

MobileDrop



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MobileDrop is a semiautomatic and fully integrated system for measuring contact angles and surface free energies on samples of virtually any size. Its low weight, operation with a notebook and simple handling mean that the instrument is a flexible and reliable partner for quality assurance, both in the lab and on-site.

- **Mobile stand-alone contact angle measuring instrument with measuring head for one-hand operation**
- **Mains-independent measurements on:**
 - **very large surfaces**
 - **very small surfaces**
 - **in cavities**
 - **on vertical surfaces**
- **Drop positioning by laser pointer**
- **Rapid liquid exchange**
- **USB camera**
- **Intelligent measuring and evaluation software**
- **Extensive liquid database**



Technical Data



Measuring range	5-175°
Read-off accuracy	± 0.1°
Surface free energy models	OWRK, Wu, Zisman, Fowkes, Schultz, Van Oss & Good
Resolution of SFE result	0.01 mN/m
Data backup	In database
Sensor type	CMOS
Sensor resolution	752 x 480 px
Volume increments	2 µl
Weight of measuring head	500 g
Footprint of measuring head	25 x 52 mm
Screen	Depending on PC
Power supply	Via USB
Up-time	Depending on PC
Computer requirements	<ul style="list-style-type: none"> • IBM PC compatible, running Windows 2000/XP • USB 2.0

MobileDrop

The MobileDrop from KRÜSS has achieved a new dimension in mobility and simplicity for the contact angle measuring technique. The measuring head only weighs 500 g and can be comfortably operated with only one hand.

The compact space within the housing is occupied by high-precision components: prism optics, an "intelligent" camera and a fast exchangeable dosing unit. Operation with a notebook ensures fully independent on-site use of the instrument.

The ergonomic measuring head is placed on the sample, which can be of almost any size. The dosing lever lowers the needle and deposits the liquid – the drop volume can be adjusted in 2 µl steps.

A prism arrangement transfers the outline shape of the drop via the built-in camera to the connected notebook, where the time-proven KRÜSS SW23 (DSA2) software evaluates the drop video.

A range of different liquids can be deposited in quick succession - the DSA2 uses the drop shapes to determine the contact angle and then calculates the surface free energy from it. KRÜSS has incorporated the most important evaluation techniques for contact angles and SFE in the software.

A comprehensive substance database and comfortable data management round off the program.

Accessories MobileDrop

Basic unit	<ul style="list-style-type: none"> • GH11: Mobile Contact Angle Measuring System with USB Camera • GH11HT: Mobile Contact Angle Measuring System with USB Camera for short term measurements on hot surfaces up to 250°C
Dosing modules	<ul style="list-style-type: none"> • Manual Direct Dosing System with disposable syringe • Precision Dosing with Micrometer Calliper
Calibration standards	<ul style="list-style-type: none"> • Contact Angle Standard Set for testing of contact angle measurement by Young-Laplace Method (30°, 60°, 90°)
Syringes / Needles	<ul style="list-style-type: none"> • Disposable Syringes (1 ml) • Hollow needles (Luer-Lock)
Others	<ul style="list-style-type: none"> • Wider Base for MobileDrop for increased stability

Technical specifications are subject to change without notice.



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