

What Gas Types Can Otis Sensors Detect?

Otis Instruments provides a comprehensive selection of gas detection solutions across our product lines. Below is a detailed list of the gas types our devices can detect, along with their detection ranges, backed by our industry-leading warranty, and the calibration values applied at our factory.

This document is intended to complement a site survey conducted by a certified industrial hygienist or another qualified safety professional. Such a survey is essential to determine the appropriate gas types, detection ranges, and calibration values specific to your site requirements.

Element Type	Gas Name	Range	Calibration Value	Warranty
Electrochemical - EC	Arsine - AsH ₃	0-1 PPM	1 PPM*	12 Months
	Formaldehyde - CH ₂ O	0-10 PPM	10 PPM*	12 Months
	Methyl Mercaptan - CH ₃ SH	0-10 PPM	5 PPM*	12 Months
	Chlorine - Cl ₂	0-10 PPM	5 PPM	12 Months
	Chlorine Dioxide - ClO ₂	0-5 PPM	5 PPM*	12 Months
	Carbon Monoxide - CO	0-1000 PPM	500 PPM	24 Months
	Ethylene Oxide - EtO	0-10 PPM	5 PPM	12 Months
	Hydrogen - H ₂	0-4% Vol	2% Vol	12 Months
	Hydrogen Sulphide - H ₂ S	0-10 PPM	10 PPM	24 Months
		0-25 PPM	10 PPM	24 Months
		0-50 PPM	25 PPM	24 Months
		0-100 PPM	25 PPM	24 Months
		0-2000 PPM	500 PPM	24 Months
	Hydrogen Chloride - HCl	0-20 PPM	10 PPM	12 Months
		0-200 PPM	20 PPM	12 Months
	Hydrogen Cyanide - HCN	0-100 PPM	25 PPM	12 Months
	Hydrogen Fluoride - HF	0-10 PPM	7.5 PPM*	12 Months
	Ammonia - NH ₃	0-100 PPM	25 PPM	12 Months
		0-300 PPM	100 PPM	12 Months
		0-1000 PPM	300 PPM	12 Months
	Nitrogen Monoxide/Nitric Oxide - NO	0-250 PPM	100 PPM	12 Months
	Nitrogen Dioxide - NO ₂	0-20 PPM	10 PPM	12 Months
	Oxygen - O ₂	0-25% Vol	18.5% Vol or 25% Vol	24 Months
	Ozone - O ₃	0-5 PPM	5 PPM*	12 Months
		0-100 PPM	20 PPM*	12 Months
	Phosphine - PH ₃	0-5 PPM	5 PPM	12 Months
Silane - SiH ₄	0-50 PPM	30 PPM	12 Months	
Sulfur Dioxide - SO ₂	0-20 PPM	5 PPM	12 Months	

Element Type	Gas Name	Range	Calibration Value	Warranty
Infrared - IR	Methane - CH ₄	0-100% LEL	50% LEL	24 – 36 Months*
		0-100% Vol	5% Vol	36 Months
	Propane - C ₃ H ₈	0-100% LEL	50% LEL	24 Months
	Carbon Dioxide – CO ₂	0-5% Vol	2.5% Vol	24 – 36 Months*
Catalytic Bead - CB2	Methane - CH ₄	0-100% LEL	50% LEL	24 Months
Infrared Refrigerant - IRR	Refrigerant - R1234yf	0-2000 PPM	1000 PPM	12 Months
	Refrigerant - R1234ze	0-2000 PPM	1000 PPM	12 Months
	Refrigerant - R134A	0-2000 PPM	1000 PPM	12 Months
	Refrigerant - R32	0-2000 PPM	1000 PPM	12 Months
	Refrigerant - R404A	0-2000 PPM	1000 PPM	12 Months
	Refrigerant - SF ₆	0-2000 PPM	1000 PPM	12 Months
	Refrigerant – R1233ZD	0-2000 PPM	1000 PPM	12 Months
	Refrigerant – R22	0-2000 PPM	1000 PPM	12 Months
	Refrigerant – R410A	0-2000 PPM	1000 PPM	12 Months
Photo Ionization Detector - PID	Volatile Organic Compound - VOC - 10.6eV Lamp	0-10 PPM	10 PPM	6 Months
		0-20 PPM	10 PPM	6 Months
		0-50 PPM	50 PPM	6 Months
		0-1000 PPM	500 PPM	6 Months
		0-2000 PPM	500 PPM	6 Months
	Volatile Organic Compound - VOC - 10.0eV Lamp	0-100 PPM	50 PPM	6 Months
	Volatile Organic Compound - VOC - 11.7ev Lamp	0-100 PPM	50 PPM	1 Month

- Items marked with a “*” are cross calibrations using a different gas, please contact your product distributor or the Otis Instruments Technical Support Department for more information.
- Warranty’s marked with “*” vary between Low Power IR and Full Power IR elements.

Please note that warranties are subject to inspection and evaluation by our factory. For detailed information regarding warranty coverage on sensor elements, please contact our RMA team at rma@otisinstruments.com.

For any additional questions or support, please contact your dedicated salesman or reach out to the Otis Instruments RMA Department.