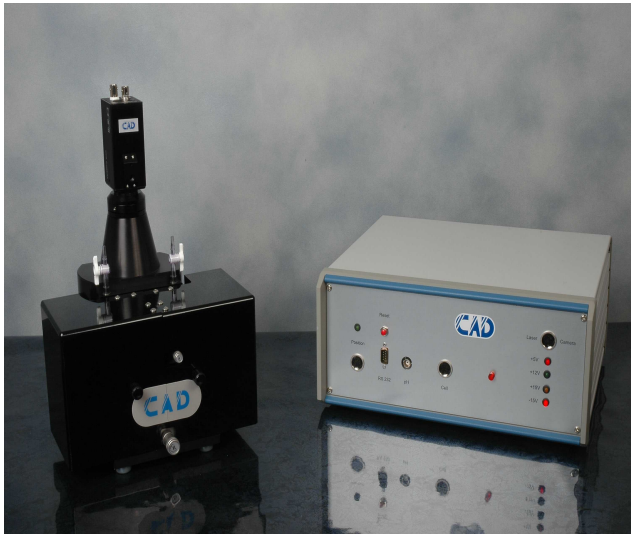


ZetaCompact®



ZetaCompact®

**Live Visualisation
of Large Particles**

**High Resolution
Spectrum of Mobility
and Zeta Potential**

Particles having a high density or large diameter will settle on the bottom of the measuring chamber.

The ZetaCompact measures electrophoretic mobilities in a vertical plane. It uses high accuracy image analysis with multiple paths extraction and angular resolution.

Measured Parameters

- Electrophoretic Mobility in the vertical plane
- Zeta Potential
- pH
- Electrical Conductivity
- Temperature
- Cell Position

Features and Benefits

- A modular tool designed to tackle all the problems encountered when measuring the electrophoretic mobility of particles from 50nm up to 50µm and calculating the zeta potential of colloidal suspensions.
- Laser illumination and video interface allows submicronic particle measurement
- The CELL consists of two pairs of palladium electrodes fitted into perfectly symmetrical chambers
- A kinematics mounting gives easy access to the quartz chamber. It allows rapid and precise positioning of the cell after cleaning
- Sample temperature is measured in-situ by a fast response micro-probe
- Fully Automatic tracking of particles with state of the art image analysis software

CAD Instrumentation

CAD Instrumentation offers a wide range of services to help you take advantage of this new measurement device. The ZetaCompact 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

ZetaCompact® Specifications

Technology

Micro-Electrophoresis with video tracking

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

Cell	Quartz interchangeable capillaries
Rectangular section	5x2x70mm
Main electrodes	Palladium
Secondary electrodes	Platinum for measuring electric field
Temperature sensor precision	0.1°C
Sample volume	6mL

Minimum Computer Specification (if supplied by customer)

- Pentium IV class, 512 Mb RAM, Windows 2000

Note: These specifications may change in the interest of product development



Instrumentation