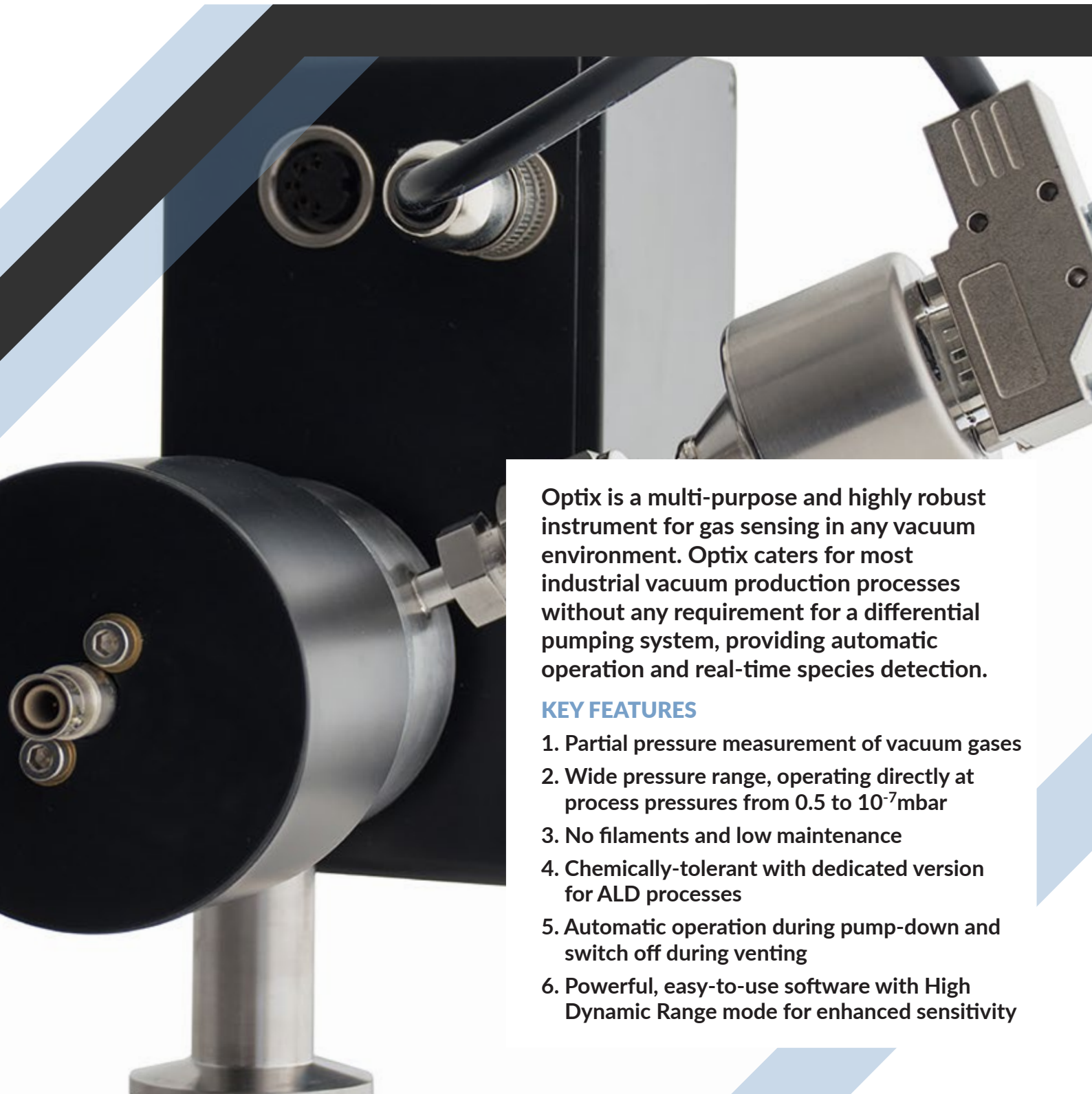




OPTIX FOR ALD PROCESSES



Optix is a multi-purpose and highly robust 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. Partial pressure measurement of vacuum gases
2. Wide pressure range, operating directly at process pressures from 0.5 to 10^{-7} mbar
3. No filaments and low maintenance
4. Chemically-tolerant with dedicated version for ALD processes
5. Automatic operation during pump-down and switch off during venting
6. Powerful, easy-to-use software with High Dynamic Range mode for enhanced sensitivity

Perfect your process
www.gencoa.com

OPTIX FOR ALD

ROBUST, COMPACT VACUUM DIAGNOSTICS AND CONTROL

Gencoa Optix is a compact gas sensor that provides robust, fast measurement of gaseous species within your vacuum process environment. Optix uses an optical detection method that operates over a wide pressure range (0.5–10⁻⁷ mbar) without filaments and without the need for differential pumping.

