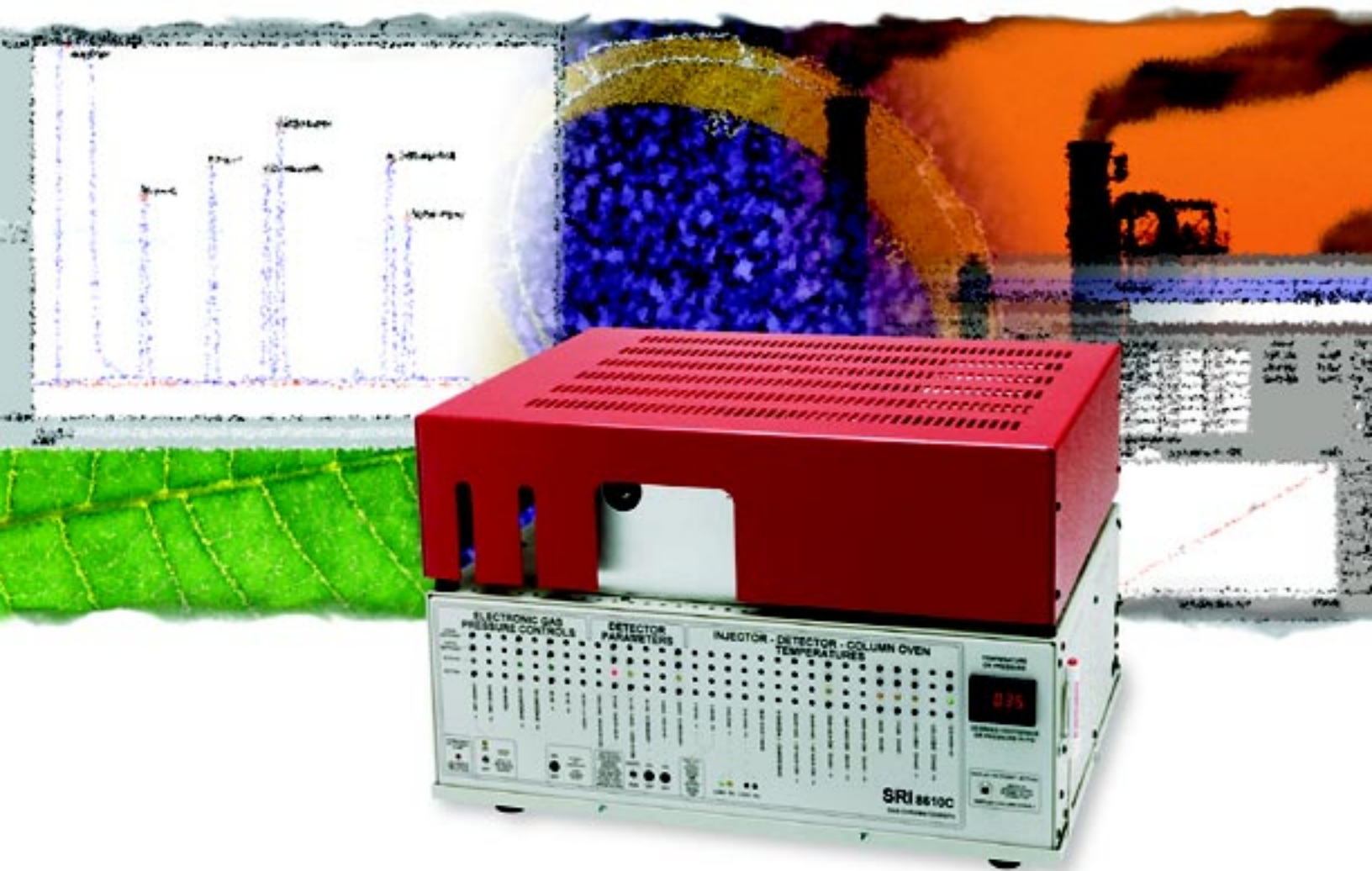


SRI Gas Chromatographs

Full Size Performance at Half the Cost!



