

Monitoring Water Quality

For Today's Demanding World



Visualize > Analyze > Optimize

ROSEMOUNT[®]
Analytical


EMERSON[™]
Process Management

EMERSON PROCESS MANAGEMENT™

BRINGING WATER QUALITY MONITORING TO A WHOLE NEW LEVEL

WHAT MATTERS MOST: MAKE IT SAFE

Like never before, keeping water systems safe and secure is a national priority. It's also a more complex and difficult job than ever before.

Aging infrastructure complicates the prevention of waterborne disease, while outmoded analyzers make detection of serious contamination difficult. Water distribution systems get larger, but staff and budgets shrink. With so much at stake, you can't afford to take chances.

Rely on the World Leader

You need a partner that can deliver

the best in knowledge and systems, and do it quickly, thoroughly and cost-effectively. The liquid analysis professionals here at Emerson Process Management are ready to put their 60-plus years of experience to work for you. We'll evaluate your situation and deliver an optimal, real-world, customized solution for your specific requirements, utilizing world-class Rosemount Analytical instrumentation.

Emerson will configure a water monitoring system to meet your particular system and regulatory requirements.

Choose multiparameter models for measuring pH, ORP, ISE, conductivity, dissolved oxygen, free chlorine, ozone, monochloramine, temperature and turbidity – all in one simple-to-use “plug and plumb” package. And single-point designs are also available for applications where just one parameter needs to be measured. Because your Emerson system is built from proven solutions-based technology, you get a highly customized solution at an off-the-shelf price.



Emerson Process Management is part of Emerson, a global company that brings together technology and engineering to provide innovative solutions for our customers in a wide range of industrial, commercial, and consumer markets. Our priority is to design, produce and deliver products, systems and solutions that make people's lives better.

EPA VERIFIED


The WQS Water Quality Monitoring System has been verified by the US EPA Environmental Technology Verification Program.

The program facilitates the deployment of innovative technologies through evaluation of product performance and effectiveness. Not only was the performance of the model WQS verified, but the system required no scheduled operator maintenance during the testing. Find out more at www.epa.gov/etv/centers/center1.html

A Complete Solution from the System Experts

Unlike purely laboratory-oriented systems that require substantial amounts of integration and maintenance by your staff, Emerson Water Quality Monitoring Solutions are complete “plug and plumb” systems designed to withstand the rigors of a real-world water distribution environment.



- > Instrument platforms range from basic analog-out monitors to digital output transmitters that can also communicate over a wireless network
- > HART® and FOUNDATION™ fieldbus communications are available to take full advantage of PlantWeb technology 
- > Wireless solutions and control systems permit remote monitoring from central operations
- > Choose 115/230VAC or 24VDC loop power
- > Ease-of-use features include “no reagent” design for most measurements, quick-disconnect sensors, and pre-wired and pre-plumbed configuration

And your entire system is backed by worldwide Emerson support and service.



The Water Quality System with HART analyzers provides a real time measure of conductivity, pH, dissolved oxygen, chlorine and ORP. HART communications provide diagnostics in a plug and plumb easy-to-install system.



The FOUNDATION™ fieldbus-based Water Quality System incorporates the Model 3420 FIM (Fieldbus Interface Module). The 3420 makes it possible to configure and diagnose Fieldbus transmitters via the Ethernet using a web browser, and to data log the measurements via OPC over Ethernet and via Modbus.



The Free Chlorine Measuring System is a complete system that measures free chlorine in samples having pH as high as 9.5. It incorporates continuous pH correction eliminating expensive and messy reagents and trouble-some sample conditioning systems.

Real World Water Quality

You face a real-world problem, and it needs to be solved quickly and cost-effectively. Join our customers from around the world that rely upon Emerson Process Management. With combined knowledge of water analysis, and design and systems integration, Emerson experts can give you:

- > Continuous monitoring of water quality events that affect the security of your network
- > Confidence in the quality of water throughout your distribution system
- > Assistance in meeting the requirements of the Surface Water Treatment Rule

And we'll do it while meeting or exceeding regulatory requirements. Plus, our global presence enables us to optimize your process virtually anywhere in the world.

It just doesn't get any better.



SENSORS



3900 and 3900VP

Enhanced performance and increased life with minimal glass cracking provided by field proven AccuGlass pH glass formulation. Extended sensor life provided by double junction reference. New 3/4 and 1" mounting threads meet a variety of application installation requirements.



499ACL

Model 499ACL measures free chlorine or monochloramine without sample pre-treatment. No messy and expensive reagents needed. Automatic pH correction to at least pH 9.5.



T1056

The Clarity II turbidimeter is intended for the determination of turbidity in water. Low stray light, high stability, efficient bubble rejection, and a display resolution of 0.001 NTU make Clarity II ideal for monitoring the turbidity of filtered drinking water.



ISE (Ion selective electrode)

Sensors for Ammonium and Fluoride. Long lived, rugged, reliable sensors utilized in the sample panels shown to the left



Ammonium or Fluoride measuring systems are complete systems that measure ammonium (NH_4^+) and infer ammonia or fluoride (F) ion activity.

Part Number:

SQP10062-LQD measures Ammonium

SQP10063-LQD measures Fluoride



Dual Ammonium/Monochloramine or Ammonium/Fluoride measuring systems are complete systems that measure ammonium, fluoride and monochloramine levels for drinking water treatment. Other measurements available upon request.

Part Number:

SQP10064 measures Ammonium and Monochloramine

SQP10065 measures Ammonium and Fluoride

THE ONLY CHOICE FOR CONTINUOUS MEASUREMENT

ONLINE ANALYSIS

The days of grab-sample analysis are over. The key to a successful water quality system in today's environment is using established parameters to measure change over time at varying locations in the water distribution network. To meet the needs of a wide range of municipal installations, Emerson Water Quality Monitoring Systems provide continuous measurement of any combination of parameters:

- > **pH** — detects changes that impact the effectiveness of disinfection, and potential corrosion of the distribution network
- > **ORP** — determines the level of chemical reactivity
- > **Conductivity** — provides an indication of total dissolved solids and susceptibility to scaling
- > **Free Chlorine** — maintains optimum residual disinfection levels
- > **Monochloramine** — monitors effective disinfection levels
- > **Dissolved Oxygen** — indicates a healthy environment for biological activity
- > **Ammonium** — maintains effective levels for monochloramine production
- > **Turbidity** — indicates biological growth and suspended matter
- > **Fluoride** — indicates appropriate ion activity
- > **Ozone** — monitors disinfection levels
- > **Temperature** — monitors continuously

**Find out what Emerson can do for *your* facility.
Call us today at 800.854.8257 or see us on the
web at www.raihome.com**



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