



Series WQM-100 Water Quality Monitor

The Hydro Instruments Series WQM-100 water quality monitor is an ideal solution for any application needing accurate measurement and control of process water pH, ORP, Conductivity and/or Temperature.

Features

- Up to four measurement electrodes: pH, ORP, Conductivity and Temperature
- Simple and easy to perform calibrations
- Electrodes do not require replacement of electrolyte
- Graphical color display
- Parameter trending charts
- Independent, adjustable alarm relays
- 4-20mA output of live readings
- Modbus (RS485) communication
Profibus communication can optionally be supported
- PID control included:
4-20mA input for flow signal
Set point control for pH, ORP or Conductivity
- Data logger with MicroSD card, optional



Description

The Hydro Instruments WQM-100 multi-parameter water quality monitor includes one temperature thermistor and can also utilize up to four electrodes in any combination to measure and monitor pH, ORP and conductivity. Each aspect of the sample water is measured using an independent electrode, installed into its own sample cell for simplicity and cost savings.

The controller's color screen is able to display the live readings with large easy to read fonts. Live charting provides a quick view of water quality trending over a user adjustable period of time for all parameters being monitored. The controller has independently adjustable alarm settings and relays for alarm indication for each parameter being measured as well as an independent 4-20mA output to remotely monitor readings in real-time. Additionally, alarm conditions and live readings can be monitored and settings changed remotely using Modbus; a feature included standard in the WQM-100.

Calibration of the controller has been designed with ease of use in mind and can be performed in the field. pH calibration can be carried out using a single or two-point calibration with buffers. ORP and conductivity calibrations can be performed using known standards.

PID control is included standard to perform either set point or compound loop control and provides a 4-20mA output that can be used to control chemical feed. Compound loop is facilitated by a 4-20mA input from a water flow meter. Set point control can be based on pH, ORP or Conductivity.



Basic Specifications

MEASUREMENT

pH Range:	0-14
ORP Range:	-2000 to +2000 mV
Conductivity Range:	10 μ S/cm to 200 mS/cm
Temp. Range:	32-122°F (0-50°C)

SAMPLE WATER

Max. pressure:	30 PSI (2 bar)
Flow rate:	4-24 GPH (15-90 l/h)

CONTROLLER

Power:	100-250 VAC, 50/60 Hz or 24 VDC
Screen:	320 x 240 pixel, color
Enclosure:	NEMA4X
I/O's:	(4) 4-20mA output (1) 4-20mA input for PID control (4) SPDT relays
Modbus:	RS485 RTU
Profibus:	Optionally supported
Data Logger:	Optional data logger records to a removable MicroSDHC card.

Ordering Information

Model No. WQM-100- <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E		
Position	Feature	Description
Base build includes: (Controller, one flow cell and one thermistor for temperature monitoring.)		
A. Electrode No.1	1	pH electrode (pH 0-14)
	2	ORP electrode (\pm 2000 mV)
	3	Conductivity (10 μ S—200 mS)
B. Electrode No.2	0	None
	1	pH electrode (pH 0-14)
	2	ORP electrode (\pm 2000 mV)
	3	Conductivity (10 μ S—200 mS)
C. Electrode No.3	0	None
	1	pH electrode (pH 0-14)
	2	ORP electrode (\pm 2000 mV)
	3	Conductivity (10 μ S—200 mS)
D. Electrode No.4	0	None
	1	pH electrode (pH 0-14)
	2	ORP electrode (\pm 2000 mV)
	3	Conductivity (10 μ S—200 mS)
E. Data Logger	0	None
	1	Included