- ▶ **Economical** - Inexpensive to Purchase and Maintain
- ▶ **Compact** - Much Smaller than Other GCs
- ▶ **Versatile** - Temperature Programmable Oven
- ▶ **Flexible** - Can Accommodate Multiple Detectors
- ▶ **PC Programmable** - Free PC Compatible Data Software
- ▶ **Protected** - Two Year Warranty

Alltech

Bulletin #425

Introduction

The Advantages of SRI Gas Chromatographs

- Economical - Inexpensive to Purchase and Maintain
- Compact - Much Smaller than Other GCs
- Versatile - Temperature Programmable Oven
- Flexible - Can Accommodate Multiple Detectors
- PC Programmable - Free PC Compatible Data Software
- Protected - Two Year Warranty

The SRI GCs offer performance comparable to full size gas chromatographs but cost less than half to buy and much less to maintain. They can fit easily on crowded lab benches, in mobile vans, or car trunks. Because of their light weight, they ship easily via UPS or Fed Ex. The column oven is multi-ramp programmable from ambient to 400°C for fast analysis times and optimum resolution. Three fans force room air into and around the oven for fast cool-down. Unlike most GCs which can only mount two or three detectors, the SRI GCs can mount up to four detectors (TCD, FID, NPD, ECD, PID, DELCD or FPD). Every SRI GC purchased comes with a built-in data system and PeakSimple™ for Windows® software.

Every SRI GC Comes Complete with:

- Single on-column injector for 0.53mm ID capillary or 1/8" packed columns
- Electronic pressure control for all gases
- Temperature programmable oven
- Digital pressure readout
- Digital temperature readout
- Built-in data system with PeakSimple™ for Windows® software
- Operator's manual
- 10µL syringe and spare septa
- Heavy duty reusable shipping container

SRI Offers Options to Suit your Needs:

Standard Gas Chromatographs: (page 2) choose either model 8610C or 310 GC with standard on-column inletting system, then the number and type of detectors (up to 4), to suit your application(s).

Preconfigured Gas Chromatographs: (page 3) complete systems, designed with either model 8610C or 310 GC, choose inletting systems, detectors, and accessories to match your application.

Custom Gas Chromatographs: (pages 4 and 5) choose either model 8610C or 310 GC, then the inletting systems (1 for model 310 and up to 5 for model 8610C), the number and type of detectors (up to 4 for both models), options and accessories to suit your application(s).

Alltech Technical Service

Having difficulty choosing the options for your SRI GC? Our staff of technical support chemists and product specialists are available to help you choose the SRI gas chromatograph, options, and accessories to best suit your needs. We also carry a full line of Packed GC Columns, Capillary Columns, and GC Accessories to complete your GC system.

Standard Gas Chromatographs

Model 8610C

- Maximum Options and Flexibility - Includes On-Column Inletting System (accommodates up to 5), Choose Up to 4 Detectors
- Includes PeakSimple™ Data System and Software



Specifications for Model 8610C

Oven: Ambient to 400°C, multi-ramp programmable
Oven Size: 7.5" W x 7.5" D x 3" H (19.1 x 19.1 x 7.6cm)
Column: 7" cage capillaries, 1/4" or 1/8" packed columns
Detectors: Choose up to 4 detectors (not included)
Inletting Systems: On-column included, accommodates up to 5
Software: PeakSimple™ for Windows® included
Dimensions: 18.5" W x 14.5" D x 13" H (47 x 36.8 x 33cm)
Weight: 45-80lbs (20.5-36.4kg)
Warranty: Two year parts and labor

Model 310

- Compact and Economical - Includes On-Column Inletting System, Choose Up to 4 Detectors
- Includes PeakSimple™ Data System and Software



Specifications for Model 310

Oven: Ambient to 400°C, multi-ramp programmable
Oven Size: 5" W x 5" D x 3" H (12.7 x 12.7cm D x 7.6cm)
Column: 4" cage capillaries, or 1/8" packed columns
Detectors: Choose up to 4 detectors (not included)
Inletting Systems: On-column included, accommodates 1
Software: PeakSimple™ for Windows® included
Dimensions: 12.5" W x 14.5" D x 13" H (31.7 x 36.8 x 33cm)
Weight: 40-70lbs (18.2-31.8kg)
Warranty: Two year parts and labor

SRI Gas Chromatographs (detectors sold separately)

DESCRIPTION	110V*	220V*	PRICE
	PART NO.	PART NO.	
Model 8610	8610102	8612202	
Model 310	3100100	3100122	

*Supplied with one on-column inletting system. See Custom GCs for other options.

