



# An Easy-to-Use, High Throughput GC The Varian 3900 GC for routine operation

Simplified routine operation—keypad icons make instrument control intuitive.

Small footprint—occupies less than half the bench space of a conventional GC.

Flexible PC control—password security, Star Chromatography Workstation Quick Start Applications, and Custom Report Writer templates streamline operation.

Today's analytical laboratories require simple, reliable, and cost-effective gas chromatographs for greater accuracy and throughput. The Varian 3900 GC meets these demands in a new small, easy-to-use platform.

The icon-based keypad simplifies daily operation and speeds up operator training. Autoinjectors and autosamplers offer reproducible results, high sample throughput, and unattended operation. The roll-back cover provides convenient injector and detector access, eliminating lengthy downtime during routine maintenance.

The single channel 3900 GC occupies 12.5 inches/31.8 cm, less than half the bench space of one dual-channel GC. With two 3900 GCs running the same, or different, applications simultaneously, you increase laboratory productivity without sacrificing precious bench space!

Quick Start Applications launch routine methods from the desktop with minimal data entry. Reports specific to your application are easily created with Star Custom Report Writer. Report generation can be automated for around-the-clock monitoring.

The 3900 GC from Varian—ideal for today's analytical laboratory conducting routine analyses.



### Universal keypad

- Complete method editing and control in a simplified user interface
- Icon-based keypad maximizes operator efficiency
- Password protection locks keypad against unauthorized access

#### **Automation**

- CP-8410 AutoInjector and CP-8400 AutoSampler for reliable automated injections
- Predefined modes of injection for quick and easy set-up
- Multiple syringe options for liquid and ambient headspace injections

### **Injector**

- CP-1177 Split/Splitless Injector with optimized flow profile
- Electronic Flow Control (EFC) of carrier gas and split flow for maximum performance
- Optimized EFC for purge and trap and headspace configurations

#### Column oven

- Front access column oven designed for **standard** 7 inch/17.5 cm diameter columns
- Autosampler remains in place for easier routine maintenance
- 450 °C temperature limit for high temperature applications

#### **Detector**

- Flame Ionization Detector (FID) with patented ceramic flame tip for ultimate sensitivity
- EFC for quick set-up of all detector gases
- Automatic flame re-ignition assures continuous operation



### Simplified PC control

- Simple interface for easy method building and data acquisition
- Quick Start helps create and launch routine applications from the desktop
- Password protection eliminates unauthorized data access and method editing

### **Routine report templates**

- Star Workstation Custom Report Writer for easy report template creation
- Drag and drop icons for quickly creating reports

# Icon-Based Keypad — For immediate system status and instrument control

The Varian 3900 GC simplifies every aspect of routine analysis.

- Color icons on keypad with local language display
- Predefined modes of injection for convenient automation
- Flash memory for downloading future hardware drivers and upgrades through the internet
- Password control locks keyboard to protect method integrity

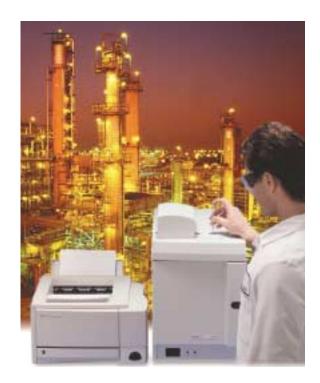
The 3900 GC is available without the keypad for ultimate security. All operating parameters are then controlled through the Star Workstation and cannot be modified at the instrument.



**Universal interface**. Language-independent icons on the keypad simplify operation.



**Future upgrades.** *Quickly upgrade* to the newest software through the internet with Flash ROM memory.

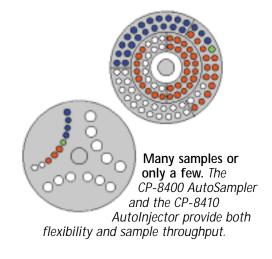


Ultimate security and simplicity. Operators using the 3900 GC, without the keypad and under remote control, can inject and view printed results on-site while sending raw data to the central Workstation.

# Outstanding Performance With easy maintenance

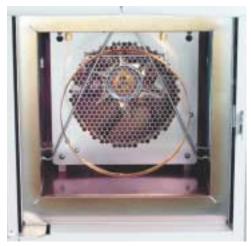
The Varian 3900 Gas Chromatograph incorporates the same outstanding EFC, injector, detector, and automation hardware as the full-featured Varian CP-3800 GC.

- Complete EFC for both injector and detector gases
- The CP-1177 Split/Splitless Injector provides optimal performance for liquid samples
- The Varian FID with its ceramic flame tip maintains an inert metal-free sample path for superior hydrocarbon response
- CP-8410 AutoInjector is unmatched in flexibility with a fixed sample tray supporting multiple vial sizes
- CP-8400 AutoSampler provides around-the-clock automation for up to 100 samples





Roll-back cover. The new roll-back cover provides complete and easy access to both injector and detector for routine maintenance.



Standard capillary columns. Use your existing columns with the compact oven of the 3900.

Retention Time Precision		
Time (min)	Std Dev	% RSD
6.208	0.002	0.0385
10.952	0.002	0.0208
19.068	0.002	0.0109
32.511	0.004	0.0118
38.760	0.008	0.0218

**Superb performance**. *Electronic Flow Control and oven performance combine for optimal retention time precision.* 

# User-Friendly Star Workstation PC Control Full-featured workstation with a simple interface

The 3900 GC can be controlled from virtually anywhere in the world through industry-standard Ethernet 10Base-T.

