

Tensiometer
STA-1**Quick surface tensions with an easy available tensiometer**

Ring and Plate tensiometry belong to the classical methods for measuring the surface tension of liquids

The principle is to measure the weight of a meniscus hanging on a ring or plate. Our solution does not use an extra force transducer as any accurate laboratory balance (better than 0.1 μg) is suitable to complete this instrument. Easy handling and operation with a modern Windows software.

Both manual and automatic versions are available.

Density of a liquid can be measured as well by the immersion of a body of known volume.

Instrument parts

- laboratory balance (better 0.1 mg)
- automatically motor driven movement of the ring or plate or manual movement by a linear stage
- holder for a ring, plate or immersion body

Tensiometry

BPA-1P

BPA-1S

DVA-1

PAT-1

PAT-2P

STA-1

DPA-1

2D-Rheology

ODBA-1

ISR-1

Foams

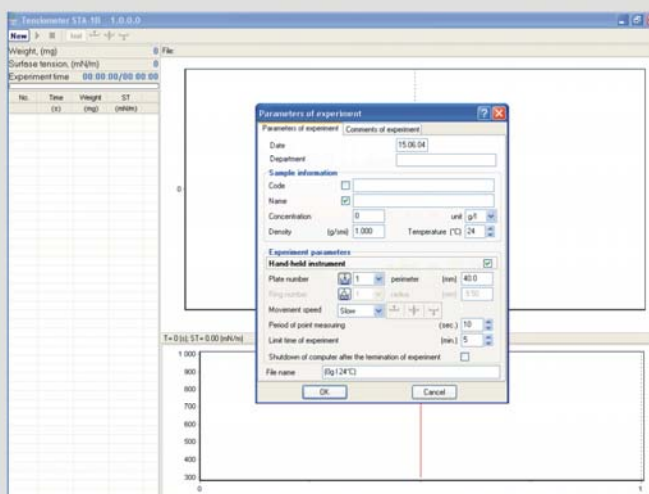
FA-1S

Emulsions

DBMM-1

The instrument allows the following measurements

- surface tension of liquids
- ring and plate method
- determination of density with an immersion body
- corrections factors after Harkins and Jordan
- contact angle measurements with the immersing plate technique
- easy to handle instrument and software
- also available as manual instrument
- use with any PC or laptop



Fields of Application

surfactant science
ink jet printing
coating technology
foam and emulsion technology
detergency

pharmacy
cosmetics
food technology
medicine and biology
ecology

Technical Data:

Range of surface and interfacial tension	1 to 1000 mN/m; resolution: ± 0.1 mN/m
Time range	1 s to 10 h
Measuring options: - Du Nouy ring method - Wilhelmy plate method - Density determination	standard routine standard including contact angle for liquids density > 2 g/cm ³
Range of contact angle measurement	10° to 180° accuracy $\pm 0.3^\circ$
Software	Windows software (free update over 1 year after purchase)
Size of device (L x W x H) - manual version (without balance) - automatic version (without ballance)	100 x 100 x 300 mm 200x50x250 mm
Weight - manual version (without balance) - automatic version (without ballance)	1 kg 2 kg
Power supply	100 ... 240 AC; 50 ... 60 Hz; 55 W
Extra accessories	temperature controlled cell

Tensiometry

BPA-1P

BPA-1S

DVA-1

PAT-1

PAT-2P

STA-1

DPA-1

2D-Rheology

ODBA-1

ISR-1

Foams

FA-1S

Emulsions

DBMM-1