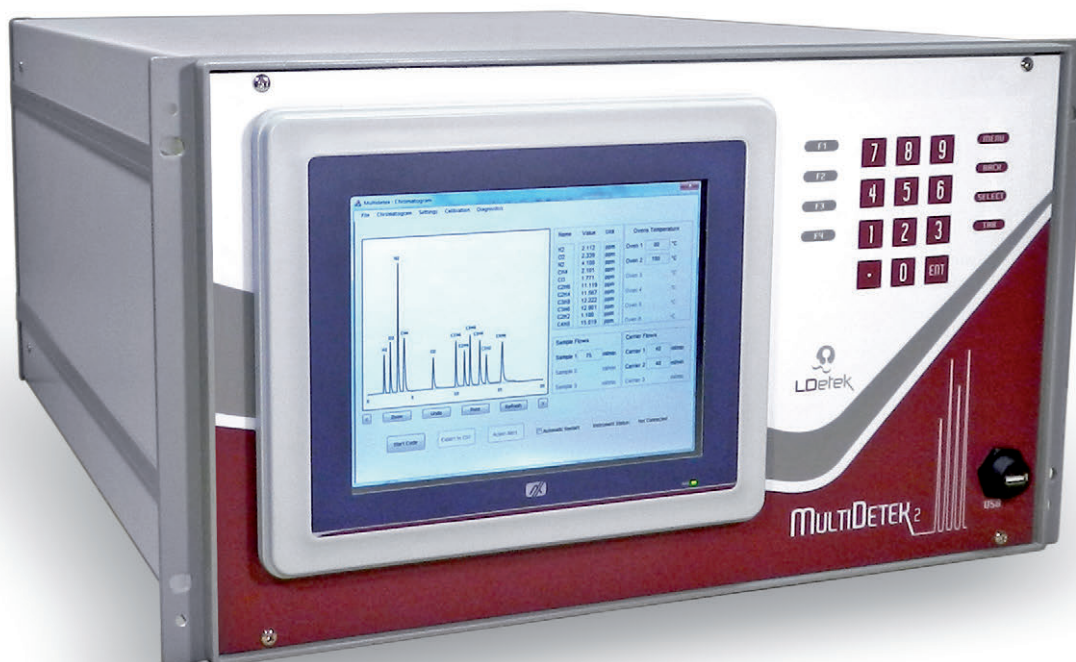


MULTIDETEK₂

MICRO GC FOR MULTIPLE IMPURITIES



With its plug and play philosophy, offering more features than never LDetek push further the possibilities with its new chromatograph system. It provides an attractive and cost effective solution for the industrial and laboratory market.

Based on the LDetek 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.

FEATURES & DESIGN:

- Multi trace impurities in one chassis
- Multiple configurations available in one chassis
- Based on the PlasmaDetek technology
- Use argon or helium as carrier gas
- Isothermal and/or programmed ramping ovens available
- LDetek's 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 (LDchrom)