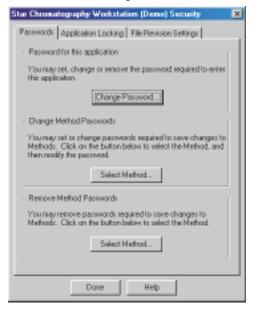
- Instrument communication utilizing standard network protocols (TCP/IP)
- PC workstation control and data handling for up to four Varian GCs
- Create Quick Start desktop icons for each sample type or method used in your laboratory
- Set levels of user access through the Star Workstation Security Administration program

Varian's Star Workstation streamlines setup, operation, and reporting for all your routine applications.

### Security

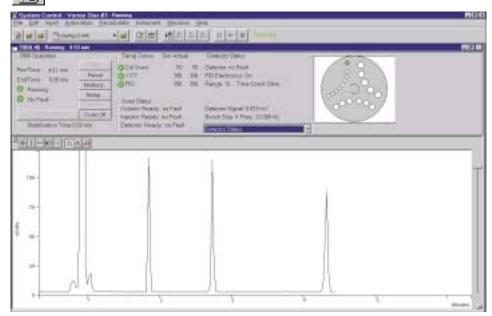


Password protection eliminates unauthorized data access and method editing.



#### System Control

System status and data acquisition are all viewed in a single window.



# Routine Analysis With minimal operator intervention

Using the Star Toolbar, lab supervisors can build Quick Start Applications with sample-specific methods for GC control and data handling. These Quick Start applications are selected through desktop icons with minimal data entry by operators. It is easy to switch between routine analyses with Quick Start.

Quick Start takes the guesswork out of daily operation improving laboratory productivity for both manual and automated injections.

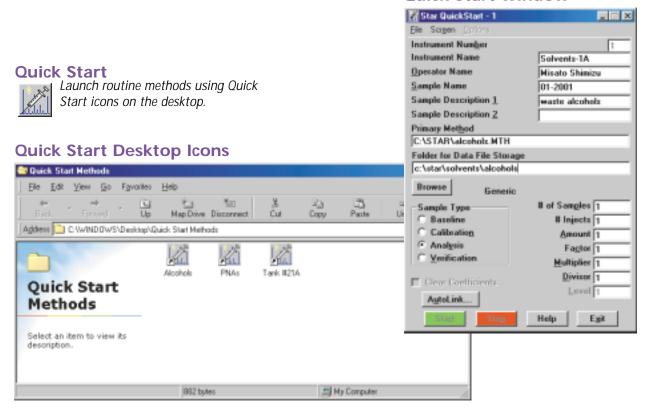




Build methods with one-click access to any Star Workstation application.



### **Quick Start Window**



# Flexible Reports Easy to create and automate

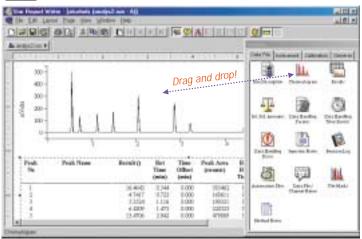
A wide array of standard report formats are available through Varian's Star Chromatography Workstation. Reports may be printed in a variety of formats or archived as ASCII files.

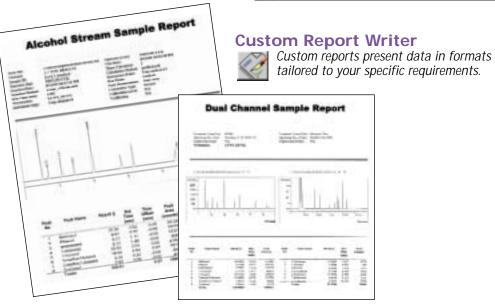
Star Custom Report Writer lets you create custom report templates for applications with specific reporting requirements. Link Custom Report templates to method sequence files for automated processing and unattended operation.

Standard and custom reports with minimal effort!

### **Custom Report Creation**

Drag multiple icons into the template field and create custom reports immediately.





# Varian Chromatography and Spectroscopy Supplies Performance, Selection, and Value

Varian's 50-plus years of continuous innovation in analytical instrumentation assures you the best in high performance products. Varian is committed to providing analytical products and supplies at affordable prices supported by superior customer service.

To maximize 3900 GC performance, select the best value in analytical supplies ranging from sample vials and sample preparation products to CP-Sil Low-Bleed capillary columns. Call today to request your free Varian Chromatography and Spectroscopy Supplies catalog.



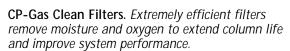
**Varian injector septa and liners**. *Products* proven to deliver high performance in demanding environments.

**Autosampler and autoinjector vials.** Vials with septa manufactured from materials specifically designed to minimize GC contamination.





CP-Sil Low Bleed Capillary Columns with EZ-GRIP. Low column bleed means higher precision, especially for trace analysis. EZ-GRIP makes column installation quick and simple.





### Varian Analytical Instruments serving worldwide markets in:

Agriculture

**Basic Chemical** 

Biotechnology

Clinical

**Electronics** 

Environmental

**Photonics** 

Toxicology

Pharmaceutical

Food and Beverage

Metals and Mining

Petroleum and Petrochemical



Varian is committed to a process of continuous improvement which demands that we understand and then meet or exceed the needs and expectations of our customers — both inside and outside the company — in everything we do.

• Varian Sales and Dealer Offices





Varian Analytical Instruments • www.varianinc.com

- North America 800.926.3000, 925.939.2400
- Europe The Netherlands: 31.118.67.1000
- Asia Pacific Australia: 613.9560.7133
- Latin America Brazil: 55.11.3845.0444
- $\bullet$  Other sales offices and dealers throughout the world