ACU-TROL® AT-8™
COMMERCIAL POOL AUTOMATION CONTROLLER

SIMPLE CHEMICAL AUTOMATION

The Acu-Trol AT-8 controllers make systems simple to monitor. The controller monitors pH, ORP and temperature as it takes the worry out of maintaining water parks, children's splash pools, or pool and spa combinations. Intelligence drives the full line of controllers offering excellent water balance and chemical control.

STANDARD FEATURES

- Includes flow cell, flow switch, pH and ORP chemical sensors
- Programmable enabling of proportional feed
- Programmable set points for the pH and ORP levels
- Programmable chemical feed cycle
- Programmable selection of acid or base feed for pH control
- Calibration of pH, ORP and temperature
- Flow cell with built-in flow switch and sampling port

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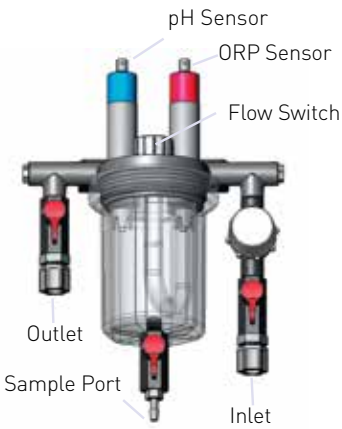
SPECIFICATIONS

- A programmable chemical automation system shall be furnished for the continuous monitoring of the following pool and spa parameters: pH, disinfectant levels, temperature, and flow switch. The controller shall be capable of controlling pH and disinfectant. Installation of the system shall be as specified by the manufacturer and no exceptions shall be taken. The water monitoring software and programmable controller systems as specified below will be provided. A factory authorized representative shall provide training to the owner.
- The system shall be a Pentair Commercial Aquatics™ Acu-Trol AT-8 controller or a technically equal system capable of providing continuous automatic monitoring of temperature and control of water chemistry.
- Sensors: The controller shall be capable of controlling sensors for the measurement and control of the water system. The controller shall have the ability to calibrate all sensor inputs. The controller shall provide separate electrical isolation for the sensors. Controllers not providing separate electrical isolation for the following sensors are not considered equal. The controller shall be capable of measuring using the following sensors: ORP: the sensor range shall be 450 to 999 mV with a 1 mV resolution, pH: the sensor range shall be 0.1 to 9.9 mV with a 0.1 resolution, Temperature: the sensor range shall be 15 to 150 degrees Fahrenheit with a 1 degree resolution, Temperature can be set to read in Fahrenheit or Celsius, Flow Switch: the sensor shall detect an open or closed condition.
- Flow Cell: The flow cell shall include two (2) sensors, one (1) in-line filter, one (1) safety flow switch, and one (1) sampling valve for water testing. The flow cell shall be transparent allowing for visual inspection of the sensors. The flow cell shall also include a valve at the inlet and outlet that may be used to adjust the flow or to stop the flow for probe cleaning or removal. The flow cell shall have two (2) extra plumbing ports. The flow cell shall be designed in such a way that it is not possible for the sensors to be exposed to air. The flow cell shall have a removable reservoir for cleaning.
- Relay Output: The controller shall be capable of controlling two (2) relays. The controller shall provide at a minimum five (5) amps of current for any group of two (2) relays. Adjustable DPST and DPDT Relays: The sanitizer relay shall supply either service voltage, 24 VAC, or act as a dry contact. The relay ratings are 5A at 250 VAC. The 24 VAC current rating is 0.25A. The pH relay shall supply service voltage. The relay ratings are 5A at 250 VAC. Default Relay Setups: The controller shall provide means for initially programming any relay to factory defaults.
- Enclosure: The controller's enclosure shall have the rating of NEMA 4X. The controller's dimensions are approximately 7-5/8" x 5-5/8" x 2-7/8".
- Interface: The controller shall be equipped with a 16 by 2 character display as the customer interface. This LCD display shall be backlit and automatically light when a button is touched, and shall remain lit for a fixed five (5) minutes of time. After five (5) minutes of inactivity the display will go to dim mode. The dim mode display is still visible in poor lighting conditions. Controllers without a dim mode shall not be considered equal. The controller shall include a four button keyboard.
- Relay Programming: The controller shall be equipped with a detailed reset menu and shall allow for the resetting of one or all relays back to the original factory defaults. The controller's relays shall be capable of being configured to control the following: Limiting the maximum length of time a relay shall be ON, Simultaneous Chemical Feed Lockout, The controller shall not adjust the pH while the disinfectant is in a feed cycle, ORP lockout if pH is above a set limit, On time proportional feed Manually turn ON a relay for the set feed time, Control primary disinfectant.
- Setup, Calibration, and Data Recording: In the absence of power, the controller shall retain all setup information and calibration data for up to 7 years. The data shall be viewable on the front panel on the AT8. The controller shall allow data recording intervals to be set by the operator with a range of 1 minute to 12 hours. The Controller shall have the ability to store 2,048 measurement lines. Controllers that do not allow at least 2048 lines of data will not be considered equal.
- Alarms: The controller's alarms shall have programmable upper and lower limits. The controller's alarms shall be activated by any relay or sensor measurement. The controller shall alert operator of alarm conditions with RED LED and flashing name.
- Security: The controller shall be capable of managing one (1) level of security accessible via one (1) password. The password may contain up to six (6) digits. When unattended, the controller shall reset to secure mode after the display back light returns to dim mode.
- Base Bid Options: The controller for the base bid options shall include pH, ORP, and temperature sensors, and flow cell.
- Warranty: The controller shall be covered by a standard manufacturer warranty of one (1) year. All pH and ORP sensors will be covered by a two (2) year warranty. Flow Cell will be covered by a one (1) year warranty. This warranty extends to the original retail owner only, beginning on the date of installation, and is not enforceable by any other party. Proof of purchase and/or date of installation will be required to execute a warranty claim.
- Warranties by Others: Some products incorporate components manufactured by other manufacturers. Some of these provide warranties in addition to the warranty provided herein. In all such cases, a copy of that warranty will be provided with the product. To the extent protection provided under any such third party warranty exceeds the Limited Warranty provided herein, the Customer will have to look to that manufacturer for the additional warranty protection.

Acu-Trol AT-8 CONTROLLER FEATURES

Programmability

- Proportional Feed
- Feeder ON and OFF cycles
- pH and ORP set point
- ORP & pH calibration
- Temperature calibration
- Acid feed
- Base feed
- Password Protected
- LED Alarm Indicator



AK1200™ Flow Cell and Sensors

Flow Cell

- Convenient inlet and outlet ports
- Built-in flow switch to disable feed in no flow conditions
- Chemical injection ports
- Sample port for testing
- Clear acrylic viewing jar

Sensors

- pH and ORP
- Temperature
- Flow

PENTAIR

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