



Peace of mind. Guaranteed.

Continuous monitoring of chlorine for indoor swimming pools in recreational facilities or hotels.

People of all ages enjoy swimming in indoor swimming pools for fun, competition, exercise, etc. Behind the scenes, keeping the pool clean requires the use of products that can be harmful to humans if not properly monitored. Complying with indoor air quality regulations and being able to detect a gas leak early can reduce costs that could be incurred from escaping gas and excess energy use.

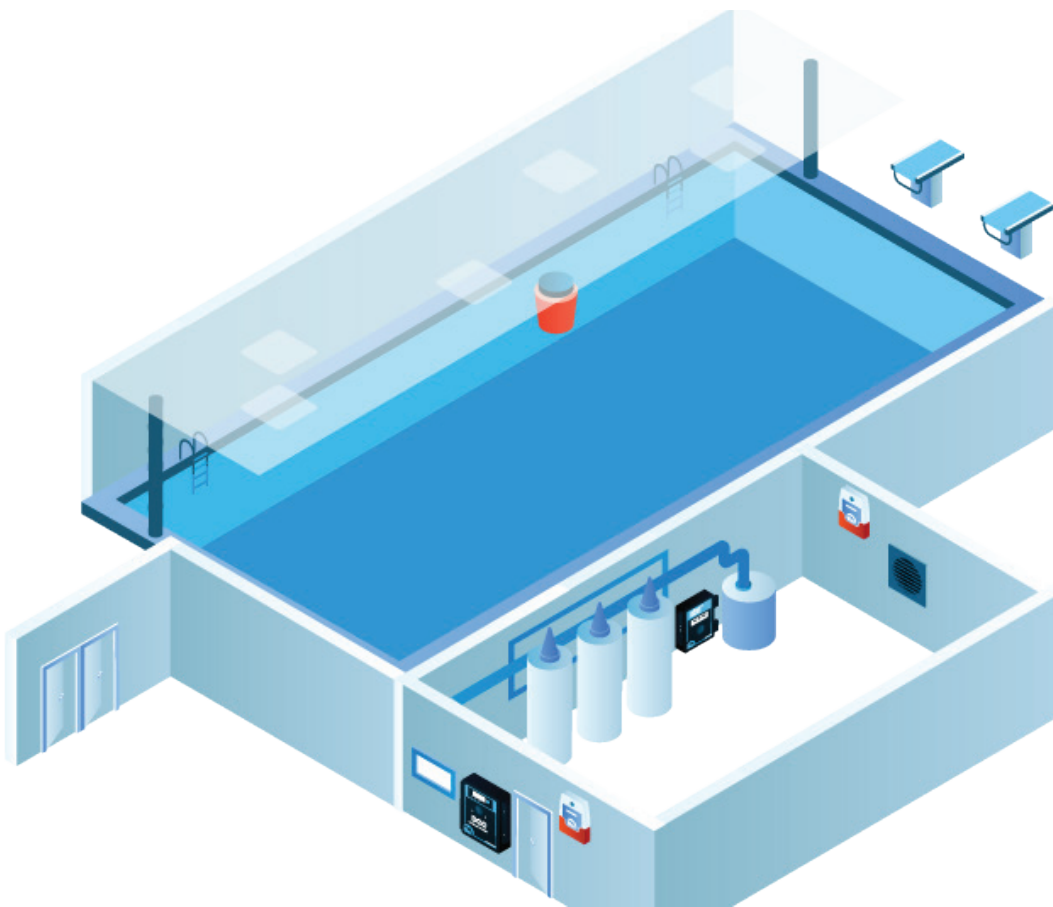
Chlorine is a common disinfectant used for water treatment programs and is often used to purify swimming pools. To help ensure the health and safety of patrons and facility maintenance workers, it is important to have a continuous gas detection system to monitor leaks in the chlorine feed and storage room. If a leak is detected, you want the peace of mind that comes with a properly installed gas detection system.

Critical Environment Technologies' [DCC](#) Dual Channel Controller and an [CGAS-A](#) with a chlorine sensor is the solution for monitoring pools disinfected with chlorine.



Continuous Monitoring of Chlorine (Cl₂) in Commercial Swimming Pool Facilities

In a typical swimming pool application where Chlorine is being used to disinfect the pool water, a DCC Dual Channel controller combined with a remote CGAS-A-CL2 transmitter will provide the detection required. The DCC has two 4-20 mA outputs that include VFD control and may also be used to interface with a Building Automation System (BAS) which in turn can trigger the alarm and other safety procedures as appropriate. It comes standard with an internal audible alarm and is available with an optional extra loud buzzer or a watertight buzzer that can be ordered and installed at the time of purchase. It can be powered by low voltage or line voltage and has a SILENCE push button that can be used to temporarily turn off the buzzer and clear the latched relays. The DCC should be mounted outside the room beside the inspection window so it can



provide a visual confirmation of the gas level readings prior to entry. If there is a chlorine leak, the DCC will alarm and trigger relays to shut down the ventilation system until it is safe to exhaust the gas from the contaminated area or activate the ventilation system (depending on the local regulation codes).

The remote CGAS-A-CL2 transmitter should be inside the chlorine gas feed and storage room to provide continuous monitoring for chlorine leaks. Chlorine is heavier than air and tends to collect in low-lying areas, so the CGAS-A-CL2 transmitter should be mounted 6 inches above the floor, close to the area of a potential leak, but away from the ventilation fans. The CGAS-A will communicate with the DCC and also has its own optional relay that can be used to trigger

additional functions. During routine maintenance such as when workers change chlorine cylinders, the potential for a leak is increased, and it is recommended that a portable gas monitor with a chlorine sensor be used as an additional safety choice. Check your local regulations, some legislation requires both monitoring systems.

A remote visual alarm device such as the Remote Strobe (RSA-24V) should be mounted on the ceiling or wall inside the pool area to provide an additional visual alert in the event of a leak inside the chlorine gas feed room.

The DCC and CGAS-A-CL2 fixed system is fully set up, programmed, calibrated and tested prior to being shipped from the factory. It is ready to install and operate upon arrival.