



Optix is a multi-purpose and highly sensitive instrument for gas sensing in any vacuum environment. Optix caters for most industrial vacuum production processes without any requirement for a differential pumping system, providing automatic operation and real-time species detection.

#### KEY FEATURES

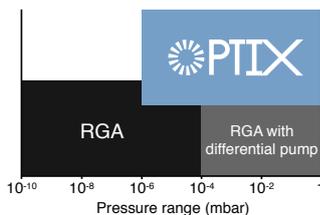
1. Wide pressure range, operating directly at process pressures from 0.5 to  $10^{-7}$  mbar
2. Built-in pressure gauge as standard
3. No filaments and low maintenance
4. Chemically-tolerant with dedicated version for ALD and CVD processes
5. Automatic calibration of total pressure reading
6. Sophisticated software with High Dynamic Range HDR mode for enhance sensitivity

# OPTIX

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## APPLICATIONS

- Leak detection, vacuum quality, pressure sensing
- PVD, CVD, ALD
- Heat treatment
- Fusion, cannabinoids, gas sampling



Genco Optix provides fast analysis of gases within a vacuum, without differential pumping (pumping needed only for atmospheric sampling). Unlike RGA's, the Optix detector is separated from chemicals/vacuum by an optical window which provide protection from operator damage.

Optix uses a remote plasma spectroscopy concept which generates a small plasma within the sensor head. A built-in high resolution spectrometer analyzes the plasma, automatically interpreting the light spectrum to provide qualitative measurement of the presence and concentration of gas within the vacuum.

The Optix spectral information and sophisticated back-end software benefit a wide range of applications. The mode of operation means contaminating processes involving hydrocarbons, solvents and long-chain polymers do not impact the detection. For very high chemical levels, a special plasma power mode is used to prevent electrode contamination.

## SOFTWARE

An advanced Windows user interface provides clear visualisation of the condition of the process and vacuum, and powerful tools for recording and referencing data enable easy identification of process problems.

Up to 20 gases can be monitored on simultaneous wavelengths, with process gas tracking that can be set up with trigger/alarm outputs.

A full, tuneable spectrum view (200-850nm) provides control of integration time for sensitivity adjustments, and automatic gas peak detection works in real-time without the need to export for data identification.

OPTIX SPECIFICATIONS	
<b>OPTIX SENSOR DIMENSIONS</b>	300mm x 170mm x 95mm
<b>PSU DIMENSIONS</b>	165mm x 105mm x 55mm
<b>SENSOR WEIGHT</b>	2.2kg
<b>VACUUM CONNECTION</b>	KF25 flange
<b>INPUT VOLTAGE</b>	24V
<b>INPUT POWER</b>	20W typical
<b>OUTPUT VOLTAGE</b>	3kV max
<b>OUTPUT CURRENT</b>	1.5mA max
<b>TOTAL PRESSURE OPERATING RANGE</b>	1x10 <sup>-6</sup> mbar - 0.5 mbar
<b>SENSITIVITY</b>	50ppm air in argon at 1.6x10 <sup>-2</sup> mbar total pressure
<b>SPECTRAL RANGE</b>	200nm - 900nm
<b>UPDATE SPEED</b>	5ms - 10 seconds (depending on sensitivity selected)
<b>COMMUNICATION INTERFACES</b>	OPC, RS232, Ethernet , Digital relay output (x4)
<b>SOFTWARE</b>	Windows 7, 8 and 10 compatible

## FURTHER INFORMATION

Contact: [sales@genco.com](mailto:sales@genco.com) or visit [www.genco.com/optix](http://www.genco.com/optix)

