



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:

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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 measurements 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)

Impurity	Matrix Gas	N ₂ , Ar, He	O_2	Air	H_2	C_3H_6
H ₂ : Hydrogen		800	800	800	*	10 ppb
CO: Carbon Monoxide		300	300	300	500	5 ppb
C ₂ H ₄ : Ethylene		500	500	500	*	N/A

^{*} 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

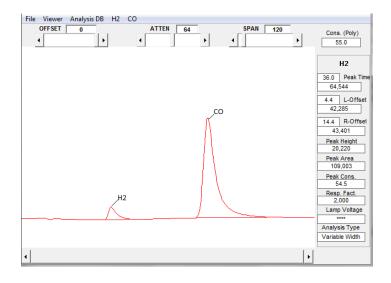
• 1000 : 1 Minimum

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