SRI GC Detectors (choose up to 4)

DESCRIPTION	PART NO.	PRICE
TCD (Thermal Conductivity)	8690107	
FID (Flame Ionization)	8690010	
NPD (Nitrogen-Phosphorus)	8690015	
ECD (Electron Capture)	8690020	
PID (Photo-Ionization)	8690040	
FPD (Flame Photometric)	8690080	
FPD/FID Simultaneous	8691080	
DFFD (Dual Flame Photometric)	8690085	
DELCD (Dry Electrolytic Conductivity)	86901026	
FID/DELCD Simultaneous	8692026	
HID (Helium Ionization Detector)	8690030	

Contact your Alltech office or distributor for current or local prices.

Save Time by Ordering a System Already Optimized for Your Application

Preconfigured GCs have been designed with the inletting systems, detectors, and accessories to suit a specific type of application. Although optimized for specific applications, these GCs are equipped to handle a variety of analyses. All preconfigured GCs come with built in data acquisition systems and include PeakSimple™ for Windows® software to control the GCs and analyze the data.

Preconfigured Gas Chromatographs

SRI Environmental GC

Three detectors plus purge and trap

- Model 8610C (110V or 220V)
- FID, PID, and DELCD
- EPA-Style Purge and Trap
- Built-in Air Compressor
- 15m Capillary Column

The SRI Environmental GC has all of the hardware to cover almost any possible environmental analytical situation. It features: 1) the FID for TPH, PAH, gasoline and diesel fuel, phenols, alcohols and all hydrocarbons, 2) the PID required for EPA analysis of aromatics, benzene, toluene and xylenes, 3) the DELCD required for the EPA analysis of chlorinated solvents, methylene chloride, chloroform, TCE, perchloroethylene, and 4) the EPA-Style Purge and Trap with dual traps for soil, water or air concentration.

SRI Gas-less™ Educational GC

Affordable hands-on instruction for study of GC principles

- Model 310 (110V or 220V)
- Catalytic Combustion Detector (CCD)
- Packed GC Column
- Built-in Air Compressor

The SRI Gas-less™ Educational GCs are ideal for demonstrating and teaching the basics of gas chromatography. These GCs work well in educational institutions or for in house training because they do not require compressed gases for operation. The convenient Gas-less™ configurations use internally generated air carrier gas along with the CCD to simplify the instruction of gas chromatography. With the built in data acquisition system, just plug in the GC and connect it to your computer and you're ready to go.

SRI Multiple Gas Analyzer

Separates H₂, O₂, N₂, CH₄, CO₂, CO, C₂H₆, C₃H₈, C₄H₁₀'s and C₅H₁₂'s automatically in a single injection

- Model 8610 (110V or 220V)
- TCD
- Heated 10-port Gas Sampling Valve (Electric)
- Two Packed GC Columns

The SRI Multiple Gas Analyzer is pre-plumbed and tested to resolve the fixed gases O₂, N₂, CO₂, plus hydrocarbons through C₆. SRI has developed a simplified system of two independent analytical columns, and one gas sampling valve for almost "bulletproof" operation. Other gases such as ethylene and N₂O may also be analyzed. An additional Multiple Gas Analyzer is available which includes an FID for hydrocarbon detection to 1ppm and a methanizer to convert CO and CO₂ to methane for measurement by the FID.

SRI Gas-less™ Indoor Air Quality GC

Monitor indoor air quality affordably and conveniently

- Model 310 (110V or 220V)
- CCD
- Tenax®-GR Trap
- Built in Vacuum Pump
- 15m Capillary Column

The SRI Gas-less™ Indoor Air quality GC combines a Tenax®-GR trap with a built in vacuum pump and a catalytic combustion detector (CCD) to achieve 1ppm detection of VOCs in a low cost instrument. Using the monitored air as a carrier gas, this GC requires no compressed gas cylinders and can be operated anywhere there is an electrical outlet. With no gases required for operation, this GC can be used to monitor air quality in a large variety of places including residential and commercial areas where compressed gases may be inconvenient. This GC can also be configured with a photo ionization detector (PID) in series for detection down to 10ppb on certain VOCs.

