About Us:

Peak Labs is a world leader in design and manufacturing of process gas chromatographs (GC). We provide simple, innovative, complete solutions for trace to percent level analysis. Our analyzers are equipped with a unique design, which allows our customers to accurately measure trace gas to part per trillion levels, while maintaining a wide linear range. Peak Labs' practical experience and ability for customization to suit your application needs makes us your analytical partner, not just your supplier.

Contact:

Ph: (650) 691-1267
Fax: (650) 691-1047
2330 Old Middlefield Way, Ste. 10, Mountain View, CA 94043
www.peaklaboratories.com

Reducing Compound Photometer (RCP):

(For the Detection of Hydrogen, Carbon Monoxide & Select Hydrocarbons)

The GC RCP analyzer is equipped with a uniquely designed hybrid ultraviolet / HgO photometer. This analyzer is the ideal solution for the measurement of trace amounts of hydrogen, carbon monoxide & select hydrocarbons in N₂, Ar, He, O₂, Air, H₂, C₃H₆ & other specialty gases. Chromatographs are generated by sample loop injections administered through columns in an isothermal oven to our GC detector. The resulting mercuric oxide reaction liberates a mercury vapor that is measured via a UV light absorption method. This process integrated with Peak’s proven platform delivers prompt and accurate results, while still maintaining a wide linear range.

Features:

- Backlit, User Friendly Touchscreen (LCD)
- Multiple Communication Protocols
- Visual Chromatogram and Numerical Results
- Excel Compatible Data
- Accurate, Effective and Reliable Design
- On-board Integration with Rerun Capability

Benefits:

- Continuous Monitoring
- Custom Solutions for your Processing Needs
- Quick, Reliable Global Support and Training
- Lower Total Cost of Ownership
- Offers Simple and Accurate Measurements, Down to the Part Per Trillion Level

Fields of Application:

- Air Separation Plants
- Regulatory Air Monitoring
- Government & University Research Institutes
- Quality Assurance / Control
- Semiconductor Plants
- Purifier Manufacturers
- Process Control
- Medical Research Labs
The Peak Performer 1 RCP gas chromatograph (GC) can be optimized for your analytical needs in a variety of matrix gases. Typical applications are provided below:

- H₂ and CO in UHP bulk process gases
- CO in atmospheric research and continuous monitoring stations
- H₂ in groundwater and sediment studies
- C₂H₂ & C₂H₄ in environmental samples and research

### Performance

Typical lower detection limits (in parts per trillion)

<table>
<thead>
<tr>
<th>Impurity</th>
<th>Matrix Gas</th>
<th>N₂, Ar, He</th>
<th>O₂</th>
<th>Air</th>
<th>H₂</th>
<th>C₂H₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₂: Hydrogen</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>*</td>
<td>10</td>
<td>ppb</td>
</tr>
<tr>
<td>CO: Carbon Monoxide</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>500</td>
<td>5</td>
<td>ppb</td>
</tr>
<tr>
<td>C₂H₂: Ethylene</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>*</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

* Contact local representative for specific details

All performance specifications are based on fully optimized PP1 with 1 cc sample loop on continuous analysis.
- Unless specified, carrier gas is purified nitrogen
- Helium matrix spec is based on purified Helium as carrier
- Based on medical grade air as carrier

### Accuracy

- +/- detection limit or 10 % of reading, whichever is higher

### Range

- 1000 : 1 Minimum
  
  **Examples:**
  - < 1 ppb- 1 ppm w/ 1 mL sample loop
  - < 10 ppb- 10 ppm w/ 100 uL sample loop

### Dimensions / Electrical

- 27” L  x 17” W x 7” H
- 25 lbs.
- 115 VAC, 50 – 60 Hz / 220 VAC, 50-60 Hz
- 1.5 amp maximum

### Operation

- Run time ~ 3 minutes (depending on application)
- Operating Temperature: 55 - 85 °F (13-30 °C)
- Gas Requirements:
  - Carrier Gas Supply: Nitrogen / Air / Argon / Helium
  - 99.99% or purified better to < 10 ppm total impurities
  - Supply pressure 70- 110 psig with 5% stability
- Data Collection / Communication:
  - 0-1 VDC Analog Outputs
  - RS232, RS485 Serial Communication
  - Data Archive / Viewer / Trend Log/ Raw Detector Signal

### Options:

- On Column Syringe Injector Adapter
- Dual Sample Stream
- 4-20 mA Output