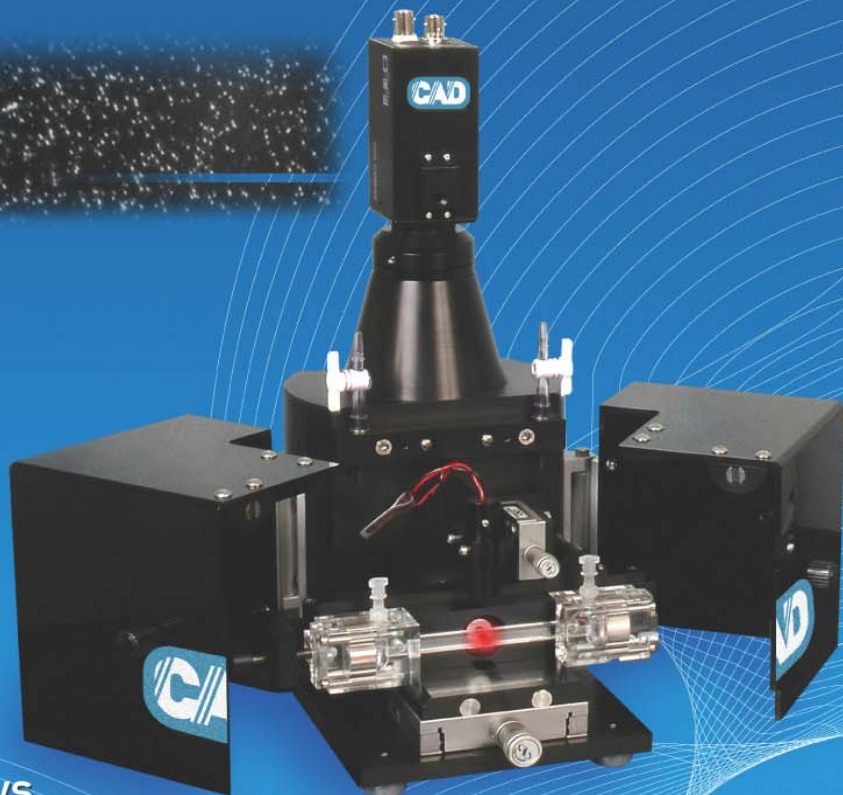
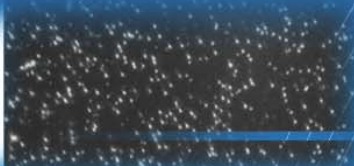


ZetaCompact[®]

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

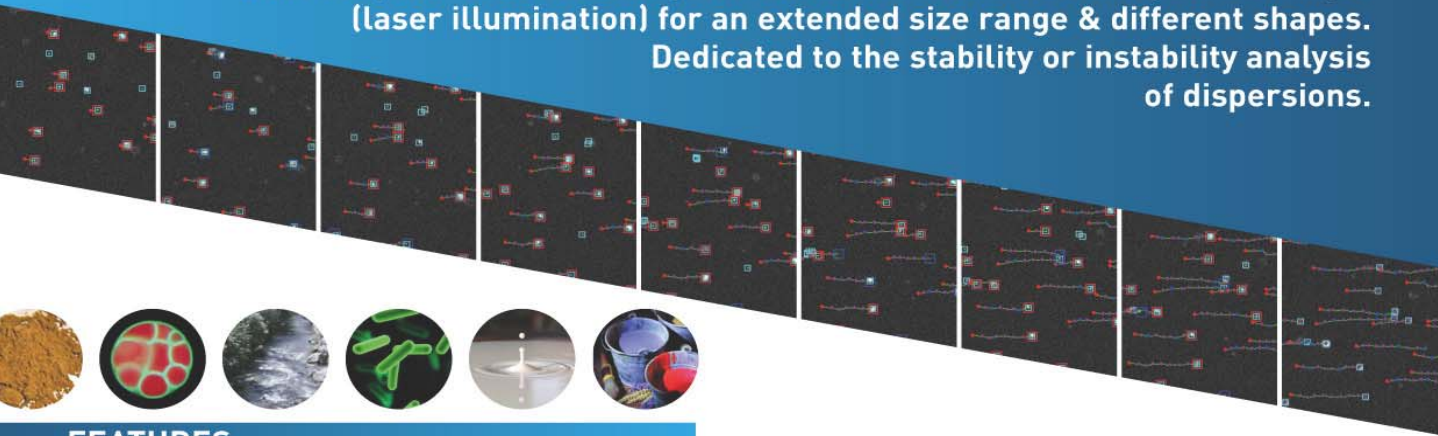


Instrumentation

Zeta potential solutions

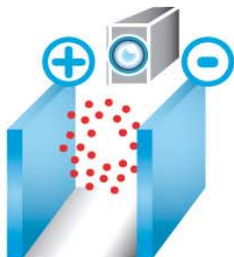
ZetaCompact® SPECIFICATIONS

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).

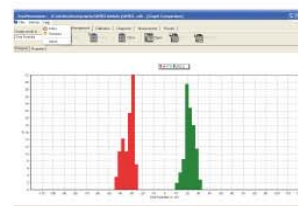


- 7/ Replaceable main electrodes and the mounting allows rapid and precise positioning of the cell after cleaning.

PARAMETERS MEASURED

Electrophoretic mobility	Electrical conductivity
Zeta potential	Temperature
pH	Cell position

- 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	10 μ S/cm – 100mS/cm
• Communications	Via RS232C serial port
• Positioning sensor resolution	1 μ m
• 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-25 μ m
• Cell	Quartz interchangeable capillaries
• Rectangular section	5x2x70mm
• Main electrodes	Palladium
• Secondary electrodes	To measure electric field
• Temperature sensor precision	0.1°C
• Sample volume	6mL



Zeta potential solutions