Preconfigured Gas Chromatographs

DESCRIPTION	PART No.	PRICE
110V		
Environmental (FID, PID, DELCD)	8610058	
Multiple Gas Analyzer (TCD)	8610022	
Multiple Gas Analyzer (TCD, FID)	8610023	
Gas-less™ Educational (CCD)	31001105	
Gas-less™ Indoor Air Quality (CCD)	31001007	
Gas-less™ Indoor Air Quality (CCD, PID)	31001008	
220V		
Environmental (FID, PID, DELCD)	8612258	
Multiple Gas Analyzer (TCD)	8612232	
Multiple Gas Analyzer (TCD, FID)	8612233	
Gas-less™ Educational (CCD)	31001225	
Gas-less™ Indoor Air Quality (CCD)	31001227	
Gas-less™ Indoor Air Quality (CCD, PID)	31001228	

Customize Inletting Systems, Detectors, and Accessories to Suit Your Specific and Unique Requirements

If you did not find a standard or preconfigured GC that will meet your analytical needs, you can custom build your own GC. Below is a listing of detectors, their detection limits, and typical applications. Also listed on this page and the following are a variety of sample introduction accessories. You can place up to 4 detectors on the 8610C and the 310 GC chassis. You can also place up to two sample introduction accessories on the 8610C GC and one on the 310 GC. If you need a sampling valve, you should place this on an 8610C GC. Please contact our technical support group to help you design a GC that will meet all of your analytical needs.

How to Build a Custom GC:

1. Choose either the 8610C or 310 gas chromatograph.
2. Choose detectors (up to 4, both models).
3. Choose inletting system (up to 5 for 8610C, 1 for 310).
4. Choose optional accessories.

Detectors

Every custom GC will need to have a detector installed. Usually a single detector will meet the majority of your analytical needs, but SRI GCs can accommodate up to 4 detectors to give you maximum flexibility. **Table 1** includes a listing of the detectors that can be installed on your SRI GC. The table shows the typical detection limits for each detector along with their common applications. If you are not sure of which detector is needed for your specific analysis, do not hesitate to contact our technical support group to make sure you get what you need.

Table 1

Detector	Detection Limit	Application
TCD	100ppm	Detects any compound, used mostly for fixed gas analysis.
FID	1ppm	Detects organic compounds having a carbon hydrogen bond.
NPD	1ppm	Detects compounds containing nitrogen and phosphorus atoms.
ECD	1ppb	Detects halogenated compounds.
PID	10ppb	Detects aromatics and any compounds with a carbon-carbon double bond.
FPD	50ppb P/500ppbs	Simultaneously detects compounds containing sulfur or phosphorus atoms.
DFPD	50ppb P/500ppbs	Simultaneously detects compounds containing sulfur or phosphorus atoms.
DELCD	10ppb	Detects halogenated compounds.
HID	10ppb	Detects any compound, used mostly for fixed gas analysis.

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Inletting Systems

Every SRI GC comes with a non-heated on-column inletting system. This inletting system is adequate for typical packed column analysis and for doing on-column injection on to a 0.53mm ID capillary column. If you want to use narrow bore capillary columns (0.32mm and 0.25mm ID capillary columns) you will need to add a split/splitless inletting system. Other inletting systems are also available including head space samplers and purge and traps. Below and on the following page the inletting systems available for the SRI GCs can be found. Again, feel free to contact Alltech technical support for assistance in choosing the inletting system that you need.

Standard On-Column Inletting Systems

The SRI GCs are supplied with one 1/8" cold on-column injection port (injector) which is ideal for packed and wide-bore (0.53mm) capillary columns. Cold on-column injection means that the injection needle deposits the sample directly into the bore of the column itself. Because of the SRI's thin oven wall design, the needle actually penetrates well into the column oven, so the injection temperature is whatever the initial oven temperature is at the time.

Additional On-Column Inletting Systems

The additional on-column inletting system includes a separate electronic pressure control, injection port hardware, septum nut, capillary adaptor and digital pressure readout with 1.0psig resolution for maximum readability at low column head pressures.

Heated Static Headspace Inletting Systems

The Heated Static Headspace Inletting System is useful for the analysis of volatiles, especially where the sample matrix is dirty. A 40mL VOA vial is inserted into a thermostated sleeve where two needles puncture the septum top of the vial. The one needle pressurizes the vial, while the other is switched by a solenoid valve which is controlled by the PeakSimple™ software. Once the valve is opened, the headspace of the vial is purged through a sample loop just prior to introducing the sample to the chromatographic column.

The thermostatted sleeve contains a second VOA vial slot for preheating the next sample. The thermostatted sleeve can be set from ambient to 100°C, all under the control of the PeakSimple™ software. The software also allows you to start and stop mechanical agitation of the vials.

