GAS CHROMATOGRAPH FOR MULTIPLE IMPURITIES

FEATURES & DESIGN:

- Multi trace impurities in one chassis
- Multiple configurations available in one chassis
- Based on the Plasma Emission Detector technology
- Use argon or helium as carrier gas
- Isothermal and/or programmed ramping ovens available
- Electronic mass flow controllers for carrier & sample gas
- Optional integrated purifier for generating high purity carrier gas in the chassis
- Easy maintenance with its slide out design
- Compact & robust industrial rackmount 6U chassis
- ppb to % application
- Large 8.4” LCD touch screen & user friendly interface
- High performance diaphragm valves
- Ethernet connectivity for remote control
- Profibus/Modbus communication protocols
- Data storage software

With its plug and play philosophy, offering more features than the possibilities with the new chromatograph system. It provides an attractive and cost effective solution for the industrial and laboratory market.

Based on the high performances Plasma Emission Detector technology, this stand-alone Gas Chromatograph is a flexible and customized platform providing the best solution for any type of gas analysis from ppb to % using argon or helium as carrier gas.
LARGE 8.4” TOUCH SCREEN & USER FRIENDLY INTERFACE

The combination of the Plasma Emission Detector and the high performance diaphragm valve bring outstanding measurement performance. A longer lifetime and better performance on common GC techniques are achieved. They also allow new methods that are not possible with other commercial detectors and valves. Consult application notes for more information.

HIGH PERFORMANCE DIAPHRAGM VALVE

The GC-2 offers an easy and complete interface working on Windows XP embedded. With its 8.4” clear LCD touch screen, it allows the operator to navigate easily through the different menus. Moreover, the system includes an Ethernet port for remote control.

The oven design can accept any type of packed, micro packed and capillary columns. It offers a very stable and quick temperature control able to proceed to high temperature column regeneration in the unit. The front access to the ovens can be done without removing unit from its rack. With its optional ramping and programmed oven, some more applications are feasible with reduced analysis time.

ISOTHERMAL OVEN FOR ANY TYPE OF COLUMNS

The GC-2 has been designed to give a complete access to all the hardware parts without removing the unit from the rack. The complete maintenance of the system can then be done by keeping the system on gas. This design gives the benefits to reduce the recovery time of the GC after proceeding to maintenance of the system.

FRONT ACCESS TO THE ISOTHERMAL AND/OR PROGRAMMED RAMPING OVENS
EASY MAINTENANCE
WITH ITS SLIDE OUT DESIGN

Using its redesign Plasma emission detector, the GC-2 can now achieve lower detection limit and can also extend his range of applications. Its plasma detector has the benefit to be a clean and maintenance free system. It can easily achieve low ppb detection limit using either argon or helium as carrier gas. The detector can be configured for low ppb as well as high percentage level. It then gives the opportunity to configure the GC-2 system for any kind of gas analysis applications.

ELECTRONIC FLOW CONTROLLER
(NEW DESIGN)

With its electronic flow controller, the GC-2 offers the possibility to have automatic carrier flow adjustment. The own valve design offering low dead volume and fast response time to allow accurate carrier flow. A manual version of the carrier flow regulator can also be used.

ELECTRONIC SAMPLE VALVE
(NEW DESIGN)

Keeping its already proof micro valve design for sample control, the GC-2 guarantee no leak and no dead volume with this high performance electronic controlled online valve to achieve ppb levels.

EASY MAINTENANCE
WITH ITS SLIDE OUT DESIGN

The same approach has been done on the back side of the unit. Other critical components can be reached from the back for maintenance purpose using its pull out rails system. Again, it gives the benefit to perform system maintenance with reduced recovery time without removing the gas lines from the unit. Also offering its optional integrated mounted in gas purifier module, the GC-2 bring some more benefits by reducing installation cost and space. Its compact design which can introduce multiple configurations with an integrated purifier and stream selector system in one chassis push further the possibilities of this GC system.
With the data storage software, the chromatograms can be stored at the user’s convenience. It can generate reports, trend the detector signals and oven temperatures. All data can be saved and exported to Excel. Offering its multiple modes, the software can acquire data from multiple GC configurations.

**APPLICATIONS:**
- Air Separation Unit
- Crude Argon production for nitrogen monitoring
- Specialty gas laboratories
- Process control
- Gas purification
- Beverage industries
- Environmental analysis

**CAPABILITIES:** (most popular applications)
- Glove box
- Steel industries
- Welding gas control
- Helium liquefaction plants
- Quality control for truck filling station
- Semiconductor manufacturing

**SPECIFICATIONS:**

<table>
<thead>
<tr>
<th>DETECTOR TYPE</th>
<th>Plasma Emission Detector design</th>
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<tbody>
<tr>
<td>RANGE</td>
<td>Application dependant</td>
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<tr>
<td>REPEATABILITY</td>
<td>&lt; 1% full scale</td>
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<tr>
<td>ACCURACY</td>
<td>Better than ±1% full scale</td>
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**STANDARD FEATURES**
- Manual or autoranging (user selectable)
- Microprocessor controlled
- Windows XP embedded user friendly interface
- Ethernet port for remote control
- Isothermal and/or programmed ramping ovens
- Electronic flow control regulators for carrier & sample gases
- 8.4” LCD large touch screen
- Self diagnosis system with auto-resolve alarm
- 4-20 mA isolated outputs
- Alarm Historic
- Digital system status output for remote monitoring (dry relay contact)
- 2 alarms contact
- High resolution Chromatogram output

**OPTIONS**
- Serial port: RS-232 / 422 / 485 / Profibus for monitoring
- Integrated compact purifier in the chassis for generating high purity carrier gas
- Integrated stream selector system
- Digital inputs for remote starting
- Analog inputs for connecting external instruments
- Remote control for stream selector

**GAS CONNECTIONS**
- Sample: 1/8” compression fittings or 1/8 VCR
- Vent: 1/8” compression fitting

**CALIBRATION GAS**
- Zero: purified gas ( Getter )
- Span: 70% to 90% of the scale

**SAMPLE PRESSURE REQUIREMENTS**
- 10 to 30 PSIG

**CARRIER PRESSURE REQUIREMENTS**
- 100 PSIG

**OPERATING TEMPERATURE**
- 10 °C to 45 °C

**SUPPLY**
- 115 VAC, 50 - 60 Hz or 220 VAC, 50 - 60 Hz

**POWER CONSUMPTION**
- 10.6 W
- 8.4” LCD large touch screen
- Windows XP embedded user friendly interface
- Better than ±1% full scale

**DIMENSIONS:**
- TOP VIEW
- FRONT VIEW
- SIDE VIEW
- CUT OUT DIMENSIONS FOR RACK MOUNTING

*Other applications are possible. Please contact factory for further details.
For further information please contact: