



iSens

Ambient wireless gas sensor with LoRa technology

01 PRODUCT DESCRIPTION

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

The iSens comes prepared to be easily installed, only needing its placement at the measurement point for the electrochemical sensors as it has an internal battery for continuous use for two years. Only a 110-220 VAC plug will be required for PID and IR sensors. An iSens network can be connected to a Central GasVisor LoRa, which will monitor the status of each of the detectors to indicate alarm conditions and sensor status, with a wide variety of controls, indications and options. Sensors can also be monitored using SensoTrak software to monitor it from a remote site.

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

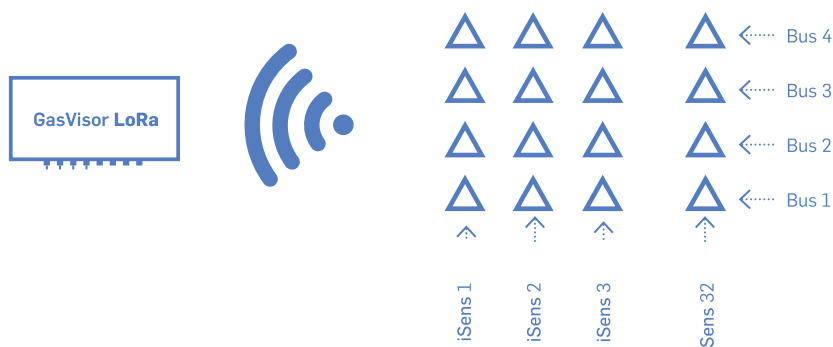
02 KEY FEATURES

- Easy to install
- Wireless transmission
- 2 years battery lifetime
- Multiple sensors available
- NFC Calibration (Android App)
- Addressable
- Plug and Play
- One man calibration
- Optional external power supply

03 TECHNICAL SPECIFICATIONS

Sensors	Electrochemical, infrared, PID
Communication	Bidirectional LoRA wireless modem / 3G/4G modem 7Km Maximum distance LoS Typical distance: 1-4 Km
Power supply	2 x Alkaline battery 1,5V D. Optional adaptador 110-220 VAC
Battery lifetime	2 years
Data download	On the control panel
Protection rate	IP-65
Calibration	NFC (Android App)
Weight	400 gr
Size	14 cm x 11 cm x 4 cm
Temperature	-10 °C to + 50 °C
Humidity	0 - 99% HR (non condensing)

04 CONNECTION SCHEME



05 ORDERING INFORMATION

Reference	Gas	Range	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 (standar range)	0 – 300 ppm	Electrochemical
IS-009-XY	NH ₃ (high range)	0 – 1.000 ppm	Electrochemical
IS-010-01	CH ₄ Vol. (IR high range)	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 range)	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