Heated Split/Splitless Injector

The split/splitless injector allows the use of narrow bore (0.32mm and smaller) capillary columns in either a split or splitless mode. It may also be used for cold on-column injections onto wide-bore capillary columns with the adaptor provided, or with packed columns. Temperatures may be adjusted up to 300°C. The injector incorporates a solenoid valve actuated automatically under control of the PeakSimple™ software.

Pressure-controlled carrier gas supplies are available and can be set and monitored on the front panel. Split ratio is controlled by a precision needle valve that allows the split flow to be completely shut off to conserve expensive carrier gas. Only one heated injector may be installed per GC.

Contact your Alltech office or distributor for current or local prices.

Heated Flash Vaporization Injector

The heated flash vaporization injector allows injections at temperatures up to 300°C and easily accepts other manufacturers' injection port adaptors or insertion of glass or metal 1/4" columns. Heat from the injector makes cooling the oven down below 50°C difficult, so this option should not be considered if operation near ambient temperature is required. Only one heated inletting system may be installed per GC.

Optional Accessories

SRI 10-Port Gas Sampling Valve

The 10-port stainless steel valve is rated for operation from ambient to 240°C. The valve may be openly mounted on the left side of the GC, or enclosed in an optional thermostatted valve oven. The open air mounting is fine for simple inject-only applications, but if the valve will backflush it needs to be hot so backflushed peaks do not condense in the valve.

Load Position

Inject Position

Standard 10-port valve configurations include:

- Inject Only - No Backflush**— Used to introduce the loop contents onto the column.
- Inject and Backflush**— Used to inject the sample then reverse the flow when the valve is rotated back to the load position.
- Simultaneous Injection**— Used to inject the sample into two loops onto two different columns.

1367

Thermostatted Valve Oven

The heated valve oven consists of an insulated aluminum box which encloses the 10-port gas sampling valve. The temperature is screwdriver adjustable from ambient to 200°C, and reads out in degrees Celsius on the front panel digital display. It is highly recommended for valve mounting.

Method 5035 Compliant Purge and Trap

EPA Method 5035 requires a Purge and Trap apparatus to heat and maintain a temperature of 40°C of the purge vial. It also specifies that the device must also be capable of agitating the sealed sample during purging. The SRI Purge and Trap inletting system is capable of doing both.

The SRI Method 5035 compliant purge and trap concentrates the volatile organic compounds in a gas, water, or soil sample onto two adsorbent traps from which they are automatically desorbed into the GC column. The purge and trap is equipped with two traps and each is heated independently at the desorption temperature, bake out temperature, and adsorption temperature. The first trap contains Tenax®-GR and the second trap contains Carbon MoleSieve. These traps are adequate for most VOC analysis.

SRI Gas Chromatographs (detectors sold separately)

DESCRIPTION	110V* PART NO.	220V* PART NO.	PRICE
Model 8610	8610102	8612202	
Model 310	3100100	3100122	

*Supplied with one on-column inletting system.

SRI GC Detectors (choose up to 4)

DESCRIPTION	PART NO.	PRICE
TCD (Thermal Conductivity)	8690107	
FID (Flame Ionization)	8690010	
NPD (Nitrogen-Phosphorus)	8690015	
ECD (Electron Capture)	8690020	
PID (Photo-Ionization)	8690040	
FPD (Flame Photometric)	8690080	
FPD/FID Simultaneous	8691080	
DFPD (Dual Flame Photometric)	8690085	
DELCD (Dry Electrolytic Conductivity)	86901026	
FID/DELCD Simultaneous	8692026	
HID (Helium Ionization Detector)	8690030	

SRI Inletting System

DESCRIPTION	PART NO.	PRICE
Additional On-Column Injector	8690023	
Heated Static Headspace Injector	8690045	
Heated Split/Splitless Injector	8690034	
Heated Flash Vaporization Injector	8690025	
Method 5035 Compliant Purge and Trap	8690051	

Optional Accessories

DESCRIPTION	PART NO.	PRICE
Gas Sampling Valves		
10-port Valve, Manual	8690063	
10-port Valve, Electric	8690065	
Accessories		
Thermostatted Valve Oven	8690088	

Optional Accessories

Everything You Need to Get Started

"Alltech Answer" GC Start-Up Kit

- Convenient Package of all the Tools You Need to Operate and Maintain Your GC
- Suitable for Use with any Capillary GC



4421

Avoid the frustration of not having the necessary tools to set up and operate your GC. Alltech's GC Start Up Kit includes

all the supplies you need to install columns, set gas flows, set linear velocity, and perform routine maintenance on your GC.

