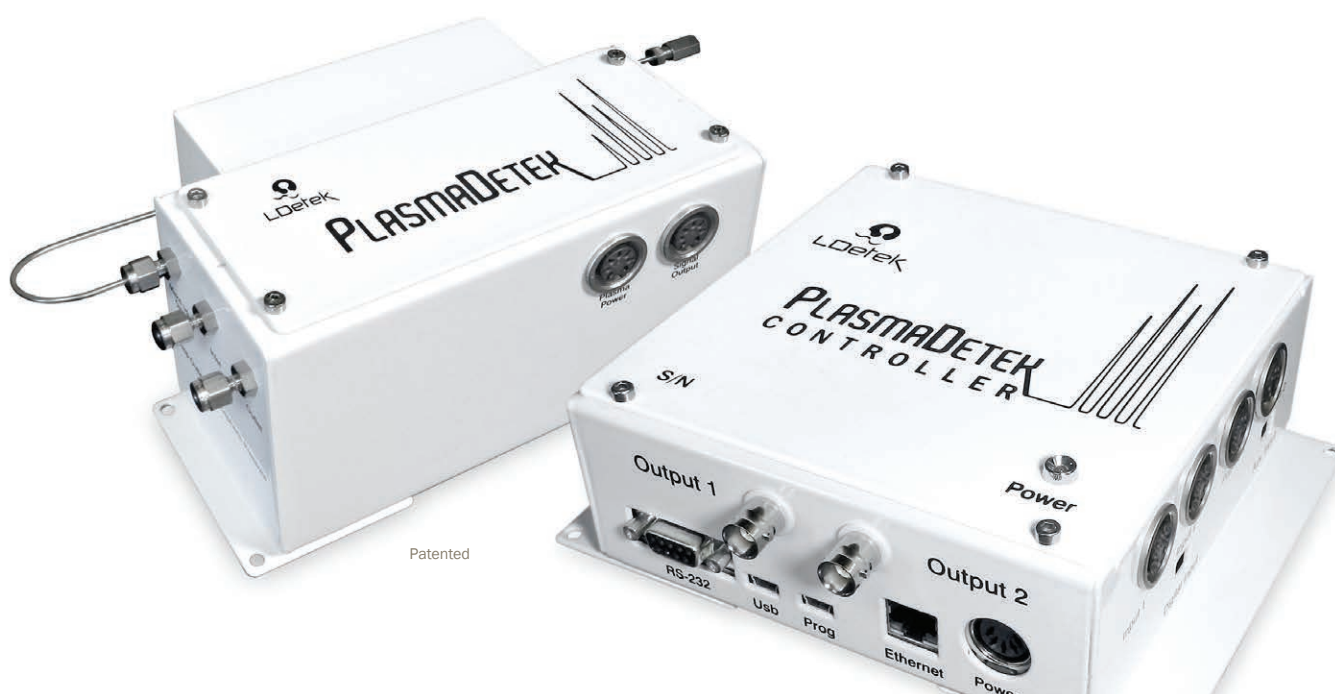


# PLASMADETEK<sub>2</sub>



## INTELLIGENT PLASMA EMISSION DETECTOR SYSTEM FOR GAS CHROMATOGRAPH



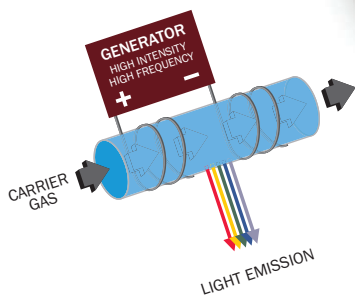
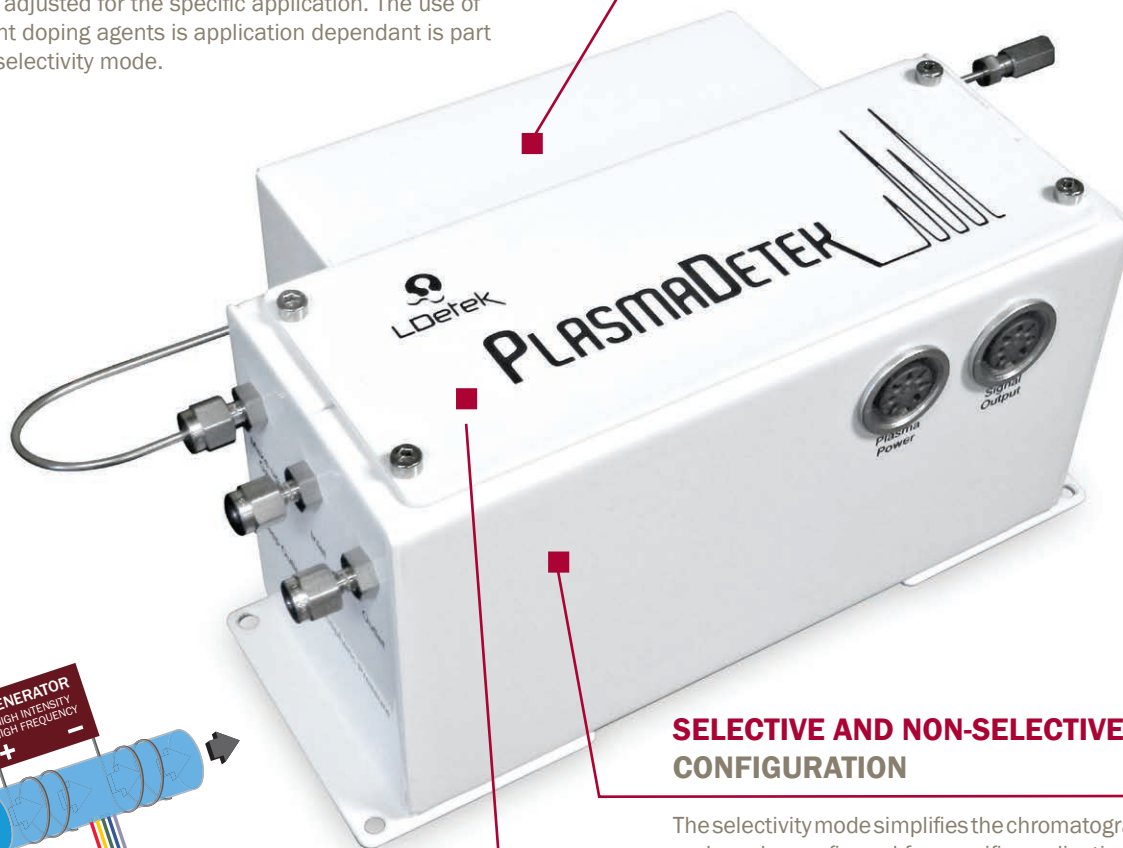
This microprocessor based plasma emission detector system gives all the tools to the GC integrator, manufacturer and user to integrate a plug and play detection system. With its customizable configuration capability, a detector has never been so intelligent.

### IN A GLANCE:

- Argon or helium carrier gas
- No dead volume design
- All in one detector by replacing existing technologies commonly used
- Selective and non-selective configuration
- Analog or digital interface
- Wide range of applications
- Easy to interface with any GC and analyzer design
- PPB to % detection
- Very stable signal
- Maintenance free
- Fast installation and tune up
- Configuration software
- Possibility of customizable protocol to control the device