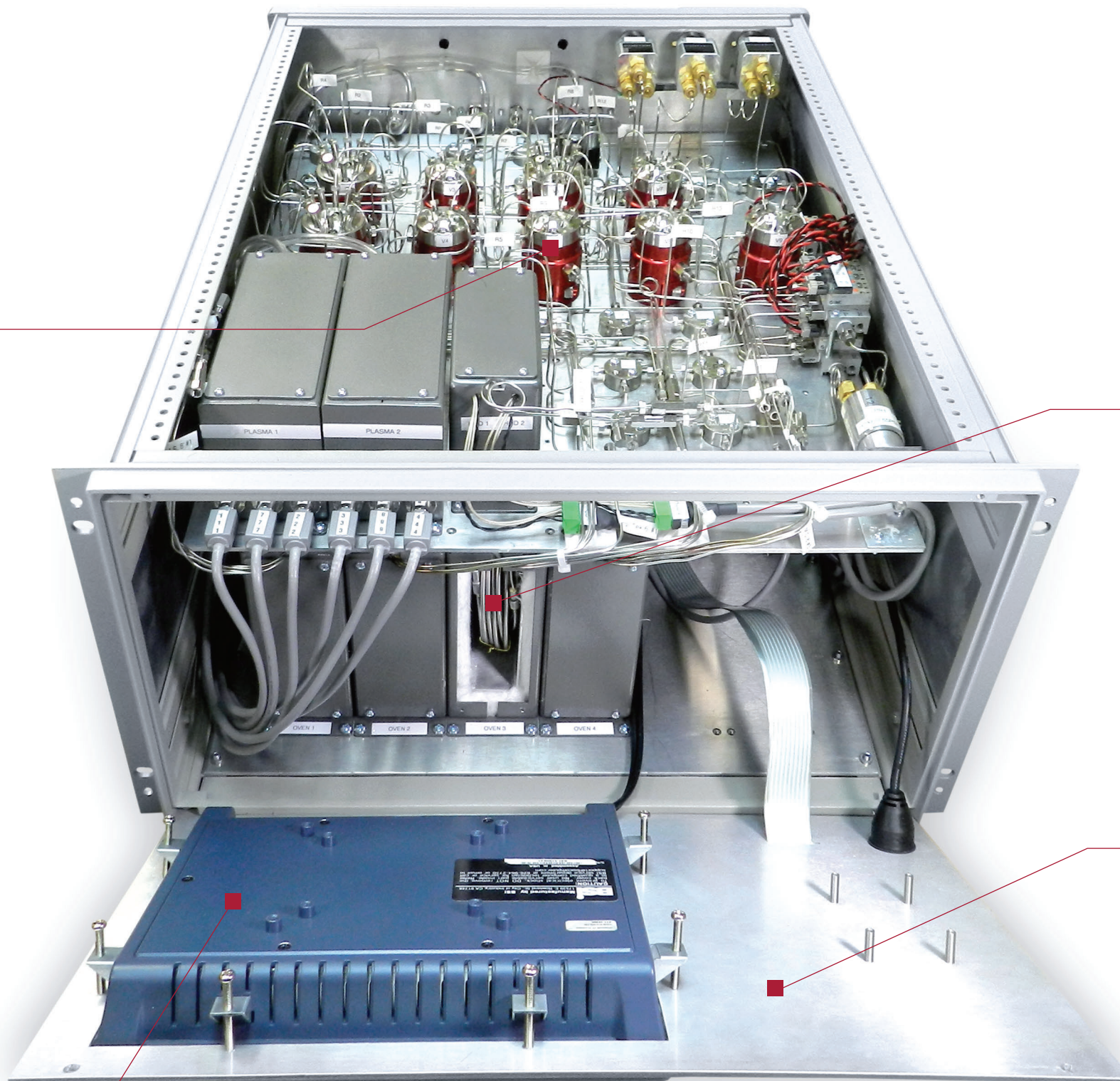
LDETEK HIGH PERFORMANCE DIAPHRAGM VALVE

The combination of the PlasmaDetek 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 LDetek application notes for more information.



LARGE 8.4" TOUCH SCREEN & USER FRIENDLY INTERFACE

The Multidetek-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.



ISOTHERMAL OVEN FOR ANY TYPE OF COLUMNS

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.