GC Start-Up Kit:

For General Maintenance:

- 4 - Open-End Wrenches (2 each, 7/16" x 1/2" & 9/16" x 5/8")
- 1 - 2-Way Reversible Screwdriver
- 25 - 9.5mm ThermoRed Septa
- 25 - 11mm ThermoRed Septa
- 1 - Septa Puller
- 4 - Stainless Steel Tube Brushes
- 40 - 1' Lengths Redi-Cut Wire (10 of each diameter - 0.003", 0.005", 0.010" & 0.020" OD)
- 8oz. - Leak-Check Soapfilm Solution

For Column Installation:

- 2 - Open-End Wrenches (1/4" x 5/16")
- 1 - Scriber for Cutting Fused Silica Tubing
- 1 Pair - Teflon® Coated Forceps
- 1 - Pick (for removing ferrules from fittings)
- 1 - Laminated Ruler
- 10' Length - High Temperature String (for securing column in oven and on cages)
- 1 - 20X Magnifier (for checking ends of tubing)
- 2' Length - Pipecleaner (for cleaning liners)
- 10 - 1/16" to 0.4mm Graphite Ferrules
- 10 - 1/16" to 0.5mm Graphite Ferrules
- 10 - 1/16" to 0.8mm Graphite Ferrules

For Setting Gas Flows:

- 1 - 100cc Soapfilm Flow Meter
- 10' Length - 5/16" Tygon® Tubing
- 1 - Stopwatch

For Setting Linear Velocity

- 1 - Hamilton 1701 Gastight Syringe with Removable Needle
- 3 - Replacement Needles
- 1 - 14L Scotty II 99.99% Methane Standard
- 1 - Scotty II Syringe Adaptor

For Sample Injection

- 1 - 10µL Hamilton 701 Syringe with Removable Needle

"Alltech Answer" GC Start Up Kit

DESCRIPTION	PART NO.	PRICE
GC Start Up Kit	20810	

The Best Tools to Measure Gas Flow

Alltech Digital Flow Check™ and Digital Flow Check-HR™

- Accurate - NIST Traceable Calibration with up to 0.01 SCCM Resolution
- Precise - Unaffected by Temperature or Pressure
- Versatile - Measure Air, Nitrogen, Oxygen, Hydrogen, Helium, and Argon/Methane Up to 500SCCM and Carbon Dioxide Up to 300SCCM
- Reliable - The Dependable Choice for GC, Industrial Hygiene and General Lab Use



4573

Alltech's family of Digital Flow Check™ flowmeters - DFC™ and DFC-HR™ (patent pending) - are the perfect choice for all your flow applications. They provide reliable, accurate real-time measurements of all your gas streams. With seven gas NIST-traceable calibration, 2% of reading accuracy, and measuring ranges from 0.1-500cc/min* (DFC™, Part No. **4700**) and 0.01-500cc/min* (DFC-HR™, Part No. **5700**), one DFC™ flowmeter replaces several separate flowmeters for GC, SFC, SFE, industrial hygiene, biotechnology, and general laboratory applications.

The DFC™ and DFC-HR™ flowmeters work equally well with positive and negative (vacuum) flow sources and may be placed in-line for continuous flow measurement. Use them to monitor flow to traps, sorbent tubes, incubators, fermenters, or reaction vessels without interrupting gas flow.


Choose the original DFC™ flowmeter if you require an economical, accurate easy to use flowmeter for setting most analytical-instrument operating parameters. Choose the new DFC-HR™ flowmeter for your most demanding low-flow applications. It offers all the features of the DFC™ flowmeter plus a wider flow range and higher resolution (0.01cc/min). It is ideal for setting capillary GC flow or for leak testing. Its high sensitivity easily detects the smallest of leaks.

* DFC™ flowmeter - 0.1 to 500cc/min for Air, N₂, O₂, H₂, He & 5% Ar/Ch₄ and from 0.1 to 300cc/min for CO₂.

DFC- HR™ flowmeter - 0.01 to 500cc/min for Air, N₂, O₂, H₂, He & 5% Ar/Ch₄ and from 0.01 to 300cc/min for CO₂.

