

Chlorine Analyzer System

RUGGED | DEPENDABLE | EASY TO USE



CUSTOM ENGINEERED AND MANUFACTURED SYSTEM

Modus Engineered Chlorine Analyzer systems can be mounted in almost any location, offering reliable and consistent chlorine analysis in demanding process applications. Built on years of experience and robust designs, this panel mounted system is designed for industrial or municipal chlorine monitoring and control. Available in many configurations, these chlorine analysis systems are tailored to your specific application or stringent specifications.

PRODUCT DESCRIPTION

The custom Chlorine Analyzer System is used in many applications requiring the measurement and control of online residual chlorine levels in water. These systems are designed for measuring free or total chlorine in drinking water, wastewater, food processing plants, and other disinfection applications.



KEY FEATURES

COMMUNICATION

Receive alarm messages, datalogs, graphs, and system summaries.

FLEXIBLE

Universal sensor input provides flexibility; the same controller functions with most sensors.

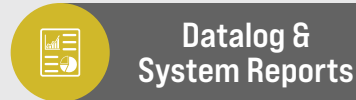
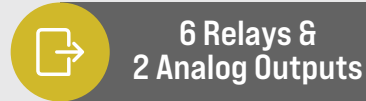
ACCESSIBLE

On-screen and web page graphing of sensor values and control output status.

EASY TO INSTALL

Large touchscreen display with icon-based programming makes setup easy.

PROPERTIES



METHOD COMPARISON

Method	Definition	Considerations		Pros	Cons
Amperometric Method	Electrochemical analysis measuring the change in current caused by the reaction taking place in the membrane tip between the electrolyte and the water source.	Sensor utilizes two dissimilar metals (one as an anode and one as a cathode) behind a membrane to measure the oxidation-reduction taking place.	Buffered electrolyte to allow the sensor the ability to measure the parameter over a wider pH range.	<ul style="list-style-type: none"> Higher upper range Continuous Monitoring Low Maintenance Low Annual Costs 	<ul style="list-style-type: none"> Can be unstable in varying flow/pressure applications Must be calibrated using a handheld meter Membrane must see continuous flow - analyzer must NOT sit idle for long periods of time.
DPD Method	Color analysis is based upon adding a buffer to bring the pH within a narrow range and a reagent reacts with active halogens in the water causing detectable color change.	A tungsten light source degrades slower than other filaments. The buffer and reagent are added to the water source via a small peristaltic pump.	DPD is not a "continuous" monitor. It takes samples at 5-minute intervals due to the large amounts of buffer and reagents necessary to conduct continuous monitoring.	<ul style="list-style-type: none"> DPD Methodology is not effected by the absence of chlorine. DPD Typically reads down far lower than amperometric DPD does not require calibration 	<ul style="list-style-type: none"> Adds chemicals to effluent that have raised red flags from oversight agencies. DPD is not a continuous reading method DPD requires costly reagents and buffers and regular tubing changes.

DPD vs AMPEROMETRIC CHLORINE SENSORS



Properties:	Models		
	HACH - CL17 DPD Style	MALTZ - 396-CL1 Amperometric	MALTZ - 396-CL2 Amperometric w pH
Free Chlorine Sensor	Yes (DPD)	Yes (Amperometric)	Yes (Amperometric)
Range	0-5 PPM	0-20 PPM	0-20 PPM
Continuous Monitoring	5/Min Intervals	Continuous	Continuous
pH adjusted (Ext. Range)	Yes	Yes	Yes
pH Sensor	No	No	Yes
Analog Output	Yes (1)	Yes (2)	Yes (2)
Relay Outputs	Yes (2)	Yes (6)	Yes (6)
Data Logging w Flash Drive USB Port	No	Yes	Yes

