

RPH-260 Residual Analyzer Single or Dual Disinfectant Probes

The RPH-260 residual analyzer offers a variety of sensors and measurement options spanning various applications. The analyzer can be provided with a maximum of two disinfectant sensors, pH electrodes, and temperature sensors.

Measurement Features

- Does not use chemical reagents.
- Available with pH & temperature compensation without the need for buffer chemicals.
- Available with one or two disinfectant sensors for free chlorine, total chlorine and various other types.
- Up to two pH or ORP electrodes can be used.
- Up to two temperature sensors.
- Open or pressurized flow cell.
- Optional flow stop switch for each sample stream.

Controller Features

- Graphical color display, 320 x 240 resolution
- Four (4) selectable alarm relays
- Four (4) selectable 4-20 mA analog outputs (Residual, pH, ORP, Temperature, Process Output 1 and 2)
- Optional data logger
- Modbus RS-485 communication



Description

Measurement is continuous, not relying on sample and hold methods, thereby allowing for better process control.

The RPH-260 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.

Because the disinfectant sensors are sensitive to pressure and flow fluctuations, the RPH-260 includes an open, gravity-flow/constant-head flow cell to maintain a consistent low pressure and stable flow as well as a bubble trap and cross flow diverter to prevent bubbles from accumulating on the sensor measuring surface. For RPH-260's using the F3 free chlorine sensor with self-cleaning head, the cleaning head requires a higher sample water flow rate and pressure and so these sensors are mounted in a closed/ pressurized flow cell. The cleaning head is used to keep the sensors exposed measurement electrodes clean and free of air bubbles. Both flow cell designs ensures that the disinfectant probe is easy to access and service.

Hydro Instruments publishes a disinfectant sensor selection data sheet and other documents that can be used to select the sensor or sensors that are right for the application.





Model RPH-261 single probe analyzer

Specifications

MEASUREMENT

Sample Water Flow Rate:	15-30 l/h (4-8 gal/h) for open flow cell 45-90 l/h (12-24 gal/h) for F3 probe with CEH-F3 cleaning head
Sample Pressure:	5 PSI (0.3 bar) for open flow cell 15 PSI (1 bar) for F3 probe with CEH-F3 cleaning head
Sample Supply:	Continuous
Speed of Response:	T ₉₀ : Approx. 30 sec. for Free Chlorine T ₉₀ : Approx. 2 min. for Total Chlorine <i>Note: Speed of response will vary depending on probe selection.</i>
Chlorine Measurement Range:	0-0.5, 0-2.0, 0-5.0, 0-10, 0-20 or 0-200 PPM Note: Available measurement range may vary depending on probe selection.
pH Measurement Range:	4-10 pH (±177 mV)
ORP Measurement Range:	±2000 mV
Resolution:	0.01 ppm or +/-1% of range, whichever is larger. Note: Resolution will vary depending on probe selection.
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

Model RPH-262 (with two Free Chlorine sensors & two pH electrodes)





600 Emlen Way, Telford, PA 18969 • Telephone: (215) 799-0980 • Fax: (215) 799-0984 US Toll Free: (888) 38-HYDRO • www.hydroinstruments.com • sales@hydroinstruments.com