

MYVAP

AUTOMATIC LPG VAPORIZER FOR GC ANALYSIS

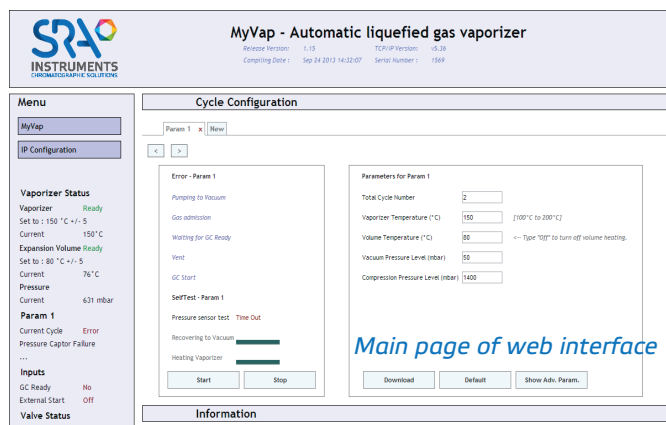
Unsurpassed performance on LPG analysis

Several methods use the Gas chromatography technique for determining the composition of liquefied petroleum gas (LPG) after a sample expansion.

The LPG vaporization is often source of errors and bias. Obtain a representative vapor sample from a pressurized liquefied gas is challenging and difficult to handling. Many procedures are used in laboratories to quantitatively expand LPG samples from a liquid phase to a homogeneous gas phase prior to analysis. Most of them are off-line methods, not safe for operators and environment, user-sensitive, causing lack of reproducibility and repeatability on analysis results. SRA Instruments developed an automated and user-independent LPG Vaporizer to handle under control the critical step of LPG phase change.

Embedded Software

The embedded software developed by SRA Instruments is extending the MyVAP capability, including all the features for safety, remote management and start GC. Software free, this allows you to start your vaporizer with a simple Web-browser.



The heart of MyVap system is the accurate control of the expansion pressure and temperature in a heated reservoir. The vaporization cycle can be programmed easily by the MyVap embedded Web interface.



Before injection, the vapor is delivered to the GC at a selected pressure; the GC is automatically started by the vaporizer with external start event. The system cleaning before and after the expansion is automatically operated by a vacuum pump controlled by a micro-processor and a pressure sensor. All operations are fully automated through electrovalves and controlled by dedicated Web software. The MyVap is manufactured with high-quality components and stainless steel, includes safe connections and relief valve for safe operation.

To provide an homogeneous LPG sample to the Gas Sampling Valve of your GC, just connect your LPG sample cylinder in the MyVap holder, open the liquid purge valve for few seconds and press the green light button on the front panel. The SRA MyVap does the rest for you, safely and start your GC.

MyVAP Automatic LPG Vaporizer



Application :

- Compositional hydrocarbon LPG analysis
- Indensable LPG analysis



Better reproducibility & repeatability



Ethernet communication



Vaporization steps fully automated



Automatic sequence of GC analysis



Stand-alone system for any GC brand



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MYVAP

TECHNICAL SPECIFICATIONS

General specifications:

Dimensions (mm): H 450; D 430; W 300
Weight: 15 Kg
Chassis: Aluminium / Steel / Stainless Steel
Sample path material: Stainless steel

Conditions of use:

Temperature: 0°C à 40°C
Relative Humidity: 5 à 95% no condensation
Altitude: jusqu'à 2000m max.
Use: indoor

Power:

Power Supply: 230 VDC, 50Hz
Power consumption: 6A max

Sample:

Nature: Liquefied Petroleum Gas, C3 and C4 mixtures
Pressure: 50bars max.
Safety: expansion chamber volume = 1 Liter. Overpressure prevented by CE type relief valve 30PSI

Connection:

Inlet: Swagelok fast connector 1/8"
Outlet to GC: 1/16" OD, 0.98mm ID
Vent: 1/4" Swagelok

Chromatographic specifications:

Repeatability: %RSD Typically better than 0.5% on C3 and C4
GC configuration : Require Heated Gas Sampling valve installed on the GC
Compatibility: compatible with any GC type equipped with Gas Sampling Valve

Communication:

Ethernet: fixed IP or DHCP. (Default IP 10.1.1.113)
Operating system: any OS with web browser
Supported web-browser:
- Internet Explorer revision 10 or higher
- Chrome revision 28 or higher
Data System: SRA embedded web Software. No installation required

I/O (Remote):

Contacts: GC External device not ready/Start/GC ready Input

Miscellaneous:

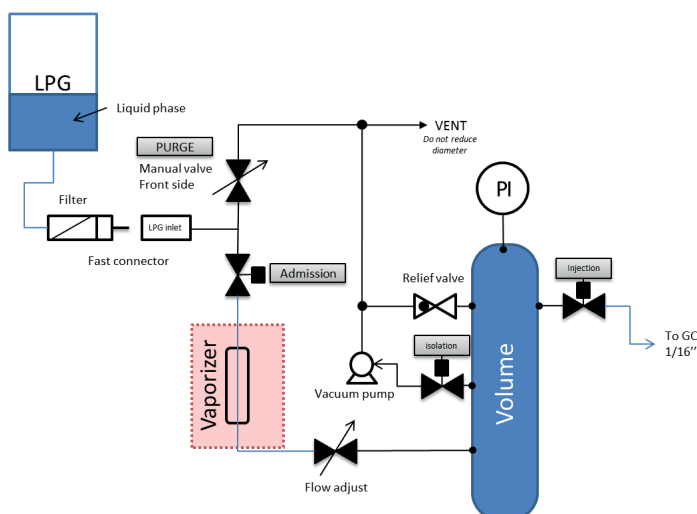
Valves: Nr 4 electro-valves
Internal Vacuum pump: Before vaporization and to clean the cylinder assembly
Vaporization temperature: range 50°C -200 °C
Pressure sensor range: 0 to 5 bar
Mode of operation: Automatic via Software, sequence programmable
Optional transfer line: Heated transfer line to GC Gas sampling valve. L= 1.5m / 150°C
Optional coating: Inert coating for H₂S, Sulfur, and active compound analysis.

Applications :

Liquefied Petroleum Gas compositional analysis

The SRA MyVAP is composed with:

- A liquefied gas inlet with a valve to fast loop vent (liquid purge)
- A vaporization chamber heated and temperature regulated
- A restriction needle valve for optimal vaporization time
- A heated main reservoir (1.00L)
- An electronic pressure sensor 0-5 bars
- A vacuum pump
- A relief valve to protect overpressure in the vaporization chamber
- Electro-valves to isolate any part of the sampler for unattended automatic runs
- Automatic self-check at start and target error message for easy maintenance



> more info and news on www.sra-instruments.com !