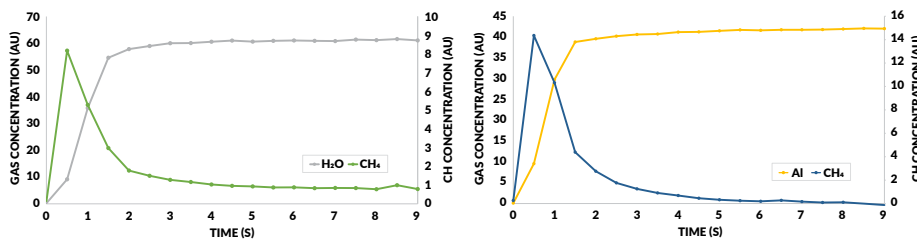
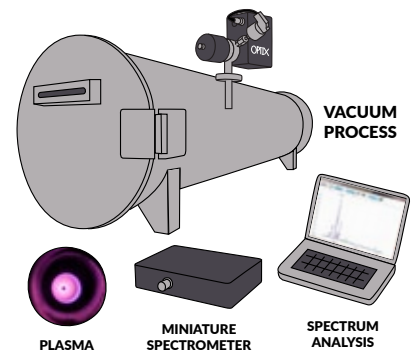
The pulse of the Optix detector can be synchronized with the pulsing ALD valve for precise detection and optimization of the delivery cycle. Real-time monitoring of byproduct release and precursor consumption delivers maximum control. Optix advanced spectral information provides valuable data for ALD process monitoring.



ALD PROCESS MONITORING AND CONTROL

Optix is the ideal tool to perform key ALD process monitoring and control tasks that will improve process performance and reliability:

- Measurement of vacuum quality prior to process start, leak detection and contamination detection.
- Diagnostics of precursor delivery
- Analysis of ALD reaction dynamics
- Optimization and control of ALD cycle and purge times



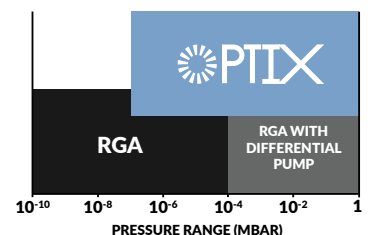
The illustrations above show Optix readings during an Al₂O₃ process. Saturation occurs within the first 0.5 seconds.

POWERFUL, EASY-TO-USE SOFTWARE

Advanced Windows software provides clear visualisation of the process condition, and offers powerful tools for recording and referencing complete process data. Up to 20 gases can be monitored simultaneously, with update speeds as fast as 10ms.



OPTIX SPECIFICATIONS			
OPTIX SENSOR DIMENSIONS	300 x 170 x 95mm	INPUT VOLTAGE	24V
PSU DIMENSIONS	165 x 105 x 55mm	INPUT POWER	20W typical
SENSOR WEIGHT	2.2kg	OUTPUT VOLTAGE	3kV max
VACUUM CONNECTION	KF25 flange	OUTPUT CURRENT	1mA max
OPERATING PRESSURE RANGE	1x10 ⁻⁷ mbar - 0.5 mbar		
SENSITIVITY	50ppm air in argon at 1.6x10 ⁻² mbar total pressure		
UPDATE SPEED	5ms - 10 seconds (depending on sensitivity selected)		
COMMUNICATION INTERFACES	OPC, RS232, Ethernet, Digital relay output (x4)		
SOFTWARE	Windows 7, 8, 10 and 11 compatible		



FURTHER INFORMATION

Contact: sales@gencoa.com or visit www.gencoa.com/optix

