

Section 16925 Analytical Monitoring

1. General

1.1 Description

- .1 For all instrumentation, the Equipment Supplier shall furnish all labour, materials, components, and programming, and shall provide all design, assembly, and start-up services required to provide a complete and workable system.
- .2 Provide assistance to the Owner and Engineer for the testing and commissioning of the instrumentation.

1.2 Operation and Maintenance Manuals

- .1 Provided for insertion within the general project operation and maintenance manuals shall be at least four copies of original equipment manufacturer printed manuals. These shall include at a minimum:
 - Full User Manual
 - Installation Instructions
 - Full list of Parameters/Programming Manual
 - Troubleshooting/Maintenance Manual
- .2 A complete list of all parameters programmed into each instrument at the end of commissioning shall be provided for insertion within the general project operation and maintenance manuals. These lists shall be clearly sorted by instrument tag number.

2. Products

2.1 UVT Analyzer

- .1 Provide a microprocessor based online UV% transmission analyzer with an autoranging 0-100% transmission having 1% accuracy. Unit shall have continuous ultrasonic cleaning, bubble rejection system, shall be rated for 120VAC power supply and have a 4-20 mA active current output. Unit shall be rated for 0-50°C ambient and have an NEMA 4/IP66 enclosure. UVT Analyzer shall be REAL UV254 M3000 from Real Tech (905-665-6888 ext.153).

2.2 Chlorine Residual Analyzer

- .1 Provided shall be a microprocessor based chlorine residual monitoring system.



- .2 System controller shall be NEMA 4 rated with backlit LCD display, one 4-20mA analog outputs for chlorine, two (2) configurable alarm relays suitable for 5A at 120VAC, and a power supply suitable for 120 VAC 60Hz operation.
- .3 Provided shall be a chlorine residual sensor capable of measuring free chlorine from 0 to 5ppm free with an accuracy of $\pm 5\%$ of f.s. A flow regulator shall be included with the system to maintain a constant flow at the measuring cell inlet without valves.
- .4 System shall come with quick-disconnect fitting.
- .5 Shall be HACH CL17 with Pressure Regulator and Reagents for Free Chlorine, all as available from HACH (604-637-9599).
- .6 Supplier shall provide a certified field technician to conduct on-site final calibration of the unit in the presence of the District's operating personnel, and provide all necessary field training.

3. Execution

3.1 Installation

- .1 Manufacturer installation guidelines shall be adhered to.

End of Section