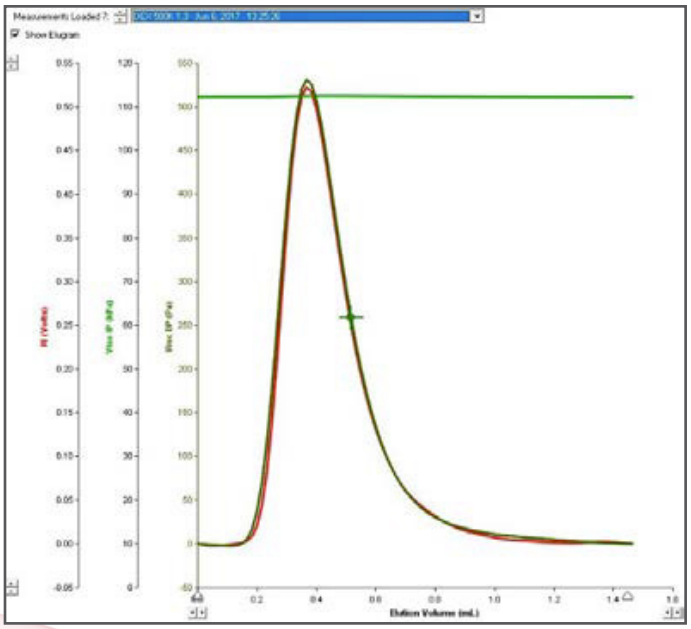
Brookhaven Instruments Corporation

# BI-RIVS


## Easy, Flexible, & Intuitive GPC/SEC Combo Detector

Use of a viscometer within a GPC/SEC system requires a source of a concentration signal to complete the necessary calculations. The difficulty is that the DRI Detector, which is usually utilized for this task, must deliver a corresponding concentration signal for each point on the viscosity curve. This is possible with two separate instruments, however precision of the results will be limited due to the volume difference of the detectors. A combo instrument, where both detectors are integral part of each other, overcomes these limitations and allows a much better determination of the sample under investigation.



The Combo Refractometer/Viscometer sets a new standard for the detection of intrinsic viscosity of highly diluted samples. The Refractometer is an integral part of the viscometer, therefore both concentration and viscosity are measured at exactly the same time on the very same sample segment. This combination allows a much more accurate determination of molecular parameters and is particularly suited for applications focused on the structure and branching of the investigated polymer.

| Key Features & Specifications | |
|---|---|
| **DRI Cell Angle** | 45° C. |
| **DRI Cell Volume** | 8 µl. |
| **Refractive Index Range ($n_0$)** | 1.0 to 1.75 n. |
| **Baseline Drift** | 2 x $10^{-8}$ RIU/30 min. |
| **Wavelength** | 620 nm. |
| **Software** | ParSEC GPC/SEC Software and others. |
| **Power** | 90 - 230 V/65 W. |
| **Temperature Range** | Ambient to 80° C. |
| **Temperature Accuracy** | ± 0.01° C. |
| **Temperature Stability** | > 0.05° C. |
| **Digital Interface** | USB. |
| **Weight** | 20 kg approx. |
| **Size (W x H x D)** | 400 x 200 x 350 mm. |
| **Water (at 1 mL/min Flow Rate)** | |
| **Absolute value inlet pressure signal** | 60 kPA - 100 kPa. |
| **Noise inlet pressure signal** | < 50 Pa. |
| **Absolute value differential pressure signal** | > -0.5 kPa and < 7.5 kPa. |
| **Noise differential pressure signal** | < 2 Pa. |
| **Drift differential pressure signal** | < 10 Pa/h. |
| **THF (at 1 mL/min Flow Rate)** | |
| **Absolute value inlet pressure signal** | 30 kPa - 50 kPa. |

## 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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