
	surface free energy of solids

Measurement specifications**MSA****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

¹⁾ optional²⁾ software-based³⁾ instrument-based

General specifications

MSA

Sample dimensionsMaximum sample size $\infty \times \infty \times \infty$ (W × D × H)**Housing and peripherals**

Compartment stainless steel

EnvironmentTemperature operating: 10 °C to 40 °C
storage: -10 °C to 70 °C

Humidity without condensation

Instrument dimensions

Footprint 106 mm × 59 mm (W × D)

Height 112 mm

Weight (without accessories) 0.85 kg

Power

Voltage 5 V

Power consumption 4.5 W

Interfaces

PC USB 3.0

