

## OI-6000-O Sensor Assembly

The Otis Instruments OI-6000 Series is a versatile hazardous gas detector designed for reliable performance in demanding environments. Utilizing electrochemical, infrared, catalytic bead, or PID sensor elements, the OI-6000 offers broad gas detection capabilities, ensuring safety and compliance in hazardous locations.

### Key Features:

- **Advanced Sensor Technology:** Supports multiple sensor types, including:
  - \* Electrochemical sensors for toxic gas detection
  - \* Infrared sensors for combustible gases
  - \* Catalytic bead sensors for hydrocarbon monitoring
  - \* PID sensors for volatile organic compounds (VOCs)
- **Robust Communication Options:** Equipped with:
  - \* 4-20 mA analog output for easy integration with existing control systems
  - \* RS-485 Modbus output, enabling seamless data transfer to industrial automation systems
- **Non-Intrusive Calibration:** Magnetic switches allow for in-field calibration, full system settings, and diagnostics, maintaining Class I, Division I, Groups B, C, and D certification.
- **Safe and Reliable Power:** Operates on wired power (12 to 35 VDC), ensuring consistent performance in critical safety applications.
- **Certified for Hazardous Environments:** The explosion-proof design allows for safe operation in classified areas, providing enhanced safety for workers and equipment.

### Ideal For:

- Oil and gas facilities
- Chemical processing plants
- Industrial manufacturing sites
- Hazardous and classified environments

The Otis Instruments OI-6000 Series delivers accurate gas detection, flexible sensor options, and robust safety features, making it a trusted choice for protecting personnel and maintaining safety standards in hazardous industrial settings.



# Explosion Proof Wired Power Ambient Air Hazardous Gas Detector

Product Specifications			
Sensor Type	Electrochemical, Infrared, Catalytic Bead, or Photo Ionization Detector		
Power Voltage	Wired Power (3-Wire) 12 to 35 VDC		
Power Draw	2 Watts Maximum		
Protection	Power Electromagnetic Interference (EMI) Filter 4-20 mA Surge Suppression		
Display Screen	102x64 Resolution Graphical LCD Screen Transflective (Sunlight Readable) with white LED Backlight		
Interface	3 Push-Buttons (MENU, ADD, and SUB)		
Customizable Settings	2 Individually-Configurable Alarm LED Set-Points		
T <sub>amb</sub> Temperature Range	-40°C to +54°C / -40°F to 130°F		
Wired Analog Output	4-20 mA (3-Wire) Fault Terminal		
Digital Output	RS-485 Modbus		
Optional WireFree Radio Output	GEN II 900 MHz Radio or GEN II 2.4 GHz Radio		
Remote Sensor Kit Optional Additional Feature	OI-501-5 Remote Sensor Kit with Enclosure (5 Pin) <ul style="list-style-type: none"> <li>• Electrochemical Sensor Max Length: 250 Feet</li> <li>• Infrared Sensor Max Length: 40 Feet</li> <li>• Photo Ionization Detector Sensor Max Length: 35 Feet</li> <li>• Catalytic Bead Sensor Max Length: 15 Feet</li> </ul>		
Product Dimensions	5.5" T x 6" W x 7" H (8" W x 17" H Maximum w/ Antenna Fitting and Antenna)		
Total Weight	6 lbs.		
Hazardous Location Certifications and Approvals QPS Component Certified	Class I, Division 1, Groups B, C, and D T <sub>amb</sub> - 40°C to +60°C		
Ex Location Certifications ATEX QPS 23ATEX5008X IECEX QPS 19.0025X	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;">                     Without Antenna Fitting:                       Ex db mb IIB T6 Gb    2460  II 2 G                       -40°C ≤ Ta ≤ +54°C                 </td> <td style="width: 50%; vertical-align: top;">                     Without Antenna Fitting:                       Ex db mb IIB T6 Gb    2460  II 2 (1) G                       -40°C ≤ Ta ≤ +54°C                 </td> </tr> </table>	Without Antenna Fitting:  Ex db mb IIB T6 Gb  2460  II 2 G  -40°C ≤ Ta ≤ +54°C	Without Antenna Fitting:  Ex db mb IIB T6 Gb  2460  II 2 (1) G  -40°C ≤ Ta ≤ +54°C
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Hardware Warranty	Limited one year		
Sensor Element Warranty	Varies with Gas Type		
Part Number Formula	OI-6000-[Sensor Type]-[Gas]-[Radio Option]-[Relay Option]-O		

