# JAS GICU

### **Gas Injection Control Unit**



### JAS GICU – Unique and Flexible Gas Injection

Easy to use gas injection unit delivers reproducible results for gaseous matrices.

Reproducible results with low Relative Standard Deviations (RSD; measured in percent) are two main aspects in modern gas analysis. Fundamental is the gas sample injection at reproducible and controllable volumes, pressures and temperatures. This is especially challenging in cases where one GC system is required to handle samples coming from different sample containers and where the sample characteristics may vary from injection to injection.

The JAS GICU was designed to overcome these challenges. With it you can reproducible control the pressure in the sample loop from 150 mbar to 1800 mbar (absolute). It offers unique features such as automation for low pressure sample containers (e.g. Tedlar bags) with programmable sequences. Furthermore, GICU enables Multi Level Calibration, which is extremely important for detectors that are not linear and require multiple calibration points to establish a confident calibration curve.

#### **Unique Features and Benefits:**

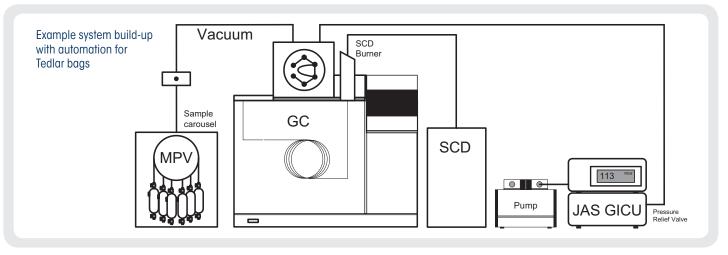
Flexibility of use: Pressurized samples

Low pressure samples

Bypass sampling

- Automation for Tedlar bags, gas sampling bulbs, etc. available
- Multi sample loop purging
- Multi level calibration
- Time programmed and volume based sample loop filling
- Pressure controlled injection for accurate RSD (150-1800 mbar absolute)
- Compatible with most gas chromatographs





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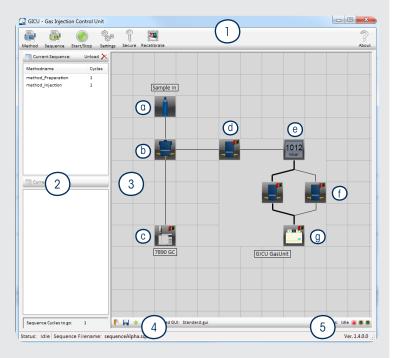
### User Friendly Easy to Use Software Interface

The JAS GICU Software is literally self-explaining. It can control a MPV for automation of low pressure sample containers. The program surface can be divided into five sections:

- 1. Toolbar
- 2. Process indicator
- 3. Element area
- 4. Loaded sequence
- 5. Software revision

The element area shows the main hardware components such as:

- a. Gas cylinder/Tedlar bag/ Bypass
- b. Safety valve
- c. Remote GC
- d. Valve
- e. Programmable Sample Loop Pressure
- f. Pump valves
- g. Vacuum pump



| Technical Details       | GICU                | Diaphragm vacuum pump              |  |
|-------------------------|---------------------|------------------------------------|--|
| Product number          | JAS 16800           | JAS 16805                          |  |
| Dimensions              | 27x27x20 cm         | 30x14x16 cm                        |  |
| Weight                  | 4,5 kg              | 6,5 kg                             |  |
| Electrical requirements | 230 V / 50 Hz IP 44 | 230 V / 50 Hz IP 40                |  |
| Power input             | 170 W               | 120 W                              |  |
|                         | RSD < 1%            | Final vacuum: 5 mbar (2-stage)     |  |
|                         |                     | Positive operating pressure: 1 bar |  |
|                         |                     | Delivery rate: 20 L/min            |  |
|                         |                     | Delivery rate: 20 L/min            |  |

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