Peak Performer 1 TCD

The Peak Performer 1 TCD uses a sensitive single filament Thermal Conductivity Detector (TCD) which has been designed specifically for process gas or laboratory applications. The TCD is used to measure impurities or mixtures from ppm to percent levels. The PP1 TCD uses Peak Laboratories proven operating platform for simple, accurate measurements. The PP1 technology has proven to offer a more cost-effective and user friendly alternative to other process GC’s. In addition, Peak Labs practical experience and ability to customize to suit your applications makes Peak Labs your partner, not just your supplier. Please contact us at Peak Laboratories or your local sales representative for custom applications and further information on our standard applications.

The Peak Performer 1 TCD gas chromatograph (GC) has been optimized for permanent gas applications to simplify the chromatography and consistency of the process application. Typical applications are in process gas plants such as manufacturing of: Ar, O2, He, and H2.

**Performance** *

Standard detection limits (in parts per million)

<table>
<thead>
<tr>
<th>Impurity</th>
<th>Matrix Gas</th>
<th>He</th>
<th>Ar</th>
<th>O2</th>
<th>H2</th>
</tr>
</thead>
<tbody>
<tr>
<td>N2: Nitrogen</td>
<td></td>
<td>20</td>
<td>20</td>
<td>50</td>
<td>20</td>
</tr>
</tbody>
</table>

* All performance specifications are based on optimized carrier gas each matrix gas.
Accuracy
- +/- detection limit or 10% of reading, whichever is higher.

Range
- 10000 : 1

Operation
- Run time: 300 seconds < (depending on application)
- Operating Temperature: 55 - 85 °F (13 - 30 °C)

Typical Gas Supply Requirements:
1. Carrier:
   - Purified research grade helium
   - Supply pressure 70 – 110 psig with 5% stability to purifier
   - Total flow ~ 200 sccm (plus ~ 50 cc per actuation)
2. Actuator:
   - N2/Air or inert gas regulated @ 70 psig

Data Collection / Communication (Standard)
- Backlit 3” x 5.25” touch screen
- Visual chromatogram and numerical results
- On-board integration with re-run capability
- Peak Viewer software: chromatograms collected and archived via standard 9 – pin com-port in .csv format (data is excel compatible)

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

Accessories and other features
- Analog (VDC or mA) trend outputs
- analysis averaging
- auto start/stop capability

Standard N2 in Ar chromatogram (Ar heart cut)