

Dual Detector



Viscotek's Dual Detector is specifically designed to be added to an existing GPC/SEC system equipped with a concentration detector, instantly converting it into a triple detector system.

The Dual Detector provides a seamless upgrade path from conventional GPC/SEC to triple detection without the need to sacrifice existing system components.

In triple detection, the patented 4-capillary Differential Viscometer Detector provides a direct measurement of intrinsic viscosity and allows for the determination of molecular size, conformation and structure. The Light Scattering Detector provides a direct measurement of absolute molecular weight and eliminates the need for column calibration.

The Dual Detector is configured with Differential Viscometer and a Low Angle Light Scattering (LALS) Detector. It is also available as a stand-alone viscometer or light scattering detector. This flexibility allows you to choose the configuration that meets your specific application requirements, insuring superior performance while maximizing the information from your GPC/SEC experiment.

for more information visit us @ www.viscotek.com

Technical Specifications



Dimensions, Weight and Power

Width: 7.7 in. (19.6 cm)
Height: 9.7 in. (24.7 cm)
Depth: 18.3 in. (46.5 cm)
Total Instrument Weight: 21.6 lbs.
Power Supply: 100–240 VAC, 50–60 Hz, single phase
Fuse: 0.8 A, 250 VAC, type T

Viscometer Detector

Patented 4 capillary, differential Wheatstone bridge configuration.

Bridge Volume: 72 microliters
Maximum Flow Rate: 1.5 ml/min (H₂O); 3.0 ml/min (THF)
DP Noise Maximum: 0.7 millivolts
DP Noise Typical: < 0.5 millivolts
DP Drift Typical: < 3.0 millivolts/hour
Sensitivity: 2.0 x 10⁻⁵ specific viscosity
Transducer Linearity: < 1%
Shear Rate: 3000 sec⁻¹

Light Scattering Detector

Right Angle Light Scattering Detector uses a 90° angle geometry for maximum signal-to-noise.

Low Angle Light Scattering Detector uses a 7° angle geometry that requires no extrapolation or correction.

Cell Volume: 18 microliters
Maximum Backpressure on Cell: 15 psi
Maximum Signal: 2.5 volts
Baseline Noise: 0.4 millivolts
Baseline Drift: 3.0 millivolts/hour
Light Source: laser at 670 nm wavelength

TDA, GPCmax, FIPA, TriSEC, ARV, PolyCAL, ViscoGEL, and Viscotek are trademarks of Viscotek, Incorporated. The 4-capillary viscometer and the 2-capillary viscometer are covered by the following U.S. Patent Nos. and corresponding foreign Patent Nos.: 4,463,598; 4,627,271. Other patents pending.

©2006 Viscotek Corporation
All rights reserved.

Dual-0706

Viscotek World Headquarters

15600 West Hardy Road, Houston, Texas 77060, USA
Tel: 281-445-5966 or 800-375-5966 • email: info@viscotek.com

Viscotek Europe Ltd.

20 Wellington Business Park, Crowthorne, Berkshire RG45 6LS, UK
UK +44 1344 467180 • D +49 7254 959195 • BNL +31 412 639963
F +33 4 78 51 67 08 • email: info@viscotek-europe.com