

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

Thermal Conductivity Detector (TCD)

(For the Detection of Argon, Hydrogen, Oxygen, Nitrogen & Methane)

The TCD analyzer is equipped with a uniquely designed thermal conductivity detector. This analyzer is the perfect solution for the measurements of trace amounts of **atmospheric gas** components in He, N₂, Ar, O₂, H₂, N₂O & other specialty gases. Chromatographs are generated by pushing sample gases over a heated filament at constant flow. The internal detector measures the variance of thermal conductivity in the gas stream. This process integrated with Peaks 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
- All Data is Excel Compatible
- 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 Million Levels

Fields of Application:

- Air Separation Plants
- Government & University Research Institutes
- Quality Assurance / Control
- Semiconductor Plants
- Purifier Manufacturers
- Process Control
- Medical Research Labs



Contact us.

The Peak Performer TCD gas chromatograph (GC) can be optimized for your analytical needs in a variety of matrix gases. Typical applications are in process gas plants such as manufacturing of:

- N₂
- N₂O
- Air
- H₂
- Ar
- O₂
- He

Performance

Typical lower detection limits (in parts per million)

Impurity	Matrix Gas	He	Ar	O ₂	H ₂	N ₂
N ₂ : Nitrogen		50	50	50	50	N/A
O ₂ : Oxygen		50	50	N/A	50	50
Ar: Argon		50	N/A	50	50	50

* Contact local representative for specific details

All performance specifications are based on fully optimized carrier matrix gas

Accuracy

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

Range

- 10000 : 1
- Examples:
20 ppm- 20% w/ 2 mL 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 ~ 300 seconds (depending on application)
- Operating Temperature:
55 - 85 °F (13-30 °C)
- Gas Requirements:
Carrier Gas Supply: Helium / Nitrogen / Argon
Supply pressure 70- 110 psig with 5% stability
Total Flow: ~200sccm (plus ~50 cc per actuation)
- Data Collection / Communication:
0-1 VDC Analog Outputs
RS232, RS485 Serial Communication
Data Archive / Viewer / Trend Log

Options:

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

