



RPH-260 Residual Analyzer Single or Dual Disinfectant Probes

The RPH-260 residual analyzer offers a variety of probe and measurement options spanning various applications. The analyzer can be provided with a maximum of two disinfectant probes, pH probes, 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 probes for free chlorine, total chlorine and various other probe types.
- Up to two pH or ORP electrodes can be used.
- Up to two temperature sensors.
- Open or pressurized flow cell depending on probe type.
- Optional flow stop switch for each sample stream.

Controller Features

- Graphical color display, 320 x 240 resolution
- Four selectable alarm relays
- Four selectable 4-20 mA analog outputs (Residual, pH, ORP, Temperature, Process Output 1 and 2)
- Optional data logger
- Modbus RS-485 communication
- Two independent PID control loops capable of Set Point Control and Compound Loop Control

Description

Measurement is continuous, not relying on sample and hold methods, thereby allowing for better process control. The disinfectant probe is easily accessible, easily serviceable and is low maintenance.

The RPH-260 is available with pH compensation performed in software and is available with internal data logging capability.

Disinfectant measurement probes are sensitive to pressure and flow fluctuations. Therefore it is critical to maintain constant sample water pressure, flow rate and to avoid air bubbles. To achieve this we offer two types of flow measurement cells. The open flow cell with bubble trap and cross-flow insert for most probes and a closed flow cell used for setups using the F3 free chlorine probe with bare electrodes and cleaning head. The cleaning head used with the F3 free chlorine probe requires a slightly higher sample water flow rate and pressure and so these probes are mounted in a closed flow cell. The cleaning head is used to keep the bare electrodes clean and free of bubbles.

Hydro Instruments publishes a disinfectant probe selection data sheet and other documents that can be used to select the probe that is right for each application.



Model RPH-261 single probe analyzer



Specifications

MEASUREMENT

Sample Water Flow Rate:	15-30 l/hr (4-8 gal/h) for open flow cell 45-90 l/hr (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. <i>Note: Probes with a membrane cap must be kept wet.</i>
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 <i>Note: Available measurement range may vary depending on probe selection.</i>
pH Measurement Range:	4-10 pH (± 177 mV)
ORP Measurement Range:	± 2000 mV
Resolution:	0.01 ppm or $\pm 1\%$ of range, whichever is larger. <i>Note: Resolution will vary depending on probe selection.</i>

ELECTRICAL

Power Requirements: 100-250 VAC, 50-60 Hz or 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 probes & two pH electrodes)



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