Chlorine Monitoring

Introduction

Chlorine is introduced into the water network as a disinfectant to maintain hygienic conditions of the potable water. At low levels, chlorine is perfectly safe. At higher levels the taste and smell of chlorine will be more noticeable.

The chlorine absorption in drinking water is typically below 5 mg/l as a residual disinfectant.

Chlorine monitors can measure both 'Free' and / or 'Total' chlorine levels in the water supply system.

Technolog products have the ability to record a wide range of signal outputs from a water treatment works. Data may be downloaded locally or transmitted to a remote server.

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Chlorine Monitoring

Technology

Chlorine analyzers are used in many applications requiring the measurement and control of online residual chlorine levels in water. Many types are available which provide a suitable output to Technolog products that are suitable for total or free residual chlorine monitoring or even control applications in potable water, seawater, process water, swimming pool water, waste water, food washing, paper and pulp.

There are different types of Chlorine:

Free Chlorine:

Refers to both hypochlorous acid (HOCl) and the hypochlorite (OCl–) ion or bleach. This is commonly added to water systems for disinfection. When contaminants such as ammonia or organic nitrogen are present, chloramines known as monochloramine, dichloramine, and trichloramine will quickly form. Chloramines are also known as combined chlorine.

Total Chlorine:

This is the sum of free chlorine and combined chlorine.

Free chlorine is typically measured in drinking water disinfection systems using chlorine gas or sodium hypochlorite to find whether the water system contains enough disinfectant. Typical levels of free chlorine in drinking water are 0.2 - 2.0 mg/L Cl2, although regulatory limits allow levels as high as 4.0 mg/L.

Total chlorine is measured in drinking water and is also typically measured to determine the total chlorine content of treated wastewater. If you are required to measure and report chlorine levels to a regulatory agency, we advise that you check with your regulator to find whether you are required to measure free chlorine or total chlorine.

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TECHNOLOG

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Product Technical Matrix

	Cello 4s
Service	Water
Available Communication Options	Local / 2G / 3G NB-IOT / Cat M1
User Accessible SIM	Yes
User Replaceable Battery	Yes
Available Channels	8
Optional Pressure Inputs	2
Supported Pressure Recording Strategies	I / A / S / T
Optional Temperature (PT-100) Inputs	0
Available Digital Inputs	8
Available Analogue Inputs	8
Internal / External Supply	Internal & External
Powering of Third Party Sensors	Yes
WITS Compliance	Yes
Intrinsically Safe	No
Protection Class	IP 68
Level Monitoring Capability	Level Transmitter, Float Switch, Shaft Encoder

Key : Pressure Recording Strategy (I - Instantaneous / A - Average / S - Statistical / T - Transient)

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