



iLeak

Intelligent Safety System for Carbon Dioxide and Ammonia Leak Detection

01 PRODUCT DESCRIPTION

The iLeak system has been designed as a dedicated safety solution for facilities where carbon dioxide or ammonia are used, stored or may accumulate due to leakage. This makes it particularly suitable for beverage production, hospitality venues, cold rooms, refrigeration systems and other enclosed spaces where gas build-up can create a serious hazard. Its modular concept allows the solution to be scaled from small independent sites to larger multi-room or multi-site installations.

At the heart of the system is a smart gas detector using infrared technology for rapid and reliable CO₂ detection, together with an electrochemical sensor option for ammonia applications. The detector communicates wirelessly with the central controller and with an electronic safety lock using Bluetooth Low Energy, enabling a neat installation with minimal wiring. This reduces disruption during implementation and makes the system especially attractive for retrofit projects.

If a gas leak is detected, iLeak can trigger staged visual and acoustic alarms and automatically prevent entry to the affected area by activating the electronic lock. At the same time, safe exit from inside the room is maintained through an internal emergency release function on the lock, ensuring personnel can leave quickly if the space is occupied. The system also offers Wi-Fi connectivity for transmission of data to cloud software and supports zero and span adjustment through an app via Bluetooth. By combining gas detection, alarm management and controlled access in one integrated package, iLeak delivers a smart and highly practical approach to leak protection.

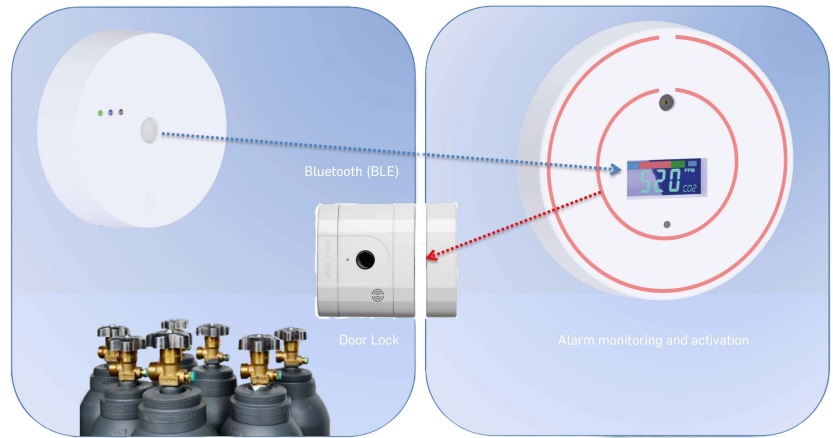
02 KEY FEATURES

- **Real-Time CO₂ Monitoring** with continuous high-precision sensing
- **Immediate Leak Detection** in breweries, cellars and storage areas
- **Infrared detection using** high quality and long life CO₂ sensor technology.
- **Wireless BLE Connectivity** eliminating the need for complex wiring
- **Automatic Safety Lockout** to automatically prevent entry into contaminated areas during an alarm state.
- **Emergency Manual Override** to ensure a safe and immediate exit from the inside at all times
- **Visual & Acoustic Alarm System** with integrated high-visibility light rings and a built-in buzzer
- **Plug & Play Installation** for quick and easy setup, reducing deployment time and maintenance costs.
- **Enhanced Personnel Safety** to comply with safety regulations

03 TECHNICAL SPECIFICATIONS

Sensors	Infrared for CO ₂ and Electrochemical for Ammonia
Power Supply	Sensor & Controller: 5Vdc (USB-C) - Locker: 9Vdc battery
Data Transmission	Bluetooth Low Energy (BLE) WiFi data transmission to Cloud Software
Calibration	Zero and Span calibration with Bluetooth APP
Weight and Size	Controller 680 gr - 120 x 40 mm Sensor: 200 gr - 90 x 40 mm Locker: 875 gr - 175 x 120 x 36 mm
Temperature	-10 °C a + 60 °C
Humidity	0 to 85% RH (non condensing)
Normative	EN 50270:2015

04 WORKING SCHEME



05 ORDERING INFORMATION

Part Nr.	Description	Range	Sensor
IL-011-41	iLeak Standard Kit (Sensor + Controller + Locker)	0 – 10.000 ppm CO ₂	Infrared
IL-012-41	iLeak Standard Kit (Sensor + Controller + Locker)	0 – 50.000 ppm CO ₂	Infrared
IL-011-40	iLeak Starter Kit (Sensor + Controller)	0 – 10.000 ppm CO ₂	Infrared
IL-012-40	iLeak Starter Kit (Sensor + Controller)	0 – 50.000 ppm CO ₂	Infrared
IL-008-41	iLeak Standard Kit (Sensor + Controller + Locker)	0 – 300 ppm NH ₃	Electrochemical
IL-009-41	iLeak Standard Kit (Sensor + Controller + Locker)	0 – 1.000 ppm NH ₃	Electrochemical
IL-008-40	iLeak Starter Kit (Sensor + Controller)	0 – 300 ppm NH ₃	Electrochemical
IL-009-40	iLeak Starter Kit (Sensor + Controller)	0 – 1.000 ppm NH ₃	Electrochemical
IL-011-42	Sensor	0 – 10.000 ppm CO ₂	Infrared
IL-012-42	Sensor	0 – 50.000 ppm CO ₂	Infrared
IL-008-42	Sensor	0 – 300 ppm NH ₃	Electrochemical
IL-009-42	Sensor	0 – 1.000 ppm NH ₃	Electrochemical
IL-000-41	Controller		
IL-000-42	Locker		
IL-000-43	Locker spare battery		
IL-000-44	USB power adaptor for Sensor or Controller		
IL-000-45	USB 2 meter cable for Sensor or Controller		