- Detect organic and inorganic compounds, permanent gases and noble gases (including Ne)

## DOPING AGENT INJECTOR TEMPERATURE CONTROLLED

By controlling the temperature of the doping agent injection device, better stability of the measurement is achieved. The temperature is controlled by the PlasmaDetek controller and can be adjusted for the specific application. The use of different doping agents is application dependant is part of the selectivity mode.



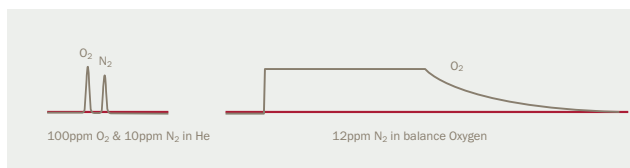
## SELECTIVE AND NON-SELECTIVE CONFIGURATION

The selectivity mode simplifies the chromatography and can be configured for specific application.

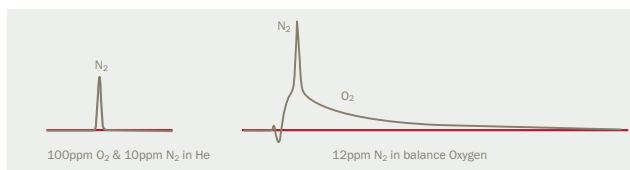
## PED DESIGN WITH NO DEAD VOLUME

The PlasmaDetek design avoids the creation of phantom peaks that occurs in conventional ionization detector. Its unique design made of a monolithic quartz makes the detector dead volume free. It is not affected by pressure or flow swings.

