



Series RAH-210 Residual Chlorine Analyzer

- Measure: Free Chlorine, Total Chlorine or Chlorine Dioxide
- Continuous amperometric measurement with continuous cleaning of the measuring electrodes
- Available with pH & temperature compensation without the use of reagent chemicals for Free Cl_2 measurement
- Multiple options available for applications requiring reagent chemicals
- Includes:
 - Complete PID control software
 - (4x) 4-20mA analog outputs
 - (4x) SPDT alarm relays
 - Modbus communication
- Optional data logging



RAH-210-D
(with Reagent Feed Pump Kit)



Description of Operation

The RAH-210 residual chlorine analyzer uses the amperometric method to determine residual levels in the sample water. The measurement cell consists of large anodic and cathodic electrodes in direct contact with the sample water. The measurement is continuous, not relying on sample and hold methods thereby allowing for better process control. A continuously driven cleaning system is employed to prevent the build up of impurities on the surface of the electrodes and reduce the need for maintenance.

The RAH-210 residual chlorine analyzer for Free Cl_2 measurement is available with pH & temperature compensation performed in software. For applications with stable pH, the known pH value can be manually input for software compensation. A gravity driven pH buffer / reagent feed system or peristaltic pump are also available to inject the required chemicals for measuring Free Cl_2 , Total Cl_2 and Chlorine Dioxide. The measuring range is field adjustable.



Basic Specifications

MEASUREMENT

Temperature Range:	32° to 122°F (0° to 50°C)
Sample Water Flow Rate:	8 GPH (500 ml/min) ideal 2.4 GPH (150 ml/min) minimum
Sample Pressure:	5 PSI (0.3 bar) max. inlet pressure
Sample Supply:	Continuous. Electrodes must be kept wet with fresh water.
Speed of Response:	4 sec. Full scale residual change = 90 to 120 sec.
Sample Water:	pH range 4 to 8.5 Oxidants, surfactants and corrosion inhibitors interfere with operation
Range:	0-0.1 PPM min. 0-20 PPM max. Field adjustable
Accuracy:	0.003 PPM or $\pm 1\%$ of range, whichever is greater
Sensitivity:	0.001 PPM

ELECTRICAL

Power:	120-240 VAC 50/60 Hz, 10 W max.
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COMMUNICATION

Analog Inputs:	Up to 5x inputs
Analog Outputs:	(4x) 4-20mA (selectable among: Residual, pH, ORP, Temperature, Turbidity or PID control output)
Alarm Relays:	(4x) SPDT, 10 A @ 120 VAC or 5 A @ 240 VAC, 24 VDC, resistive load
Modbus:	RS485 RTU
Profibus:	Optionally supported
Data Logging:	Optional data logging with removable MicroSDHC card.

RAH-210-E
(with pH Electrode)



RAH-210-B
(with Gravity Reagent Feeder)

