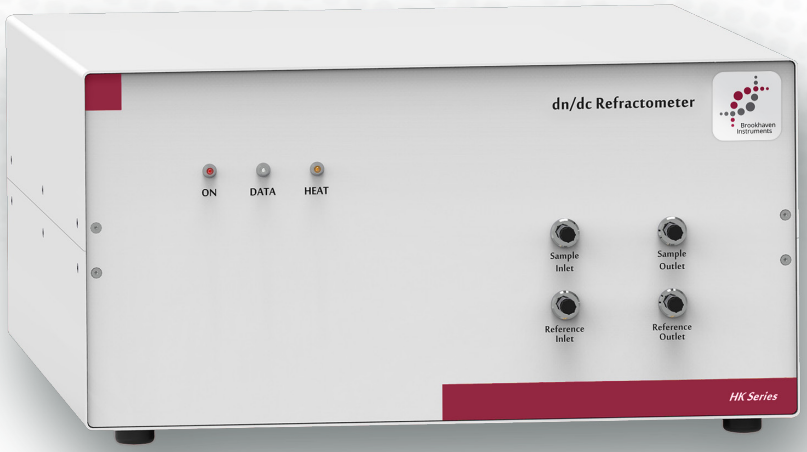
Brookhaven Instruments Corporation

BI-DNDC

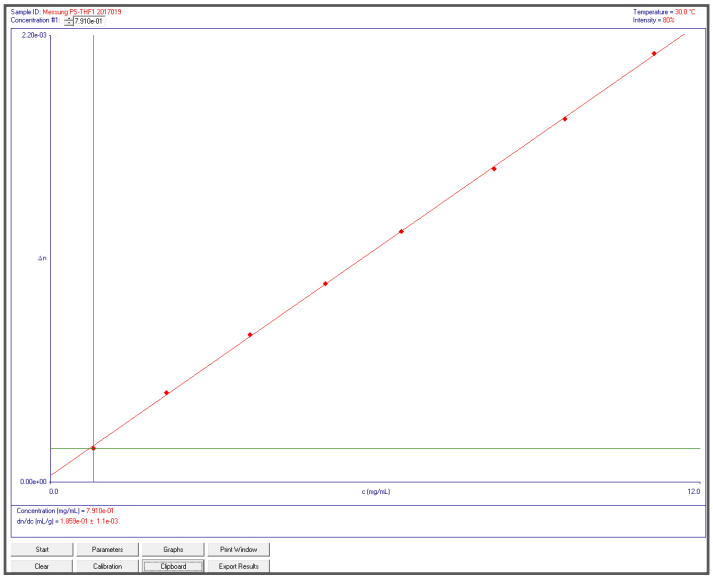


Easy, Flexible, & Intuitive dn/dc Refractometer

The specific refractive index increment (dn/dc) is one of the values required for the determination of absolute molecular weight with Static Light Scattering (SLS). The importance of this parameter becomes clear when observing the composition of the Debye Constant used for calculations, where the dn/dc is a squared term.

As such, a relatively small error in dn/dc will lead to twice the error in molecular weight. It is important to notice that the dn/dc value must be obtained at the same wavelength as the Laser used for Light Scattering or a further unknown error will be introduced.

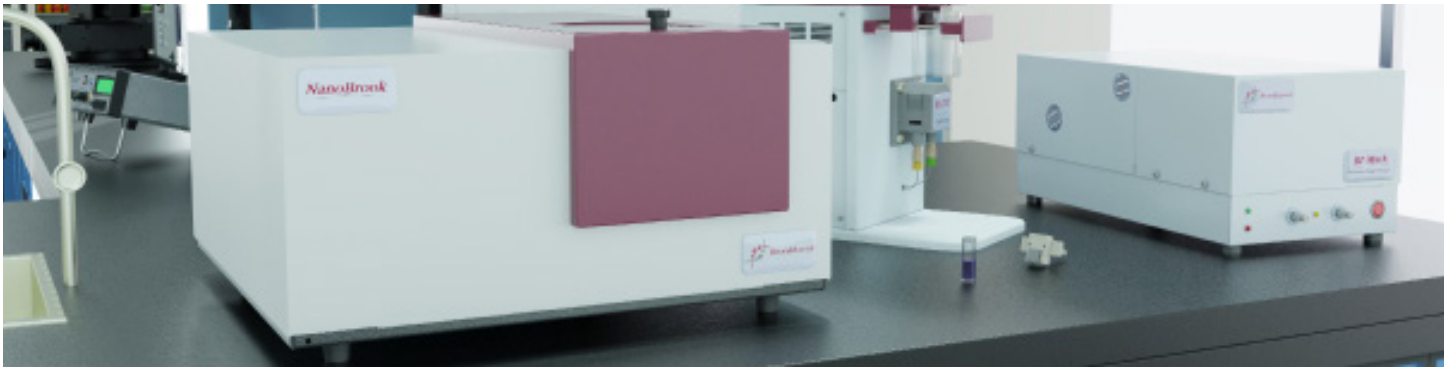
The HK Series dn/dc Differential Refractometer is a flexible device that may be used in either static or dynamic mode. In static mode, the specific refractive index (dn/dc) of dissolved samples can be determined easily and precisely in just a few minutes. Beneficially, the new system offers a large number of wavelength options enabling precise matching of your light scattering detector laser operating wavelength, thereby ensuring reliable and reproducible results every time.



Where the dn/dc value of the sample is already known, the HK Series dn/dc differential refractometer can be used for precise and sensitive concentration determination. The amount of sample used for this can also be easily recollected and therefore utilized for further investigations.

Key Features & Specifications	
DRI Cell Angle	45° C.
DRI Cell Volume	8 µl.
Refractive Index Range (n_0)	1.0 to 1.75 n.
Max Detection	1.4 x 10^{-3} Δn.
Temperature Range	Ambient to 80° C.
Specify Wavelength	620 nm, 535 nm or 470 nm, factory set‡.
Software	BI-DNDCW for Batch Mode measurements.
Power	90–230 V/65 W.
Temperature Accuracy	± 0.01° C.
Temperature Stability	> 0.05° C.
Digital Interface	USB.
Weight	10 kg approx.
Size (W x H x D)	400 x 200 x 350 mm.

‡A huge number of wavelength options are available to perfectly match the laser used in SLS, making sure your results will be perfect.



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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