TENSIOCAD-M®: A MODULAR AND EASY-USE TENSIOMETER

SURFACE AND INTERFACIAL TENSION MEASUREMENT

TensioCAD-M® is a modular tensiometer for interfaces characterization such as surface and interfacial tension measurements or contact angle determination.

Based on a high sensitivity weighing sensor, **TensioCAD-M®** offers several configurations of measurement depending on your applications: surface (1 liquid) or interfacial (2 liquids) tension, contact angle (solid-liquid), powder wettability (porous solid or particle packing).

Data are mass (force) *vs.* time measurements during controlled lift of the measurement probe.

Configurations

- Wilhelmy plate
- Du Noüy ring
- Washburn method

Measured parameters

- Superficial & interfacial tension
- Powder wettability
- Contact angle for membranes & fibers
- Capillary rise
- Density
- Sedimentation speed

Features and Benefits

- Modular tensiometer
- Wilhelmy plate and Du Noüy ring are **Pt-Ir** material made (ISO 304 standard), offering a very high surface free energy
- Special measuring cells for powder wettability, hair, polymer or membrane analysis using the Washburn method
- Temperature control (*optional*) due to a circulating water bath and magnetic stirrer include to ensure temperature equilibrium of the liquid
- An easy-to-use and friendly software to record your data and perform data treatment

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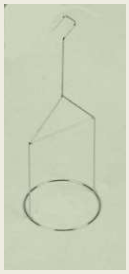
TensioCAD-M®: a Modular and Easy-use Tensiometer

CAD Instruments offers a wide range of services to help you take advantage of this new measurement device. The **TensioCAD-M®** can be used for major industrial and academic applications including:

- Ceramics
- Polymer latex
- Nanoparticles
- Cement

- Emulsion
- Micro-emulsion
- Liposomes
- Water treatment
- Pulp & Paper

- Clays
- Pigments
- Flotation
- Biology
- Immunology



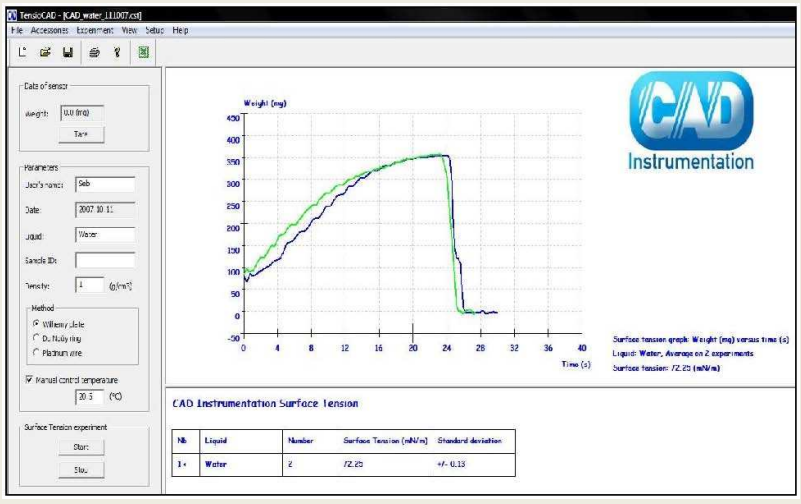
TensioCAD-M® Specifications

Weight	**0.001 ..... 120**	**g**
Weigh sensitivity	**0.0001**	**g**
Surface Tension	**1 ..... 1 000**	**$mN.m^{-1}$**
Surface Tension Accuracy	**0.01**	**$mN.m^{-1}$**
Temperature (*optional*)	**5 ..... 60**	**°C**
Dimensions	**340 x 160 x 260 mm** (H x l x P)	

TensioCAD-M® Software

- Complete and user-friendly software
  - Adapted to the proposed configurations: Wilhelmy, Du Noüy or Washburn method
  - Data record Force *vs.* Time
  - Data treatment
  - Summary table of experiments

- Minimum computer configuration:
  - Pentium IV, 512 Mb RAM
  - Windows XP and up



Note: specifications may change in the interest of product development

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