Digital Flow Check™ Family of Flowmeters

DESCRIPTION	PART NO.	PRICE
Flowmeters		
Digital Flow Check™	4700	
Digital Flow Check-HR™	5700	
Recalibration Services		
for Digital Flow Check™	4702	
for Digital Flow Check-HR™	5710	

 For more information on the Digital Flow Check™ Family of Flowmeters, request Bulletin #427.

Standard Capillary Columns - Ideal for the 8610C GC

Alltech's Econo-Cap™ Columns

- Low Cost Due to Batch Testing
- On Standard 7" Cage
- Available in a Variety of Phases

Econo-Cap™ Columns are the high quality, low cost alternative to individually tested columns. Batch-Tested Econo-Cap™ Columns provide relief from high prices. But low cost doesn't mean you have to sacrifice quality. Econo-Cap™ Columns are made using the same deactivating, coating, and bonding techniques, as individually tested columns.

The difference between Econo-Cap™ Columns and individually tested capillaries is the amount of testing performed. Econo-Cap™ Columns are batch tested (1 of 6 columns). We pass the savings from the reduced cost of testing on to you.

Because the SRI 8610C is designed to be portable, it requires a rugged dependable column like the Econo-Cap™. And with the reasonable cost, you can always have a spare column on hand.

Econo-Cap™ Capillary Columns

LENGTH	ID	FILM	TEMP. LIMITS	PART NO.	PRICE
EC-1 (SE⁻-30, AT⁻-1)					
15m	0.53mm	1.2µm	-60/350°C	19650	
30m	0.53mm	1.2µm	-60/350°C	19656	
15m	0.45mm	1.0µm	-60/350°C	19642	
30m	0.45mm	1.0µm	-60/350°C	19644	
30m	0.32mm	0.25µm	-60/350°C	19651	
30m	0.32mm	1.0µm	-60/350°C	19660	
30m	0.25mm	0.25µm	-60/350°C	19652	
EC-5 (SE⁻-54, AT⁻-5)					
15m	0.53mm	1.2µm	-60/350°C	19645	
30m	0.53mm	1.2µm	-60/350°C	19657	
15m	0.45mm	1.0µm	-60/350°C	19661	
30m	0.45mm	1.0µm	-60/350°C	19658	
30m	0.32mm	0.25µm	-60/350°C	19646	
30m	0.32mm	1.0µm	-60/350°C	19665	
30m	0.25mm	0.25µm	-60/350°C	19647	
EC-20 (AT⁻-20)					
15m	0.53mm	1.2µm	-20/300°C	19673	
30m	0.53mm	1.2µm	-20/300°C	19675	
15m	0.45mm	1.0µm	-20/300°C	19670	
30m	0.45mm	1.0µm	-20/300°C	19672	
30m	0.32mm	0.25µm	-20/300°C	19677	
30m	0.25mm	0.25µm	-20/300°C	19679	
EC-WAX (Carbowax®, AT⁻-WAX)					
15m	0.53mm	1.2µm	40/260°C	19653	
30m	0.53mm	1.2µm	40/260°C	19659	
15m	0.45mm	1.0µm	40/260°C	19667	
30m	0.45mm	1.0µm	40/260°C	19663	
30m	0.32mm	0.25µm	40/260°C	19654	
30m	0.25mm	0.25µm	40/260°C	19655	
EC-1000 (FFAP, AT⁻-1000)					
15m	0.53mm	1.2µm	40/250°C	19684	
30m	0.53mm	1.2µm	40/250°C	19688	
15m	0.45mm	1.0µm	40/250°C	19648	
30m	0.45mm	1.0µm	40/250°C	19669	
30m	0.32mm	0.25µm	40/250°C	19685	
30m	0.25mm	0.25µm	40/250°C	19686	

Contact your Alltech office or distributor for current or local prices.



4" Cage Columns - Ideal for the 310 GC

Alltech's Heliflex® Columns

- On Smaller 4" Cage
- Available in a Variety of Phases
- Heliflex® is Also Available on Standard 7" Cage

The SRI 310 GC requires capillary columns with a smaller diameter cage. Alltech is now providing its Heliflex® line of capillary columns on a smaller 4" cage. Capillary columns with lengths up to 30 meters and diameters smaller than 0.32mm can be coiled onto these new cages. All of Alltech's popular phases are available.

