




## Rapid, Reliable, and Accurate Zeta Potential Analysis

The ZetaPlus is the simplest electrophoretic light scattering (ELS) system available. This NanoBrook is straightforward and intuitive to operate, yet offers a full range of features and options to handle any experimental application. ELS measures complete electrophoretic mobility distributions in seconds, including multimodal distributions.

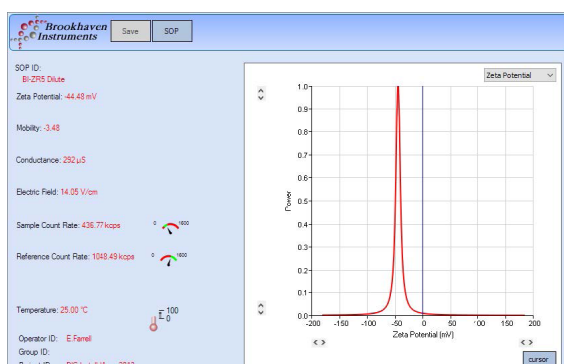
### Key Features

- » Zeta potential measured with high accuracy in low salt aqueous media
- » ELS can resolve simple multimodal distributions
- » Can extrapolate Isoelectric Point from pH titrations

Core Functionalities		
Particle Sizing		No
Zeta Potential		Yes
Scattering Angles		15°

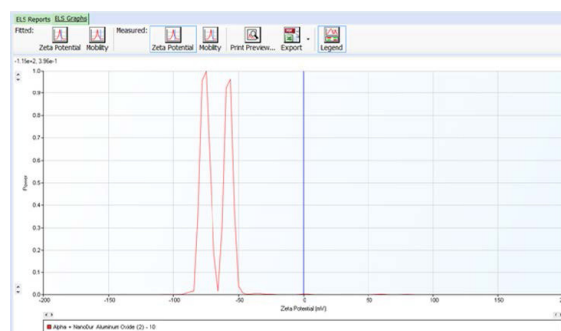
### Unique Cell Design

The unique cell configuration eliminates the electroosmotic effect: no stationary levels, no alignment, and no calibrations are required. This is evidenced by the excellent agreement with positive electrophoretic mobility standard, NIST SRM1980.



Presentation of a measurement from Brookhaven's Particle Solutions software is seen to the left. Information obtained from the sample is updated in real time and the user can select from several display formats. A table of physical constants for many common suspending fluids is pre-loaded, but the user has the freedom to provide their own values.

To the right is an example of results collected from a measurement on a mixture of alpha and gamma Aluminas in 1 mM KCl and pH 10. The left peak is identified with the green cursor and shown to have a zeta potential of -75 mV. If the other peak is chosen, the zeta potential value is -55 mV. The NanoBrook ZetaPlus has an advantage with its ability to distinguish mixtures such as these, unlike other methods which only provide an average.



