ZetaCompact®
New zeta potential meter for nano and micro particles

Live visualisation in vertical plane for large particles

Laser illumination & video interface

New software allows fully automatic tracking of particles

Colloidal stability studies ...

For emulsions, suspensions, bacteria, proteins ....
ZetaCompact® SPECIFICATIONS

ZetaCompact® is a new zeta potential meter with video analysis technique (laser illumination) for an extended size range & different shapes. Dedicated to the stability or instability analysis of dispersions.

FEATURES

1/ Charged particles in a liquid suspension can be made to move by applying an alternative electric field to the liquid through two electrodes [two others electrodes measure the electric field].

2/ Observation & tracking of particles in vertical plane by combination with laser light scattering and CCD Camera (video interface).

3/ Angular path finding resolution for large particles that are settling during measurement.

4/ Sample temperature & electrical conductivity are permanently measured in-situ by fast response micro-probe.

5/ Special positioning sensor for stationary layer detection.

6/ Easy to clean : a kinematics mounting gives easy access to the measuring chamber (Patented).

7/ Replaceable main electrodes and the mounting allows rapid and precise positioning of the cell after cleaning.

8/ The image analysis software computes the exact velocity of particles appearing on the screen.

9/ The real histogram of mobility can be calculated knowing the electrical field applied.

10/ The system stores the images, computes & overlays the exact spectrum of mobility while guaranteeing an excellent representation and reproducibility.

11/ Fast automatic analysis : typically analysis less than 2 minutes.

TECHNICAL DATA*

Electronics Units
- Electric field generator 250V – 10mA
- Conductivity meter 10μS/cm – 1000μS/cm
- Communications Via RS232C serial port
- Positioning sensor resolution 1μm
- Power supply 100V to 250V – 50 to 60Hz – 50 VA
- Dimensions W 450mm x D 300mm x H 150mm
- Weight 6kg

Measuring Cell
- Particle size measured 30nm-25μm
- Cell Quartz interchangeable capillaries
- Rectangular section 5x2x70mm
- Main electrodes Palladium
- Secondary electrodes To measure electric field
- Temperature sensor 0.1°C
- Sample volume 6mL

Hameau Saint Hubert - 10, rue de la Haie aux Vaches - 78690 Les Essarts Le Roi - France
Tél.: +33 (0)1 34 84 93 94 - Fax: +33 (0)1 34 84 66 44 - Email: cad@cad-inst.com - Web : www.cad-inst.com