### Conventional ionization detector



### Plasmadetek

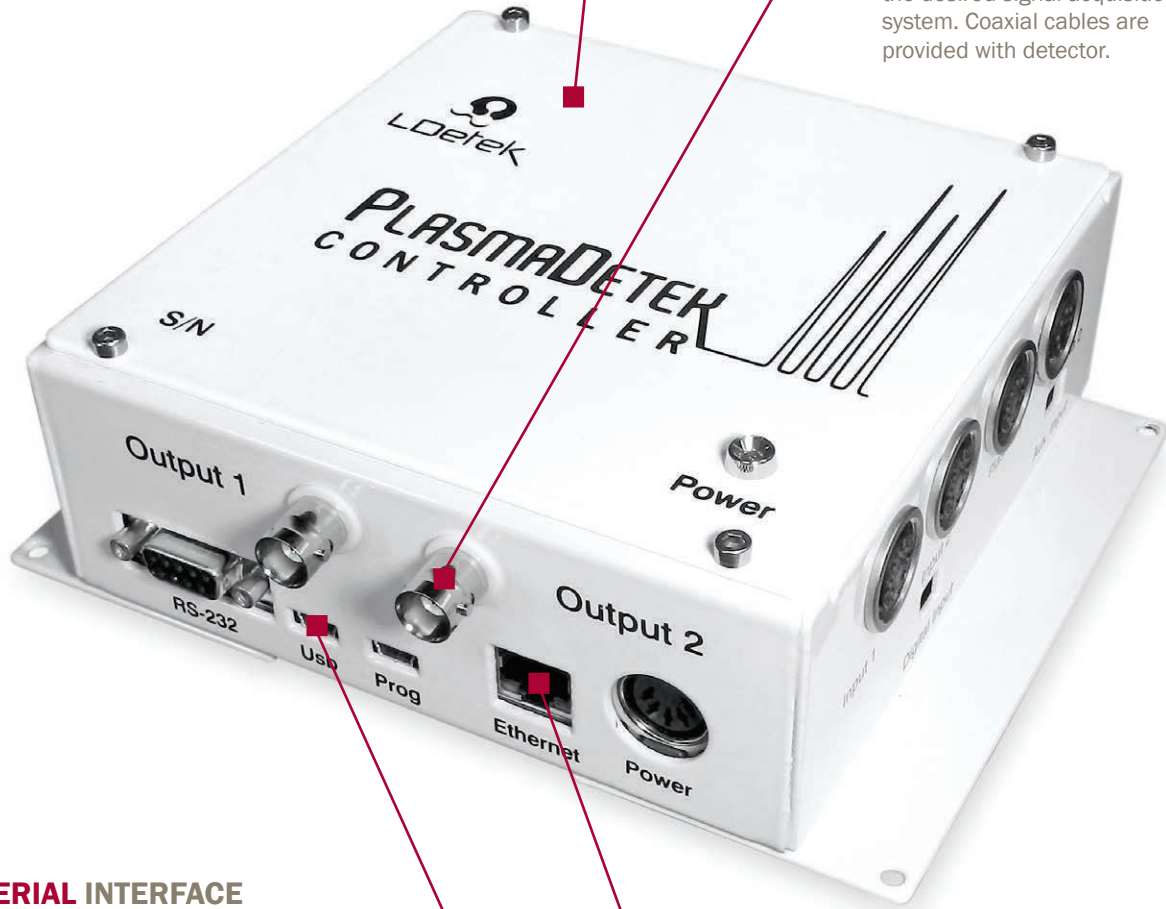


## MICROPROCESSOR BASED CONTROLLER

With an integrated DSP, the signal can be processed to improve measurement as well as providing desired signal for any GC. Configurable with LDetek plasma configurator provided with each PlasmaDetek. Cost saving by having no electrometer needed to acquire the signal. Multiple stage of amplification integrated to achieve low to high concentration.

## 2 ANALOG OUTPUTS AS STANDARD

Both analog output can be used in parallel to interface with the desired signal acquisition system. Coaxial cables are provided with detector.

