

Refractive Index Detector



The Refractive Index (RI) Detector is considered the universal detector for GPC/SEC. The Model 3580 RI provides excellent linearity coupled with superior sensitivity for a broad range of applications.

The Viscotek Model 3580 Differential Refractive Index (RI) Detector sets the standard in GPC for the determination of sample concentration. It combines superior sensitivity and versatility with reliability, ease-of-use and excellent linearity over a wide range of concentrations.

The RI is regarded as the universal detector in Gel Permeation/Size Exclusion Chromatography (GPC/SEC). It is typically employed in conventional calibration with a set of standards to provide relative molecular weight and polydispersity. However, when combined with advanced detectors such as viscometers and light scattering detectors, the concentration and dn/dc provided by the RI can be used to determine intrinsic viscosity and absolute molecular weight.

The Model 3580 Differential Refractive Index Detector mates seamlessly with the Viscotek GPCmax™ Pump/Autosampler/Degasser Module and OmniSEC™ software to form a complete Conventional GPC System. It can also be coupled with the Model 3210 UV/VIS for copolymer compositional analysis, or the Viscotek Model 270 Viscometer/Light Scattering Dual Detector to create a modular Triple or Tetra Detector GPC System.

for more information visit us @ www.viscotek.com



Technical Specifications

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| RI Detector: | Part Number – S3580 |
| Principle: | Deflection |
| RI Range: | 1-1.75 RIU |
| RI Measurement Range: | $\pm 5 \times 10^{-3}$ RIU |
| Flow rate: | 0.2-3.0 ml/min |
| Linearity: | 80×10^{-5} RIU |
| Noise Level: | 5×10^{-10} RIU |
| Integrator output: | ± 1 Volt |
| Cell Volume: | 9 μ l |
| Temperature: | RT, 35 or 55°C |
| Inputs: | Start, 5 VDC, TTL, Intensity, Marker, Temperature, Solvent Recycler |
| Outputs: | Start, 5 VDC, TTL, Purge, Polarity, Autozero, Marker, Temp., Solvent Recycler |
| Power Supply: | 220/110V, 50/60 Hz |
| Dimensions: | 30(W), 45(D), 21(H) cm |

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.

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