



Specifications for the Hydro Model OV-190 Omni-Controller **Specification OV-190**

1.01 GENERAL

1.01.1 Completeness

The system shall be complete with all components, equipment, and appurtenances.

1.01.2 Quality Assurance

All materials and components shall be new and unused of first quality by well-known manufacturers. Inferior materials or components shall not be allowed.

1.02 MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA or approved equal. The controller shall be Hydro Instruments Model OV-190 Omni-Controller.

1.03 CONTROLLER

1.03.1 General

1. The purpose of the Model OV-190 Omni-Controller is to provide a proportional analog control signal that will be used to drive a chemical feed pump, or control valve, that accepts a proportional analog input signal.
2. The microprocessor based controller shall adjust the output control signal based on one or two electronic input signals or up to four relay inputs.
3. The controller shall allow for manual, flow pacing/proportional, residual/ORP/ph set point control, compound loop control, and step feed rate control options.
4. The universal controller shall include an alphanumeric, liquid crystal display. User controls shall be accomplished using a front panel 4-button keypad.

1.03.2 Construction

1. The controller shall be housed in a NEMA4X rated enclosure.

1.03.3 User Interface

1. The controller shall include a 2-line, 20-character, alphanumeric, liquid crystal display.
2. User controls shall be through a front panel 4-button keypad.
3. Menus and variables shall be displayed in clear English using easy to read, alphanumeric characters for clear understanding.
4. Control mode and all control parameters shall be password protected and adjustable through the use of the keypad while displayed on the screen.

1.03.4 Inputs and Outputs

1. The controller shall include two analog input channels.
2. Each analog input signal shall be user selectable as 4-20 mA or 1-5 V.
3. The first analog input channel shall be used for proportional (flow) input signals. The second input channel shall be used for residual or ORP (set point) input channels.
4. The controller shall include four relay input channels for step feed control.
5. One 4-20 mA output signal is provided for control of the external device. The output impedance of this control signal is 500 Ohms.
6. One RS232 output channel shall be provided.
7. One common relay output shall be provided for remote indication of alarm conditions.