Heliflex® Columns on 4" Cages

LENGTH	ID	FILM	PART NO.	PRICE
AT⁻-1				
15m	0.32mm	1.0µm	13061	
30m	0.32mm	1.0µm	13062	
15m	0.32mm	0.25µm	13063	
30m	0.32mm	0.25µm	13064	
15m	0.25mm	0.25µm	13066	
30m	0.25mm	0.25µm	13067	
AT⁻-5				
15m	0.32mm	1.0µm	13068	
30m	0.32mm	1.0µm	13069	
15m	0.32mm	0.25µm	13070	
30m	0.32mm	0.25µm	13071	
15m	0.25mm	0.25µm	13072	
30m	0.25mm	0.25µm	13073	
AT⁻-1701				
15m	0.32mm	1.0µm	13074	
30m	0.32mm	1.0µm	13077	
15m	0.32mm	0.25µm	13078	
30m	0.32mm	0.25µm	13079	
15m	0.25mm	0.25µm	13080	
30m	0.25mm	0.25µm	13081	
AT⁻-Wax				
15m	0.32mm	1.0µm	13082	
30m	0.32mm	1.0µm	13083	
15m	0.32mm	0.25µm	13084	
30m	0.32mm	0.25µm	13085	
15m	0.25mm	0.25µm	13086	
30m	0.25mm	0.25µm	13090	
Custom 4" Cage				970124



For a complete listing of Alltech Capillary Columns, refer to Alltech Catalog 450 or call Customer Service.

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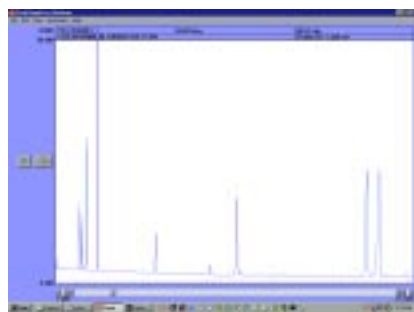
PeakSimple™ For Windows®

Free with Every SRI Gas Chromatograph!

PeakSimple™ for Windows®

- Runs On Windows® 95/98 or Windows® NT
- Can Be Used On a Desktop or Laptop PC
- Interfaces with GC through Free Serial Port

PeakSimple™ software really lives up to its name. It is simple, fast, and powerful. Each SRI GC comes with a built in data system and the PeakSimple™ software is the interface between your GC and PC. The PeakSimple™ software will run on any PC with a Windows 95/98/NT® operating system. The software communicates to the GC through an available serial port.



4541

PeakSimple™ for Windows® gives you the flexibility and power to meet all your chromatographic needs.



4542

PeakSimple™ provides for seven calibration points and six different types of calibration; from linear to quadratic.

Features:

- **Unlimited Temperature and Event Entries** — User defined temperature and event programs have no size or entry limitations, allowing a “fine-tune” for each run.
- **Mouse-driven** pull-down menus and windows.
- **Multiple Point Calibration Curves** — Permits exact quantification of sample components in analysis reports.
- **Manual and Automated Integration Correction** — Manipulate baseline and integration during and after run.
- **Peak Grouping** — for PCB's and TPH analysis.
- **ASCII or Binary File Storage** — For export to spreadsheets, etc.
- **Direct Data Exchange Links (DDE)** to other Windows® applications (e.g. Excel™).
- **Multi-tasking** with other PC applications.
- **Automatic Calibration** at seven concentration levels with six curve fitting options including straight line, multi-line, parabolic and quadratic. Choice of area or height calculation for each peak.
- **Retention Time** windows are easily changed with a click and a drag of a mouse.
- **Multiple Internal Standard Reference Peaks.**
- **High/Low Peak Alarms** with link to user programs if alarm levels are exceeded.
- **Baseline Subtraction, Peak Smoothing, Valley Deconvolution, Peak Reverse, Drift Correction.**
- **Overlay Chromatograms** for easy visual comparisons.
- **Autosampler Queues** for unattended operation allows mixed methods, auto-recalibration.
- **Batch Reprocessing** of previously run chromatograms.

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Contact your Alltech office or distributor for current or local prices.

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Use of Our Products: Alltech Associates, Inc., supplies chromatographic equipment reagents and accessories for non-medical laboratory use only. This means our products: ... may **NOT** be used as drugs, ...may **NOT** be used as cosmetics, ...may **NOT** be used as medical devices or as in vitro diagnostic devices.



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