Series 200 HPLC and Radiomatic Flow Scintillation Analyzer

Technical Specifications

**Series 200 Autosampler**
Injection range: Programmable from 0.1-1.0 µL at 0.1 µL increments, 1 µL to 2.5 mL at 1 µL increments
Precision: Typically < 0.5% RSD of peak areas from 3 µL, linearity > 0.999
Sample syringe Sizes: 50, 100, 250, 500, 1000, 2500 µL
Carryover: < 0.02%
Flush volume: 0-2500 µL
External contacts: Two, start and stop time
Method storage (battery backed): Up to 20 methods including time programming
Stored methods: Editing possible during runs
Injection cycle time: 2-3 samples per minute
Valve materials: In contact with Rheodyne® 7725 for analytical – stainless steel, Vespel®, ceramic, PEEK with sample with Rheodyne 9725 for bio applications – PEEK, Tefzel®, ceramic
Display: 7-line by 40-character backlit liquid crystal display
Integrated: For derivatization and dilution options serial communications – standard BCD communications interface – standard 5 relay outputs; 2 timed events, 2 inject, 1 start
Ambient conditions: 10-30 °C, relative humidity 20-80%
Peltier sample cooling: 4-60 °C, ±1 °C
Dimensions (W x D x H): 318 mm (12.5 in.) x 483 mm (19.0 in.) x 400 mm (15.8 in.)

**Series 200 Pump**
Flow rate range: 0.01 to 10.0 mL/min
Flow precision: 0.3% RSD @ 1 mL/min water @ 1000 psi
Flow accuracy: +/-1% of setting retention time
Reproducibility: < 0.3% RSD (typically < 0.1%)
Pressure range: 0 to 6200 psi
Compositional range: 0 to 100%, solvent A to D
Compositional precision: Typically < 0.2% (89 profile)
Timed events: Two built-in independent momentary (2 second) contact closures
Dimensions (W x D x H): 14 cm x 30.5 cm x 43 cm
Radiomatic Flow Scintillation Analyzers—Typical Performance Data

<table>
<thead>
<tr>
<th></th>
<th>Liquid(^1,2)</th>
<th>Solid(^3,4)</th>
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</thead>
<tbody>
<tr>
<td><strong>Background</strong></td>
<td></td>
<td></td>
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<tr>
<td>TR-LSC™ Low:</td>
<td>(^3)H &lt; 6 CPM(^1)</td>
<td>&lt; 10 CPM(^3)</td>
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<tr>
<td></td>
<td>(^{14})C &lt; 8 CPM(^1)</td>
<td>&lt; 20 CPM(^3)</td>
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<td><strong>Efficiency</strong></td>
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<tr>
<td></td>
<td>(^3)H &gt; 50%</td>
<td>Up to 10%</td>
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<tr>
<td></td>
<td>(^{14})C &gt; 90%</td>
<td>Up to 85%</td>
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<td><strong>Sensitivity</strong></td>
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<tr>
<td>TR-LSC Low:</td>
<td>(^3)H &lt; 35 DPM(^2)</td>
<td>&lt; 1,000 DPM(^4)</td>
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<tr>
<td></td>
<td>(^{14})C &lt; 50 DPM(^2)</td>
<td>&lt; 80 DPM(^4)</td>
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\(^1\)500 µL liquid flow cell  
\(^2\)2,500 µL liquid flow cell  
\(^3\)200 µL solid flow cell  
\(^4\)400 µL solid flow cell