

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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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

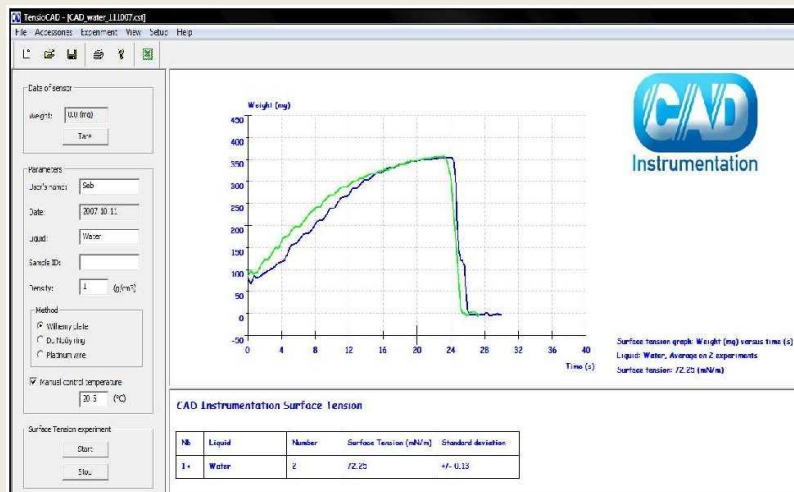


TensioCAD-M[®] Specifications

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