Model 7100

Fast GC Analyzer



EST Part No. SYS7100C5 (DB-5 Column), SYS7100C6 (DB-624 Column)

Benchtop Gas Chromatograph

What is it?

The Vapor detector and analyzer identify the vapors as low as parts-per-trillion concentrations and amounts less than 50 picograms. A proprietary Surface Acoustic Wave (SAW) detector results in a system with previously unattainable sensitivity in a portable low-cost package.



How does it work?

Two operator levels can be displayed: a complete chromatogram, VaporPrint® Pattern or a simple bar graph display with alarm indications. On-line help makes the 7100 easy to learn and use.

Analysis Time

> 10-60 seconds

Precision and Accuracy

Standard Deviation <2%</p>

Sensitivity

- Can analyze vapors in 10 seconds with sensitivity in parts-per-billion for many compounds
- Detects hydrocarbons in the range of C4 – C25. Sensitivity will vary by compound sampling time, matrix, interferences and detector temperature settings.

Dynamic Range

> $10^6 \pm 10\%$

Sampling

- Internal Sample Pump
- Sample Introduction: ~.5 ml/second
- Time programmable from 1-300 seconds

Weight 30 lbs 13.6 kg Depth 14.3 in 36.3 cm Width 14.3 in 36.3 cm Height 7.5 in 19 cm

Environmental Conditions

- Operating Temperature Range: 32°
 F to 105° F (0° C to 40°C)
- Relative Humidity: 0 95% noncondensing

Power

Dimensions

 120 - 240 VAC at 250 watts MAX (50 watts typical)

Carrier Gas

Helium, HP – 12-24 hours depending on usage

Column Limits

➢ 35° C to 200° C − depending on column

Column Ramping

➢ Isothermal or ramped from 1 − 18° C/second

Detector

- Surface Acoustic Wave (SAW) Quartz microbalance
- > Dynamic Range: 2×10^4
- ➤ Temperature: 0° C to 125° C, programmable

Inlet Connection / Temperature

- ➢ Stainless steel LUER inlet port
- \succ 50° C to 200° C

System Controller Software

Notebook Controller configured and integrated with the following:

Laptop Computer with Windows
 Operating System (English Version