

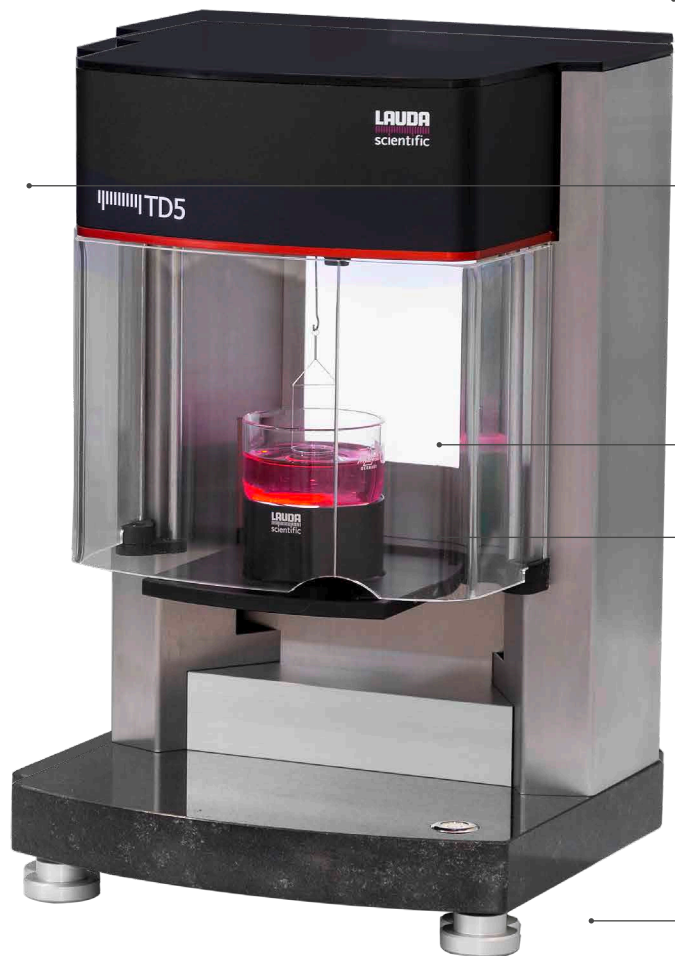
# TD5 Tensiometer – The compact scientific instrument with perfect control and new methods



**According to:**

- EN 14210
- EN 14370
- ASTM D 971
- ASTM D 1331
- ISO 6889
- ISO 304
- ISO 1409
- OECD 115
- and more

# TD5 Tensiometer – For research, quality control and product development



Surface tension, interfacial tension, drop adhesion force and density measurements – The TD5 masters all this, in a very compact and lab space-efficient way.

The intuitive Surface.Meter software gives you full control at a very high measurement frequency. The TD5 also includes an integrated automatic adjustment for reliable force data.

Along with its magnetically locked windshield, its robust but precise force sensor and the precise distance control for the sample stage, the TD5 is a reliable partner for research and quality control.

| Technical data                  | TD5 (LMT 880)  |
|---------------------------------|--|
| Surface tension measuring range | 0.75...2000 mN/m (ring) / *<br>1...2000 mN/m (plate) * |
| Surface tension resolution      | 0.007 mN/m   |
| Density resolution              | 0.001 g/cm <sup>3</sup>                                |
| Maximum density                 | 2500 kg/m <sup>3</sup>                                 |
| Weighing system resolution      | 0.1 mg   |
| Maximum Weight                  | 200 g  |
| Table movement                  | Motor driven PC controlled (precision drive)           |
| Ring correction                 | Automatic (acc. to Zuidema and Waters)                 |
| Temperature range with TDJ 805  | 5...80 °C  |
| Dimensions (WxDxH)              | 226x189x360 mm   |
| Power consumption               | 15W  |
| Weight, net                     | 11.3 kg  |

\* Depending on density or density difference

## Scope of supply:

- || TD5 automatic tensiometer, incl. Surface.Meter software
- || Measuring ring acc. to Du Noüy, 2-legged (Pt/Ir) (EZ 325)
- || Density measurement set (UD 320)
- || Sample beakers, ø 6 cm, 10 units (EG 011)

# Development

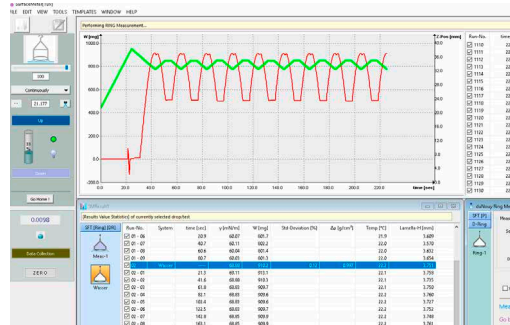
- || Surface tension measurements
  - || Interfacial tension measurements
  - || Drop adhesion force measurements
  - || Density measurements
- 
- || Powerful PC software with intuitive interface
  - || Data export to Excel® and CSV files
  - || Real-time live data monitor for force and position
  - || Innovative methods like adhesion force tests
- 
- || High resolution position measurement
  - || Ultra compact and lab space-efficient design
  - || Dynamic and high precision force sensor
  - || Weighing range from 0.1 mg up to 200 g
  - || Internal automatic calibration
- 
- || Windshield doors
  - || Bright backlight
  - || Easy sample handling
  - || Precise alignment of different vessel sizes
  - || Optional temperature jacket
  - || Drop adhesion force measurements without a camera
  - || Density tool included
- 
- || Integrated spirit level
  - || Optional temperature sensor

# Accessories and features

## Comprehensive software with full control

### Advantages & benefits

- || Surface.Meter software for standard surface and interfacial tension measurements and drop-adhesion force measurements
- || Complete control over all parameters like weight and position
- || Easy data handling and export for all QC and research purposes
- || Integrated liquid database
- || Integrated calibration procedure with the option to use an external calibration weight
- || Sample area is protected by windshield
- || Sample spacers allow quick handling and adjustments



## Measurement modes and options

### Advantages & benefits

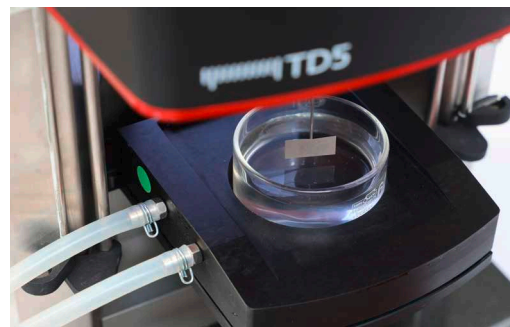
- || Surface tension and interfacial tension measurements according to the respective norms
- || Surface and interfacial tension measurements using the pull-through method
- || Density measurement software and tool included
- || Drop adhesion measurements to determine solid-liquid interactions
- || Micro-penetration measurements optional
- || Internal and external calibration procedure
- || Temperature range 5...80 °C, optional temperature sensor available



## Accurate temperature with TDJ 805 temperature control unit and LOOP

### Advantages & benefits

- || Fast and effective temperature control of your samples by connecting an external thermostat (e.g. LAUDA Scientific Loop 100)
- || Temperature-controlled measurements between 5 and 80 °C
- || Incl. sample beaker ø 6 cm (EG 011-1) and windshield
- || Low space requirement with convenient controls within the Surface.Meter software



## Innovative drop adhesion force measurement

### Advantages & benefits

- || Precise measurement of solid-solid and liquid-solid interactions
- || With the help of a cuvette, various environmental phases are possible, allowing also the measurement of bubble-solid interactions
- || Different probe sizes for a wide measurement range

