



iSens

Environmental gas wireless sensor with LoRa technology

01 PRODUCT DESCRIPTION

The iSens can use a wide range of sensor types to achieve a variety of configurations, allowing the measured gas reading to be transmitted to the GasVisor station controller for a fast and accurate measurement of all types of gases. Among these sensors, we can select Electrochemical for oxygen and toxic gases, catalytic and infrared for flammable gases, infrared for CO2 and PID for Volatile Organic Compounds.

The iSens is supplied to be easily installed, needing only to be placed at the point of measurement for the electrochemical sensors thanks to its internal battery for continuous use during two years. For PID, IR or catalytic sensors, only a 110-220 VAC socket is required. An iSens network can be connected to a LoRa GasVisor Central, which will monitor the status of individual detectors to indicate alarm conditions and sensor status, with a wide variety of controls, indications and options. Sensors can also be monitored using the SensoGuard software.

The transmission distance is up to 7 km. LoS (Line of Sight). In urban or industrial environments this distance will be significantly reduced depending on obstacles between the transmitter and receiver. A distance of 1 km is highly probable in normal environments. In case of loss of signal or low battery, the control unit detects the incident and alerts the user.

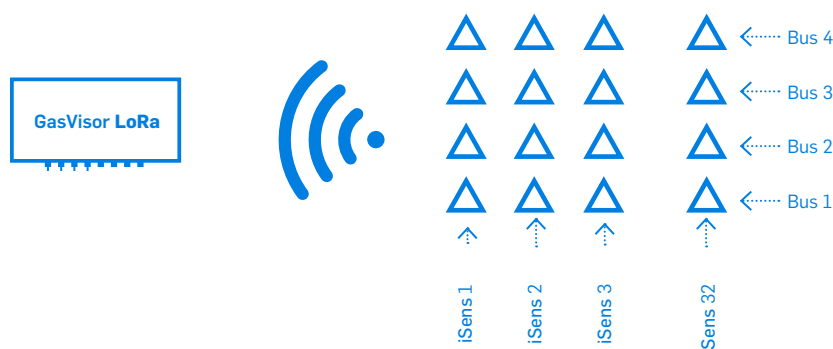
02 TECHNICAL CHARACTERISTICS

- Easy installation
- Wireless communication
- 2 years autonomy
- Multiple sensors available
- Adjustment via keypad
- Addressable
- Plug and Play
- Single person calibration
- External power supply optional

03 TECHNICAL SPECIFICATIONS

Sensors.....	Electrochemical, infrared, PID or catalytic
Communication.....	Bi-directional
.....	LoRa Wireless Modem Km
.....	7Km Maximum distance LoS
.....	Typical distance 1Km
Power Supply	2 x 1,5V Batteries (Optional adapter 110-220 VAC)
Indicators.....	Operating mode - Green Led
Download data.....	On the station
Protection Level.....	IP-65
Data input.....	micro USB (optional)
Weight.....	400g
Dimensions.....	14 cm x 11 cm x 4 cm
Temperature.....	-10 oC a + 50 oC
Humidity.....	0 a 99% HR (without condensation)

04 INFORMATION DRAWING



05 INFORMATION FOR ORDERS

Reference	Gas	Margin	Sensor
IS-001-01	O ₂	0 – 30% vol.	Electrochemical
IS-002-01	CO	0 – 1.000 ppm	Electrochemical
IS-003-01	H ₂ S	0–100 ppm	Electrochemical
IS-004-01	NO	0–250 ppm	Electrochemical
IS-005-01	NO ₂	0–20 ppm	Electrochemical
IS-006-01	Cl ₂	0 – 10 ppm	Electrochemical
IS-007-01	SO ₂	0 – 20 ppm	Electrochemical
IS-008-01	NH ₃ I (Standard margin)	0 – 300 ppm	Electrochemical
IS-009-XY	NH ₃ I (High margin)	0 – 1.000 ppm	Electrochemical
IS-010-01	CH ₄ Vol. (IR High margin)	0 – 100% vol.	Infrared
IS-011-01	CO ₂	0 – 10.000 ppm	Infrared
IS-012-01	CO ₂	0 – 50.000 ppm	Infrared
IS-013-01	CO ₂	0 – 100% vol.	Infrared
IS-014-01	COV	0,01 – 20,0 ppm	PID
IS-015-01	COV	0,1 – 200 ppm	PID
IS-016-01	COV	0 – 2.000 ppm	PID
IS-017-01	PH ₃	0 – 20 ppm	Electrochemical
IS-018-01	H ₂ S (High margin)	0 – 2.000 ppm	Electrochemical
IS-019-01	L.I.E. (IR)	0 – 100% L.I.E.	Infrared
IS-021-01	ETO	0 – 10 ppm	Electrochemical
IS-022-01	HCN	0 – 50 ppm	Electrochemical
IS-023-01	HF	0 – 10 ppm	Electrochemical
IS-024-01	H ₂	0 – 2.000 ppm	Electrochemical
IS-025-01	O ₃	0 – 10 ppm	Electrochemical
IS-026-01	HCl	0 – 50 ppm	Electrochemical
IS-027-01	HCHO	0 – 10 ppm	Electrochemical
IS-028-01	CH ₃ SH	0 – 10 ppm	Electrochemical
IS-029-01	C ₂ H ₃ Cl	0 – 20 ppm	Electrochemical
IS-030-01	ClO ₂	0 – 10 ppm	Electrochemical