

GEN²

OTIS

OI-6000-X-X-X-X-O Sensor Assembly

Explosion Proof Wired Powered Ambient Air Hazardous Gas Detector

The Otis Instruments OI-6000 Series Ambient Air Hazardous Gas Detector is a versatile assembly that uses an electrochemical, infrared, catalytic bead or PID sensor element to detect a variety of gases. Wired powered (12 to 35 VDC) with 4-20 mA analog and RS-485 Modbus outputs standard. Magnetic switches allow for non-intrusive calibration while in the field as well as full system settings and diagnostics.



Gas Type	Range	T ₉₀	Warranty
EC-AsH3	0-1 ppm	< 30 sec.	10 months
EC-CH2O	0-10ppm	< 30 sec.	12 months
EC-CH3SH	0-10 ppm	< 100 sec.	12 months
IR-CH4	0-100% vol.	< 30 sec.	60 months
EC-CL2	0-20 ppm	< 60 sec.	12 months
EC-CLO2	0-5 ppm	< 120 sec.	12 months
EC-CO	0-1000 ppm	< 30 sec.	24 months
IR-CO2	0-5% vol.	< 30 sec.	60 months
EC-ETO	0-10 ppm	< 80 sec.	12 months
EC-F2	0-1 ppm	< 80 sec.	12 months
EC-H2	0-4%	< 60 sec.	18 months
EC-H2S	0-100 ppm	< 30 sec.	24 months
EC-H2S2K	0-2000 ppm	< 25 sec.	24 months
EC-HBr	0-30 ppm	< 40 sec.	12 months
EC-HCL	0-30 ppm	< 300 sec.	12 months
EC-HCN	0-50 ppm	< 70 sec.	12 months
EC-HF	0-10 ppm	< 90 sec.	12 months
IR-LEL	0-100% LEL (0-5% vol.)	< 30 sec.	60 months
EC-NH3	0-100 ppm	< 90 sec.	12 months
EC-NH3300	0-300 ppm	< 120 sec.	12 months
EC-NH3A	0-1000 ppm	< 120 sec.	12 months
EC-NO	0-250 ppm	< 40 sec.	12 months
EC-NO2	0-20 ppm	< 25 sec.	12 months
EC-O2	0-25% vol.	< 15 sec.	24 months
EC-O3	0-5 ppm	< 60 sec.	12 months
EC-O3H	0-100 ppm	< 60 sec.	12 months
EC-PH3	0-5 ppm	< 30 sec.	12 months
EC-SO2	0-20 ppm	< 35 sec.	24 months
PID-VOC10	0-10 ppm	< 3 sec.	6 months / 24 months
PID-VOC20	0-20 ppm	< 3 sec.	6 months / 24 months
PID-VOC50	0-50 ppm	< 3 sec.	6 months / 24 months
PID-VOC1K	0-1000 ppm	< 3 sec.	6 months / 24 months
PID-VOC2K	0-2000 ppm	< 3 sec.	6 months / 24 months

Product Features

- Electrochemical, Infrared, Catalytic Bead or PID Sensor Element
- Wired Powered (3-Wire), 12 to 35 VDC Operating Voltage
- Operating Temperature Range of -40°C to +54°C
- Graphical LCD with LED Backlight
- 3 Push-Button Interface (ADD, MENU, SUB) with 3 Corresponding Magnetic, Non-Intrusive Switches
- 2 Individually Configurable Alarm Set-Points: Two Front Panel LED Indicators (Amber and Red); Optional 2 Dry-Contact Relays
- Output Options: 4-20 mA (3-Wire) Analog, RS-485 Modbus, Optional GEN II 900 MHz or GEN II 2.4 GHz Radio
- Sensor Element Warranty Subject to Otis Verification
- 1-Year Limited Hardware Warranty



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OI-6000-X-X-X-X-O Product Specifications

Product Specifications	
Sensor Type	Electrochemical, Infrared, Catalytic Bead or PID
Operating Voltage	Wired Powered (3-Wire) 12 to 35 VDC
Power Draw	2 Watts Maximum
Protection	Power Electromagnetic Interference (EMI) Filter 4-20 mA Surge Suppression RS-485 Surge Suppression
Display Screen	102x64 Resolution Graphical LCD Screen Transflective (Sunlight Readable) with White LED Backlight
Interface	3 Push-Buttons (MENU, ADD and SUB) 3 Magnetic, Non-Intrusive Switches for Calibration
Customizable Settings	2 Individually-Configurable Alarm LED/Relay Set-Points
T _{amb} Temperature Range	-40°C to +54°C
Output (Digital)	RS-485 Modbus
Wired (Analog) Output	4-20 mA (3-Wire) Fault Terminal Optional 2 Dry-Contact Relays with Replaceable 4 Amp Fuses
Remote Sensor Kit (Optional Additional Feature)	OI-501-5 Remote Sensor Kit with Enclosure (5 Pin) <ul style="list-style-type: none"> • Electrochemical Sensor Max. Length: 250 Feet • Infrared Sensor Max. Length: 40 Feet • PID Sensor Max. Length: 35 Feet • Catalytic Bead Sensor Max. Length: 15 Feet
Product Dimensions	5.5 in. T x 6 in. W x 7 in. H (8 in. W x 17 in. H Max. with Attachments)
Total Weight	6 lbs.
Hazardous Location Certifications and	<p>CSA Class I, Division 1, Groups B, C and D Ex d IIB T6 Gb Class I, Zone 1, AEx db IIB T6 Gb T_{amb} -40°C to +54°C</p> <p>ATEX Models w/ Radio Option Ex II 2 (1) G Ex db mb ia [ia Ga] IIB T6 Gb T_a= -40°C to +54°C</p> <p>Models w/out Radio Option Ex II 2 G Ex db mb IIB T6 Gb T_a= -40°C to +54°C</p> <p>IECEx Models w/ Antenna Fitting Ex db mb ia [ia Ga] IIB T6 Gb -40°C ≤ T_a ≤ +54°C</p> <p>Models w/out Antenna Fitting Ex db mb IIB T6 Gb -40°C ≤ T_a ≤ +54°C</p>
Hardware Warranty	1-Year, Limited
Sensor Element Warranty	Varies with Gas Type
Part Number Formula	OI-6000-[Sensor Type]-[Gas]-[Radio Option]-[Relay Option]-O OI-6000-X-X-X-X-O