## Key Features & Specifications

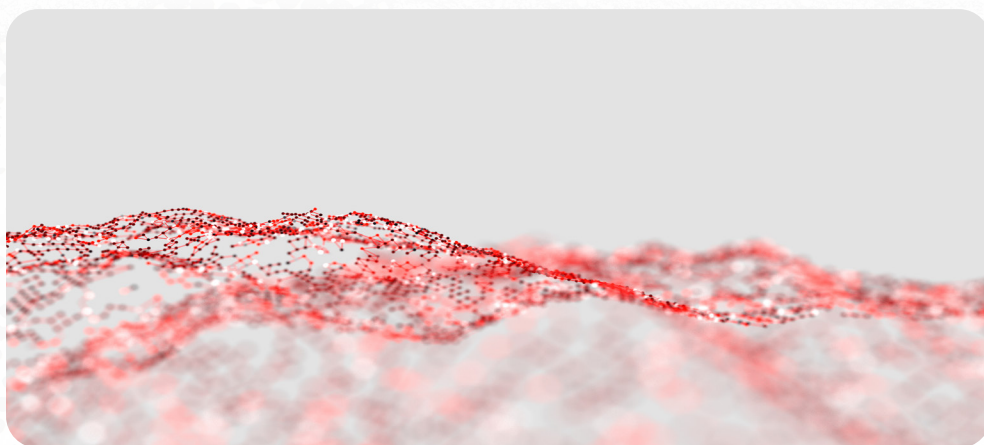
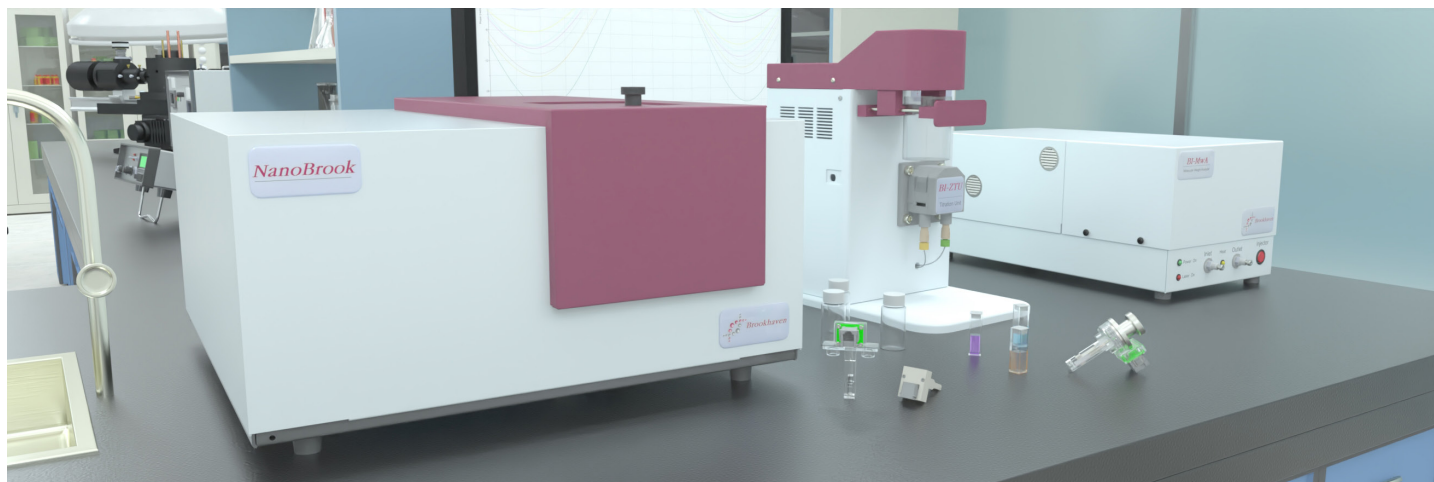
<b>Mobility Range</b>	10 <sup>-9</sup> to 10 <sup>-7</sup> m <sup>2</sup> /V•s
<b>Zeta Potential Range</b>	-500 mV to 500 mV*
<b>Technique</b>	Laser Doppler Electrophoresis/Electrophoretic Light Scattering (ELS)
<b>Maximum Sample Conductivity</b>	7.5 mS/cm*
<b>Scattering Angle</b>	15°
<b>Test Standards</b>	Conforms to ISO13321 and ISO22412

\* sample dependent

## About Brookhaven Instruments

Our talented team of scientists and engineers is dedicated to delivering the most accurate, reliable, and easy-to-use particle characterization instruments on the market. Our modular instrument design allows us to fully customize every aspect of our products, ensuring that our customers receive precisely what they need to meet their research goals. We are continuously improving our products based on feedback from customers, building on our legacy of innovation in particle science.

We strive to act as partners with our customers to ensure they get the most benefit and maximum value from their Brookhaven equipment. We offer extensive post-sale support to educate and empower customers. Whether you have questions about a specific function or are trying to set up a new experiment, our experts will be there to help you every step of the way.



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