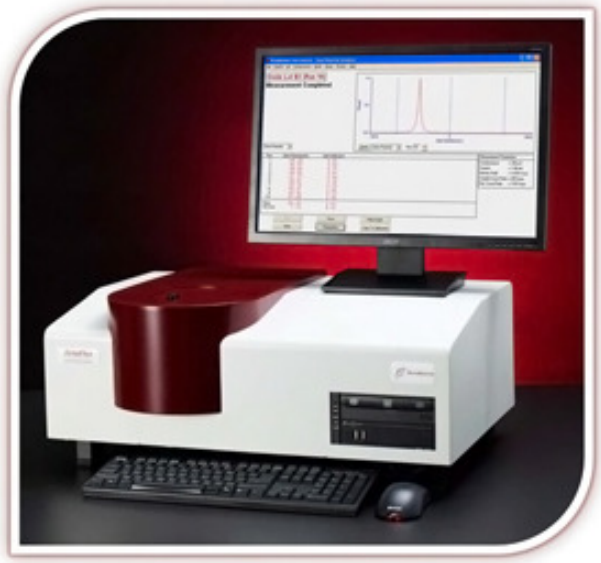
Brookhaven Instruments

ZetaPlus

Zeta Potential & Particle Size Analyzer

Features At a Glance

- Accurate, rapid, easy-to-use
- No cell alignment or calibration
- Can resolve multi-modals
- One-piece-easy-fill disposable sample cells
- Particle sizing option



ZetaPlus, Simply the Best

The Brookhaven **ZetaPlus** is the simplest, most accurate particle electrophoresis system available.

This revolutionary instrument has been designed to eliminate short comings inherent in other zeta potential instruments. The **ZetaPlus** measures complete electrophoretic mobility distributions in seconds, including multi-modals, from which zeta potential distribution is calculated.

And as the name implies, the **ZetaPlus** is more than just a zeta potential analyzer. It also measures particle size distributions.

The **ZetaPlus** software will tabulate or graph any appropriate pair of parameters, allowing the determination of the isoelectric point. Statistical process control software is standard.

The **ZetaPlus** is truly cost effective. Its capabilities offer you competitive advantages and savings in both time and labor.

Best of all, the **ZetaPlus** has the highest performance/price ratio of any zeta potential analyzer.

Unique Cell Design

The unique cell configuration eliminates the electro-osmotic effect, hence no stationary levels, alignment and no calibration are required, as evidenced by the excellent agreement with NIST 1980, a standard reference material.

The **ZetaPlus** uses low cost, disposable sample cells. There is no assembly or maintenance required: cross contamination is eliminated. Glass and quarts cells are available optionally.

The same basic cell design is used with the **ZetaPALS** for measurements of very low mobility in solvents, in oils, at very high salt concentrations, or very near the I.E.P.. With the **BI-PALS** options to the **ZetaPlus**, low mobilities can also be measured.

The standard electrodes are palladium; however, for reactive samples, gold may be substituted.

The precision Peltier temperature controller allows measurements from –5 ℃ to 110 ℃.

ZetaPlus

Zeta Potential and Particle Size Analyzer

Specifications

Zeta Potential	Size Range	1 nm to 100 µm
	Mobility Range	10^{-11} to 10^{-7} $m^2/V \cdot s$
	Zeta Potential Range	-220 mV to 220 mV †
	Maximum Sample Concentration	10% v/v †
	Sample Volume	180 µL, 600 µL, 1,250 µL
	Maximum Sample Conductivity	30 S/m
	Signal Processing	Phase Analysis Light Scattering, PALS
Particle Size	Size Range	< 0.3 nm to > 3 microns
	Sample Volume	10 µL, 40 µL, 1 - 3 mL
	Concentration Range	0.1 mg/mL to 10% v/v †
Molecular Weight	Molecular Weight Range (estimated from hydrodynamic diameter)	1 kDa to 25 MDa
	Molecular Weight Range (calculated using Debye plot) requires BI-APD	1 kDa to 25 MDa
	Minimum Sample Volume	10 µL
General	Temperature Control Range	-5 ℃ to 110 ℃ ± 0.2 ℃
	Measurement Angles	Three angles, two for particle sizing, one for zeta potential
	Condensation Control	Purge facility using dry air, nitrogen preferred
	Standard Laser	35 mW red diode laser, nom 660 nm
	Correlator	TurboCorr
Accessories	BI-ZTU	Autotitrator
	BI-870	Dielectric constant meter
	Uzgiris Cell	Standard, eliminates electro-osmosis completely
System	Dimensions	23.3 x 42.7 x 48.1 HWD in cm
	Weight	15 kg
	Power	100/115/220/240 VAC, 50/60 Hz, 150 W max
Software	***New*** Particle Solutions	Windows 7™ compatible
Options	Laser	HeNe 632.8 nm, frequency doubled 532 nm
	BI-MAS	Required for particle size measurements
	BI-APD	Required detector for molecular weight measurements
	90PDP	Required for Debye plot measurements
	Narrow Band Filters	632.8 nm, 532 nm to block fluorescence
	Flow Mode Option	90PFC flow cell allows DLS size for GPC/SEC
	21 CFR Part 11 Software Option	Software assists ERES compliance

Note: † sample dependent

A policy of continual improvement may lead to specification changes

CE Certified

With distributors around the world, contact us for details about the office nearest you.

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