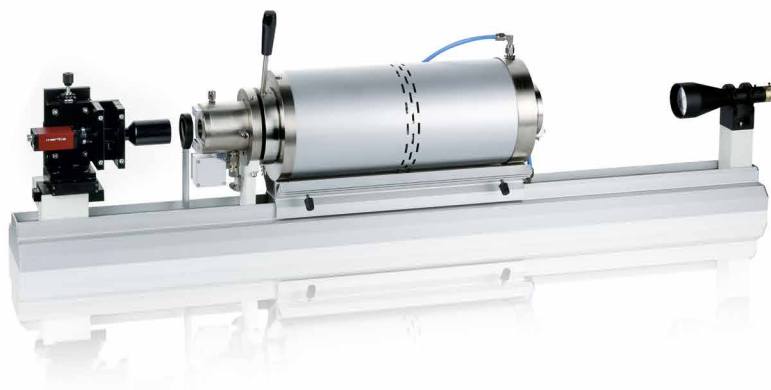


Drop Shape Analyzer

DSAHT

Specifications



Product group specifications	DSAHT1600	DSAHT1800	DSAHT2000
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Camera system			
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Connection		ethernet	
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Optics			
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Focus		software-controlled autofocus	
Magnification		1.87×	
Field of view		10 × 14 mm	
Resolution		down to 7 μm	

Illumination			
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Type		halogen, telecentric	
Field of light (D × H)		25 × 23 mm	

Measurement specifications with ADVANCE software	DSAHT1600	DSAHT1800	DSAHT2000
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Sessile drop			
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Result		contact angle	
Range (software-based)		0 to 180°	
Resolution (software-based)		0.01°	
Models		conic section, polynomial, circle, Young-Laplace, height-width	
Types		static	

Constrained Sessile Drop			
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Result		surface tension	
Range (software-based)		0.01 to 2000 mN/m	
Resolution (software-based)		0.01 mN/m	
Models		Young-Laplace	

General specifications	DSAHT1600	DSAHT1800	DSAHT2000
Sample dimensions			
Maximum sample space	length: 20 mm, diameter: 7 mm		length: 20 mm, diameter: 5 mm
Temperature control			
Heating element	SiC	MoSi ₂	Graphite
Measuring system	Al ₂ O ₃	Al ₂ O ₃	Graphite
Range furnace	up to 1600 °C	up to 1800 °C	up to 2000 °C
Range sample	up to 1550 °C	up to 1700 °C	up to 2000 °C
Heating rates		0 ... 1200 °C: 30 °C/min 1200 ... 1600 °C: 20 °C/min > 1600 °C: 10 °C/min	
Cooling rates		1600 ... 1100 °C: 10 °C/min 1100 ... 600 °C: 10 °C/min 600 ... 300 °C: 5 °C/min	
Temperature measurement			
Accuracy	± 2.5 °C		
Internal sensor Location	thermocouple type S	thermocouple type B at the sample	thermocouple type C
Vacuum control			
Final value Atmosphere	down to 10 ⁻⁵ mbar oxidizing, reducing, vacuum	down to 10 ⁻⁴ mbar inert, oxidizing, reducing, vacuum	down to 10 ⁻³ mbar inert, reducing, vacuum
Instrument dimensions			
Footprint (W × D) Height		1200 × 400 mm 400 mm	
Power supply			
Voltage	230 V/16 A		