



## Series RPH-250 Residual Chlorine Analyzer

### Features & Benefits

- Amperometric probe-style residual chlorine analyzer, provides continuous measurement & fast response.
- Disinfectant probes available:  
Free Chlorine  
Total Chlorine  
Chlorine Dioxide  
Chlorite
- pH and temperature compensation available
- Includes complete PID control (standard)
- Multiple 4-20mA analog outputs
- Multiple alarm relays
- Modbus communication
- Optional data logging
- Constant-head flow cell with bubble trap and cross flow diverter to stabilize readings or optional pressurized flow cell.



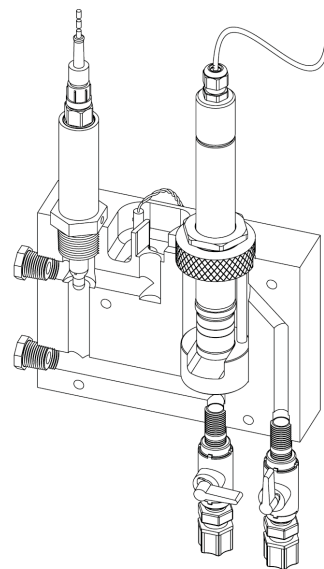
### Description

The Series RPH-250 residual analyzer uses the amperometric method to determine residual levels in the sample water. The measurement is continuous and does not rely on a sample & hold method, thereby allowing for better process control.

The RPH-250 is usable for determining compliance with daily residual chlorine (free or total) monitoring requirements. It is compliant with US EPA regulation 40 CFR 141.74 and 40 CFR 141.131, method 334.0 for On-line Chlorine Analyzers.

The Series RPH-250 residual analyzer is optionally available with pH compensation performed in software. The analyzer also includes a complete PID control program.

Because disinfectant measurement probes are sensitive to pressure and flow fluctuations, the RPH-250 includes an open, gravity-flow/constant-head flow cell to maintain a consistent low pressure and stable flow and a bubble trap and cross flow diverter to prevent bubbles from accumulating on the probes measuring surface. The flow cell design also ensures that disinfectant measurement probes are easily accessible and serviceable.



## Basic Specifications

### MEASUREMENT

|                         |                                                                                                                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sample Water Flow Rate: | 4-8 GPH (15-30 l/h) for open flow cell                                                                                                                                               |
| Sample Pressure:        | 5 PSI (0.3 bar) for open flow cell                                                                                                                                                   |
| Sample Supply:          | Continuous.<br><i>Note: Probes with a membrane cap must be kept wet.</i>                                                                                                             |
| Speed of Response:      | T <sub>90</sub> : Approx. 30 sec. for Free Chlorine<br>T <sub>90</sub> : Approx. 2 min. for Total Chlorine<br><i>Note: Speed of response will vary depending on probe selection.</i> |
| Measurement Range:      | 0-0.5 PPM, 0-2.0 PPM, 0-5.0 PPM, 0-10 PPM, 0-20 PPM or 0-200 PPM<br><i>Note: Available measurement range may vary depending on probe selection.</i>                                  |
| Resolution:             | 0.01 ppm or +/-1% of range, whichever is larger.<br><i>Note: Resolution will vary depending on probe selection.</i>                                                                  |

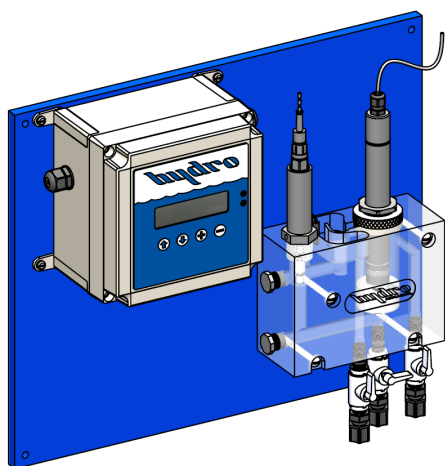
### ELECTRICAL

|                     |                                    |
|---------------------|------------------------------------|
| Power Requirements: | 100-240 VAC, 50/60 Hz or 12-24 VDC |
|---------------------|------------------------------------|

### COMMUNICATION

|                       |                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------|
| Analog Outputs:       | Qty. 4: 4-20 mA (selectable)                                                                       |
| Alarm Relay Contacts: | Qty. 4: 10 Amps @ 120 VAC or 24 VDC, resistive load, 5 Amps @ 240 VAC, resistive load (selectable) |
| Modbus:               | RS-485 RTU                                                                                         |
| Profibus:             | Optionally supported                                                                               |
| Data Logger:          | Optional data logging writes data on a removable MicroSD card                                      |

**RPH-250**  
(with open, constant-head flow cell)



**RPH-250**  
(with pressurized flow cell)

