

FREE CHLORINE ANALYZER

FC



FEATURES & BENEFITS

- Affordable, real-time free chlorine, chlorine dioxide and/or dissolved ozone measurement
- Potentiostatic sensor technology
- Range for wastewater to high purity applications
- Automatic temperature compensation
- Low maintenance requirements
- Simple to install and operate
- No reagents required

MUNICIPAL DRINKING WATER
MUNICIPAL WASTEWATER
INDUSTRIAL PROCESS WATER
INDUSTRIAL WASTEWATER

WATER QUALITY
MONITORING
SOLUTIONS

OVERVIEW

Real Tech's bypass style Free Chlorine analyzer provides rapid real-time measurement of free chlorine, chlorine dioxide and/or dissolved ozone in water or wastewater. Ideal for pressurized applications, the monitoring solution has three measurement ranges.

MEASUREMENT PRINCIPLE

Real Tech's Free Chlorine potentiostatic sensor technology is an amperometric measurement with constant potential, made through two metal electrodes and a reference electrode. The electrodes potential is electronically controlled in relation to the liquid, providing a steady and accurate relationship between cell current and concentration. As a result, calibration is required less frequently in comparison to traditional amperometric measurements and a very stable zero value is achieved in oxidative absence. A temperature sensor performs automatic compensation in the case of significant temperature fluctuations.

REALTECH
INC.



FREE CHLORINE ANALYZER SPECIFICATIONS

CHARACTERISTIC	TECHNICAL DATA
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SENSOR

Parameters	Free chlorine, chlorine dioxide, and/or dissolved ozone
Free Chlorine Range	Selection of three measuring ranges: 0-2 mg/L , 0-20 mg/L or 0-200 mg/L
Resolution	0.001, 0.01 or 0.1
Units	ppm / mg/L
Sampling Time	0.5 seconds
Measurement Principle	Potentiostatic measurement technology
Electrodes	2 platinum rings
Reference	Gel with annular junction
Sensor Lifetime	Approximately 12-18 months. Depends on site and application
Calibration	Manual correction on the selected scale and sensor's current offset
Cleaning	Pressurized DI water only
Temperature Compensation	Automatic with RTD
Flow Rate	Constant flow required. ~150-500 mL/min
Fluid Connections	Inlet: 1/4" fitting. Outlet: fitting for 10x14 mm tubing
Dimensions	5.90"H x 3.54"W x 1.57"D

TRANSMITTER

Interface	Four buttons to control set-up and configuration
Display	1 line x 8 character LCD
Output	Self-powered 4-20mA, RS485 serial to PC
Electrical	9-36 VDC
Operating Temperature	0 to 50°C (32 to 122°F)
Storage Temperature	-10°C to 60°C (14 to 140°F)
Weight	5 lb
Enclosure	IP40, wall mountable. IP65 / NEMA 4 optional.
Dimensions	2.79"H x 3.74"W x 2.28"D (Optional IP65/ NEMA 4 cabinet - 10.25"H x 10.25"W x 5.5"D)
Warranty	2-year limited warranty

* Technical Specifications are subject to change without notice.

Note: The free chlorine sensor requires a constant flow for stable measurement, therefore an accompanying bypass manifold (chamber) is included. The bypass manifold and transmitter are both wall mountable.

ANALYZER MODEL & RANGE

Includes potentiostatic sensor, temperature sensor, transmitter and bypass chamber.

MODEL #	FREE CHLORINE (mg/L)
FC	Three measuring ranges: 0-2 mg/L , 0-20 mg/L or 0-200 mg/L

* Stated ranges approximate, dependent on industry, site and application

ACCESSORIES

PRODUCT #	NAME	DESCRIPTION
S-211001	FC IP65 Enclosure	IP65 NEMA 4 enclosure upgrade for free chlorine sensor transmitter

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