

GEN²

OI-6900-X-X-O-2B Sensor Assembly

WireFree Dual Battery Ambient Air Hazardous Gas Detector

Reliable monitoring of hazardous gases in harsh conditions by use of the Otis wireless dual battery-powered detector.

The Otis Instruments WireFree OI-6900 Series Ambient Air Hazardous Gas Detector is a wireless, dual battery-powered assembly that uses an electrochemical or low-power infrared sensor element to detect a variety of toxic or combustible gases. The OI-6900 offers non-intrusive calibration, allowing the device to remain Class I, Division 1, Groups C and D certified, while adjustments are made in the field. The OI-6900 continuously monitors the gas level of the surrounding environment and reports once a minute, the reporting rate will increase to once every five seconds when the detected gas is above the Background Gas Set-point. This set-point is adjustable to account for sites that may have a constant low level of gas always present. The display screen always shows the present gas concentration.



Product Features

- Electrochemical or Low-Power Infrared Sensor
- WireFree (Wireless) Communication
- Dual Battery-Powered - 3.6 V (19 Ah each, 38 Ah total) Lithium-Thionyl Chloride (Li-SOCl₂) Battery with Connector (Non-Rechargeable)
- 1-Year Maximum Battery Life (Low-Power Infrared) or 2-Year Maximum Battery Life (Electrochemical)
- 102x64 Resolution Graphical LCD Screen; Transflective (Sunlight Readable) with LED Backlight
- 3 Push-Buttons (MENU, ADD, and SUB)
- 3 Magnetic Non-Intrusive Switches (MENU, ADD, and SUB)
- Non-Intrusive Calibration
- Adjustable Background Gas Setting
- Available with 900 MHz Radio and 52 Networks or 2.4 GHz Radio and 78 Networks
- CSA Explosion/Flame-Proof Certification for Select Gases
- 1-Year Limited Warranty on Hardware
- Sensor element warranty varies with gas type
- Battery warranty is 90 days from product ship date

Additional Features

- Optional OI-501 Remote Sensor Kit with Enclosure



Type	Range	T ₉₀	Warranty
CL2	0-10 ppm	—	12 months
CO	0-1000 ppm	< 210 sec.	24 months
H2S	0-100ppm	< 40 sec.	24 months
HCL	0-100 ppm	—	12 months
HCN	0-50 ppm	< 70 sec.	12 months
HF	0-10 ppm	—	12 months
LEL	0-100% LEL	< 50 sec.	24 months
NH3	0-100 ppm	—	12 months
NH3A	0-1000 ppm	—	12 months
NO2	0-20 ppm	—	12 months
O2	0-25% vol.	—	24 months
PH3	0-5 ppm	< 55 sec.	12 months
SO2	0-20 ppm	< 95 sec.	24 months

OI-6900 Product Specifications

Product Specifications	
Sensor Type	Electrochemical or Low-Power Infrared Sensor
Power Type	Dual Battery-Powered
Operating Voltage	3.6 V (19 Ah each, 38 Ah total) Lithium-Thionyl (Li-SOCl ₂) Battery, with Connector (Non-Rechargeable)
Battery Life	1-Year Max. Battery Life (Low-Power Infrared) or 2-Year Max. Battery Life (Electrochemical)
RF Connection	External N-Female Radio Frequency (RF) Connector
Display Screen	102x64 Resolution Graphical LCD Screen Transflective (Sunlight Readable) with LED Backlight
Interface	3 Push-Buttons (MENU, ADD, and SUB) 3 Magnetic Non-Intrusive Switches for Calibration (MENU, ADD, and SUB)
Customizable Settings	Adjustable Background Gas Setting (1% to 10% of Full Scale)
T _{amb} Temperature Range	-40 to +54°C
WireFree Radio Options	GEN II 900 MHz (200 mW) Radio or GEN II 2.4 GHz (125 mW) Radio
Networks	52 Networks (GEN II 900 MHz Radio) or 78 Networks (GEN II 2.4 GHz Radio) 255 Addresses per Network
Product Dimensions	5.42 in. L x 6.03 in. W x 17.03 in. H (Max. Dimensions w/ Attachments)
Total Weight	6 lbs.
Remote Sensor Kit	OI-501 Remote Sensor Kit with Enclosure (7 pin)
Additional feature	Available in lengths of up to 250 feet for Electrochemical and lengths of up to 40 feet for Low Power IR
Approvals	CSA Certified Explosion/Flame-Proof
Hazardous Location Certifications and Approvals	Class I, Division 1, Group C and D, T6 Ex d IIB T6 Zone 1, AEx d IIB T6
Hardware Warranty	Limited one year
Sensor Element Warranty	Varies with Sensor Element and Type
Battery Warranty	90 Days from Ship Date
Part Number Formula	OI-6900-[Gas]-[Radio]-[Enclosure]-[2 Battery] OI-6900-X-X-O-2B