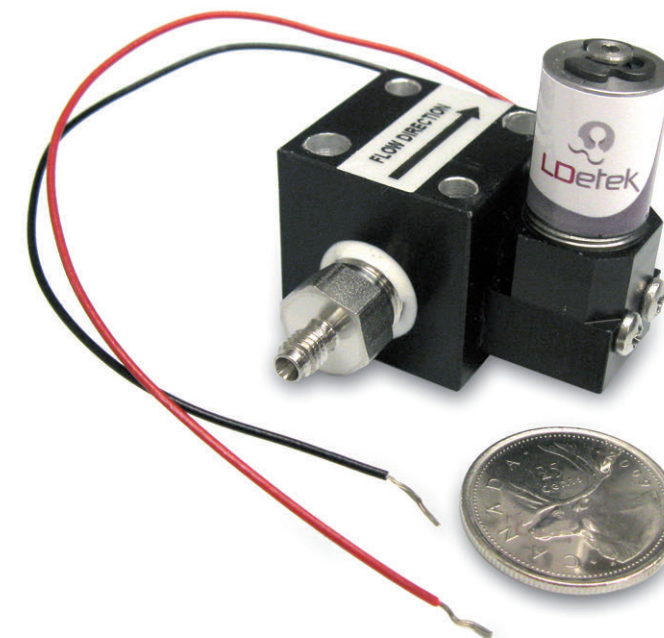
FRONT ACCESS TO THE ISOTHERMAL AND/OR PROGRAMMED RAMPING OVENS

The Multidetek-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.



ELECTRONIC FLOW CONTROLLER (LDETEK DESIGN)

With its electronic flow controller, the Multidetek-2 offers the possibility to have automatic carrier flow adjustment. LDetek has developed its 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 (LDETEK DESIGN)

Keeping its already proof LD8000 micro valve design for sample control, the Multidetek-2 guarantee no leak and no dead volume with this high performance electronic controlled online valve to achieve ppb levels.

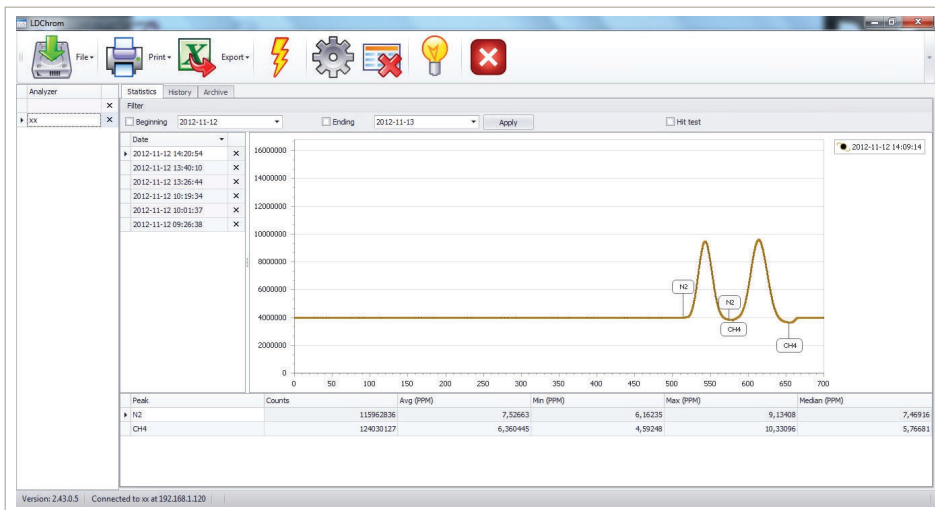


LDETEK HIGH PERFORMANCE PLASMA DETECTOR

Using its redesign Plasma emission detector, the Multidetek-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 Multidetek-2 system for any kind of gas analysis applications.

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 Multidetek-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 LDchrom data storage software, the chromatograms can be store at the user's convenience. It can generate reports, trend the detector signals and oven temperatures. All data can be saved and export to Excel. Offering its multiple modes, LDchrom can acquire data from multiple Multidetek configurations.

- LDetek Data storage software (LDchrom)

APPLICATIONS:

- Air Separation Unit
- Crude Argon production for nitrogen monitoring
- Speciality gas laboratories
- Process control
- Gas purification
- Beverage industries
- Environmental analysis
- Glove box
- Steel industries
- Chemical plant
- Welding gas control
- Helium liquification plants
- Quality control for truck filling station
- Semiconductor manufacturing