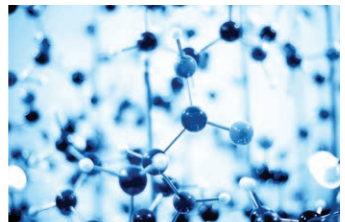


## SERIAL INTERFACE

USB and RS-232 connection are available to provide digital signal and avoid analog interface. Custom digital communication can also be implemented to communicate and configure the PlasmaDetek from your own system.

## ETHERNET PORT

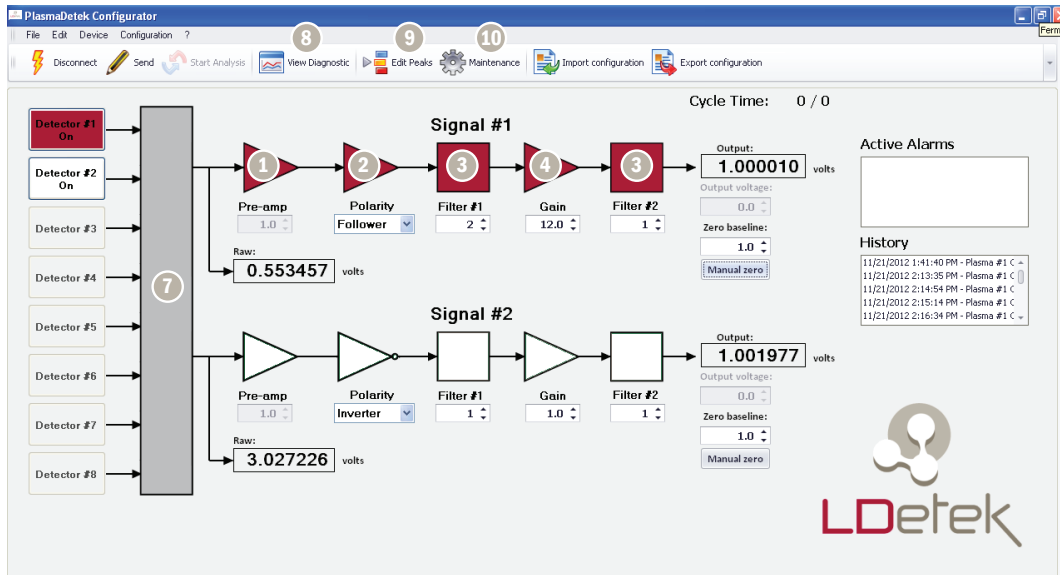
Connect the PlasmaDetek to your network to communicate with the device.



## SPECIFICATIONS:

<b>CARRIER GAS</b>	Argon and Helium
<b>POWER</b>	80 to 240 VAC, 50-60 Hz
<b>GAS CONNECTIONS</b>	1/16" (can be customized)
<b>OPERATION OUTLET PRESSURE</b>	Atmospheric or Vacuum
<b>OPERATING TEMPERATURE</b>	10 °C to 50 °C (in stable environment)
<b>FILTER</b>	10u SS particle filter on the gas inlet
<b>DETECTOR SIGNAL OUTPUT CONNECTION</b>	BNC Coaxial type (can be customized)
<b>POWER CONSUMPTION</b>	Max 10 Watts

## PLASMADETEK CONFIGURATOR:



- 1 Adjust the amplification directly on the source light of the plasma to change the measurement scale of the detector. PPB to % application can be achieved with the same detector.
- 2 **SIGNAL POLARITY:** negative peaks can now be inverted to get positive peaks.
- 3 **FILTERING:** Digital filtering can be applied to improve signal provided to the GC.
- 4 **GAIN:** adjust the gain of the signal for the specific measurement.
- 5 **OUTPUT VOLTAGE:** set the output voltage scale that fits to the GC signal acquisition system.
- 6 **ZERO BASELINE:** set and perform zero baseline directly in the detector.
- 7 Connect up to 8 detector to the same plasma controller.
- 8 **DIAGNOSTIC TOOL:** Graphic tool to trend the raw or the output voltage.
- 9 **PEAK TABLE:** edit a peak event table to change all possible parameters at specific time analysis can be started manually or by digitally and the detector will follow your specific configuration.
- 10 Maintenance menu: all tools to troubleshoot the detector is provided.



271 St-Alphonse Sud, Thetford Mines, (Qc), Canada, G6G 3V7  
 Phone: 418 755-1319 • Fax: 418 755-1329 • [info@ldetek.com](mailto:info@ldetek.com)