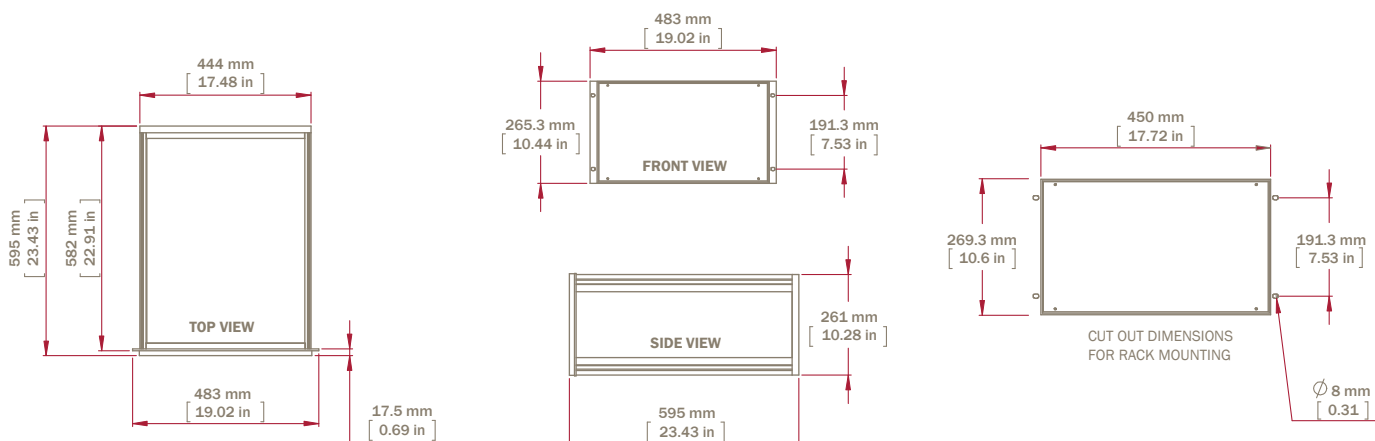
CAPABILITIES:

HALOGENATED GASES ANALYSIS
 HEALTH
 COAL CHEMICALS PLANT
 PETROCHEMICAL
 STEAM REFORMING
 ARGON
 ISO BUTANE
 ACETONE
 HYDROCARBONS PROCESSING
 PROPANE
 ETHANE
 PHOSPHINE
 SILANE
 METHANE
 AGRICULTURE
 UHP
 BEVERAGE
 ENVIRONMENT
 KRYPTON
 OXYGEN
 HELIUM
 NEON
 HYDROGEN
 CARBON DIOXIDE
 SULFUR DIOXIDE
 PROPYLENE
 NATURAL GAS
 HYDROGEN SULFIDE
 MEDICINE
 ETHYLENE
 N-BUTANE
 CARBONYL SULFIDE
 TOGA
 BEVERAGE
 INDUSTRIAL GASES
 ACETALDEHYDE
 GREENHOUSE GASES
 SEMICONDUCTOR GASES
 METHYL CHLORIDE
 PHARMACEUTICAL
 NITROUS OXIDE
 ACETYLENE
 DIFLUOROETHANE
 METHYL CHLORIDE
 NITRIC DIOXYDE
 ASU
 GASES
 RETINERY ANALYSIS
 FUEL CELL
 CO₂
 CARBON MONOXIDE
 WATER
 NITROGEN
 NITRIC OXIDE
 I-BUTENE
 FORMALDEHYDE
 AMMONIA
 XENON
 PETROCHEMICAL
 SAFETY
 FOOD
 STEAM REFORMING

SPECIFICATIONS:

DETECTOR TYPE	Plasma Emission Detector design (PlasmaDetek)
RANGE	Application dependant
REPEATABILITY	< 1% full scale
ACCURACY	Better than $\pm 1\%$ full scale
STANDARD FEATURES	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 (LDGSS)
GAS CONNECTIONS	Sample: 1/8" compression fittings or 1/8 VCR Vent: 1/8" compression fitting
CALIBRATION GAS	Zero: LDP1000 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	
DRIFT	< $\pm 1\%$ over 24 hours

DIMENSIONS:





Where **innovation** leads to **success**

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